Fit, Healthy, and Ready to Learn

Chapter E: Policies to Promote Healthy Eating
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The model policies contained in this chapter are derived from research findings, existing policy examples, and best practices as described in the narrative. The model policies do not necessarily represent the views of the National Association of State Boards of Education. NASBE's Public Policy Positions are available at www.nasbe.org/about_us/policy_positions.htm.

Printed copies of “Policies to Promote Healthy Eating” are available for $16.00 plus $4.50 shipping and handling from the National Association of State Boards of Education. To order this and other guides in the Fit, Healthy, and Ready to Learn series, call (800) 220–5183, order online at nasbe.org/nasbe_marketplace/index.php?dispatch=categories.view&category_id=87, or write to NASBE at 2121 Crystal Drive, Suite 350, Arlington, Virginia 22202. Orders under $50.00 must be prepaid; purchase orders, VISA, and MasterCard are accepted. Volume discounts are available.
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America is capable of amazingly rapid changes in public policy. When *Fit, Healthy, and Ready to Learn: A School Health Policy Guide* was first published in 2000 in partnership with the Centers for Disease Control and Prevention (CDC), a major hurdle to its use was lack of awareness or sense of urgency among most education policymakers about steadily rising rates of childhood overweight, obesity, and poor eating habits. NASBE was one of only a few mainstream education associations trying to draw attention to these problems and offering evidence-based policies to promote healthy eating.

Since then, the issue has exploded into the public consciousness through widespread media attention and dire warnings from health authorities. In recent years, more than a dozen states have adopted nutrition standards for foods and beverages sold at school. Prompted by a new federal requirement, nearly every local school district in the United States has adopted a school wellness policy that addresses nutrition and physical activity. Beverage and food industry leaders are supporting major policy changes and reformulating their products. Education associations are helping their constituents develop healthy eating policies. New nonprofit organizations have emerged to help schools implement effective programs. Foundations are providing support at every level. First Lady Michelle Obama has initiated a national obesity prevention campaign. Once considered “cutting edge,” the policy solutions NASBE suggested in 2000 have since become conventional wisdom.

This updated edition of the chapter on “Policies to Promote Healthy Eating” of *Fit, Healthy, and Ready to Learn* reflects the rapid progress made in recent years to help America’s schools become part of the solution for childhood obesity. It includes current scientific findings and policy recommendations and refers readers to new and valuable sources of information and assistance. We hope that the policies suggested here once again become conventional wisdom.

NASBE has long recognized that education and health are inextricably intertwined. We will continue our mission to draw the attention of education policymakers to every proven strategy that supports high student achievement, educational equity, and lifelong health and success.

James Kohlmoos  
Executive Director  
National Association of State Boards of Education
Calls for schools to promote student healthy eating are typically grounded in health concerns. In recent years, leading public health authorities have issued dire warnings that increasing rates of obesity in young people are putting children and youth at greater risk for future medical problems—including diabetes, hypertension, and cardiovascular disease—that will cost society billions of dollars in healthcare. Many education leaders accept that schools share a responsibility to help promote healthy lifestyles among students.

A strong case can also be made on educational grounds that promoting healthy eating is an important means of supporting student academic performance. An increasing body of evidence supports an association between nutrition, including breakfast, and student academic performance. Such a link has long been widely recognized: some American communities have been feeding students since the 1800s. Being well nourished is an important characteristic of students who come to school “fit, healthy, and ready to learn” every day.

In particular, three aspects of healthy eating can affect student academic performance:

- eating a sufficient amount of food every day;
obtaining essential nutrients from a balanced diet; and
• maintaining a healthy weight.

Under-nutrition can have lasting effects on the cognitive development and school performance of children. Teachers report higher levels of hyperactivity, absenteeism, tardiness, and behavioral and attention problems among hungry children compared to other students. One study found that severely hungry school children had parent-reported anxiety scores that were more than double the scores for children with no hunger, as well as having significantly higher counts of chronic illnesses. In a study of 21,000 kindergarten students followed through third grade, food insecurity was linked to developmental consequences, particularly impaired social skills development and reading performance among girls.

In 2008, nearly 17 million U.S. households (14.6 percent) were “food insecure,” meaning that at some time during the year they had difficulty providing enough food for family members due to a lack of resources. More than 16.7 million children (22.5 percent of all U.S. children) lived in food-insecure households. Studies have found that students from food-insecure households have significantly lower math scores and are more likely to repeat a grade, receive special education services or mental health counseling, and be suspended from school. Children from food-insecure households also have poorer health status and experience more frequent stomachaches and headaches. Among adolescents, a strong association was found between food insufficiency and depressive disorder and suicidal symptoms.11

The good news is that student participation in subsidized federal school meals programs—particularly school breakfast programs—is linked to improved learning readiness and academic achievement, as well as to fewer discipline and emotional problems. Since 1946, the federal government has sponsored and subsidized the National School Lunch Program (NSLP) to ensure that all students have affordable access to a basic minimum of nutritious food. According to preliminary data from the USDA for FY 2010, more than 31.6 million children participated in the NSLP (including those eligible for free or reduced-price lunches as well as those who paid full price), which is available in nearly all public and many private schools.

Research is particularly clear on the academic benefits associated with eating breakfast. Numerous studies have found that participation in school breakfast programs is associated with small increases in academic test scores, daily attendance, and class participation. Students who eat breakfast show improved cognitive function, attention, and memory over the morning hours in school compared to those who do not eat breakfast. Teachers report that students participating in school breakfast programs are calmer in class, and parents of children in the school breakfast program report their children are better able to concentrate on their studies. Hoyland et al. conducted a meta-analysis of the research evaluating the effects of breakfast on cognitive performance of children and adolescents. Based on the 45 studies included in the review, the authors concluded breakfast consumption was more beneficial than skipping breakfast and that school breakfast programs can have positive effects on academic performance.

An analysis by WestEd of 1998-2002 data from 1,395 California schools found that high-performing schools had larger percentages of students who ate breakfast than low-performing schools (fig. 1).

*The term “school meals” is used in this guide as shorthand for all breakfasts, lunches, snacks, suppers, and milk distribution supported by federal child nutrition programs.
Obtaining Essential Nutrients from a Balanced Diet

Students don’t just need to eat sufficient amounts of food, they need a varied and balanced diet to stay healthy and perform well at school. A large body of research suggests that an inadequate dietary supply of any of a number of essential micronutrients can adversely affect cognitive development in children and youth. These essential nutrients include iodine, iron, folate, zinc, vitamin B12, and omega-3 fatty acids.

Surveys consistently find that few children and adolescents eat a well-balanced diet; national data from the late 1990s found that no more than 2 percent of children and youth met all of the federal government’s Food Guide Pyramid recommendations, and 16 percent did not meet any of the food group recommendations. CDC’s Youth Risk Behavior Survey (YRBS) has documented how few high school students report eating five or more servings of fruits and vegetables per day (fig. 2).
Iron deficiency in particular has been linked to impaired intellectual performance and behavioral and learning problems among school-aged children and adolescents.\textsuperscript{25} For example, a study of school-aged children found those with iron deficiency had more than twice the risk of scoring below average in math than did children with normal iron status.\textsuperscript{26} Nine percent of girls and five percent of boys aged 12 to 15 years old were found to be iron deficient in 1999–2000.\textsuperscript{27} Obese and overweight children are approximately twice as likely to be iron deficient compared to their normal-weight peers.\textsuperscript{28}

Other nutrients of particular concern for lifelong health are calcium and Vitamin D, which together with daily physical activity, are necessary for healthy bone growth.\textsuperscript{29} A child’s school years are crucial for achieving optimal lifelong bone health. During the three- to four-year period of increased bone mass acquisition that occurs during adolescence, 40 percent of total lifetime bone mass is accumulated.\textsuperscript{30} Young people who fail to achieve optimal bone mass during this period will lack the adequate support to sustain normal losses of bone mass later in life.

Children and youth ages 9–18 need 1,300 milligrams of calcium per day, which is approximately three 8-ounce glasses of low-fat milk combined with the calcium from the rest of a normal diet.\textsuperscript{31} However, the 2005 YRBS found that only 21 percent of high school males and 12 percent of high school females were drinking three or more glasses of milk a day on a routine basis (fig. 3).\textsuperscript{32}

In 1996, the average intake of added sugars ranged from 19 teaspoons per day for girls aged 6–8 years to 36 teaspoons per day (3/4 cup) for male teens aged 14–18 years,\textsuperscript{34} and adolescents were found to be drinking twice as much carbonated soft drink as milk.\textsuperscript{35} The largest source of added sugars in the American diet is soft drinks, which account for 47 percent of total added sugars.\textsuperscript{36} Average consumption of soft drinks (sodas and other sugar-sweetened beverages such as fruit drinks, lemonade, and iced tea) more than doubled between 1977 and 2001, increasing by 135 percent, while milk consumption decreased by 38 percent.\textsuperscript{37} Soft drink consumption has also been associated with decreased intakes of protein, fruit juice, fruit, and riboflavin (vitamin B2).\textsuperscript{38}

Maintaining a Healthy Weight

In recent decades, the United States has been experiencing substantial increases in overweight and obesity\textsuperscript{*} that cut across all ages, sexes, and racial and ethnic groups.\textsuperscript{39} In the early 1960s, an average 10-year-old girl weighed 77 pounds; by 2002 she weighed 88 pounds without a significant increase in height.\textsuperscript{40} In the same period, the average 10-year-old boy grew from 74 to 85 pounds. In 2001, the U.S. Surgeon General warned, “Overweight and obesity have reached nationwide epidemic proportions.”\textsuperscript{41} Students’ weight status can affect both their health and academic performance in ways that may not be obvious. For example, a study of 1,069 students in grades four through

\begin{figure}[h]
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\caption{Percentage of High School Students Who Drank Three or More Glasses of Milk per Day in the Past Seven Days, by Sex and Race/Ethnicity, 2005}
\end{figure}

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\hline
Sex & Race/Ethnicity & \# of Students & \% of Students \\
\hline
Male & White & 24 & 13 \\
Female & Black & 12 & 6 \\
Male & Hispanic & 18 & 10 \\
\hline
\end{tabular}
\caption{Percentage of High School Students Who Drank Three or More Glasses of Milk per Day in the Past Seven Days, by Sex and Race/Ethnicity, 2005}
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\end{figure}

* For children and youth ages 2–18, overweight is defined as a body mass index (BMI) value that is equal to or above the 85th and below the 95th percentile. BMI is calculated from an individual’s height and weight and adjusted for age and sex according to standard growth charts. Obesity is defined as a BMI value equal to or above the 95th percentile. Both conditions are usually associated with having a greater proportion of body fat than what is scientifically determined to be healthy. For more information see www.ama-assn.org/ama1/pub/upload/mm/433/ped_obesity_recs.pdf or www.cdc.gov/healthyweight/assessing/bmi/index.html.
six in nine low-income Philadelphia elementary schools found that, on average, obese schoolchildren were absent two school days more than their normal-weight classmates; furthermore, obesity was a better predictor for absenteeism than any other factor. Obese children are more likely to have bone fractures that keep them away from school. They are also more likely to develop chronic health disorders such as hypertension, diabetes, sleep apnea, menstrual abnormalities, impaired balance, and orthopedic problems at an earlier age than their normal weight peers.

As serious as the health issues are, the social and emotional effects of obesity, such as teasing, poor self-esteem, and depression are also important factors that keep heavier students away from the classroom. The Institute of Medicine summarized the body of research about serious social and emotional effects of obesity in a 2005 report, Preventing Childhood Obesity: Health in the Balance. Concerned educators know the types of emotional health problems caused by stigmatization and chronic bullying have been found to significantly affect student attendance rates and academic performance.

Leading health authorities attribute the increase in childhood obesity in part to unhealthy eating habits and to inadequate amounts of physical activity. Excess weight is the result of an imbalance between energy intake and energy expenditure over an extended period of time—that is, between “calories in” and “calories out.”

Excessive caloric intake has been related to high-fat foods, increased portion sizes, and diets high in simple sugars such as high-fructose corn syrup, which is found in most soft drinks as well as baked goods, canned fruits, jams and jellies, and dairy products. Between 1977 and 1996, the most recent data available, children ages 2–18 years old increased their consumption of salty snacks and pizza between 132–143 percent and increased their soft drink consumption between 70–83 percent. Consumption of french fries, hamburgers, cheeseburgers, pizza, Mexican food, and medium- and high-fat beef and pork also significantly increased as this age group (along with everyone else) ate more meals away from home.

What Education Leaders Can Do

Students' eating habits are unlikely to change without strong, school-based programs and policies. Education policymakers can take a number of actions to help ensure that every student comes to school “fit, healthy, and ready to learn” every day. First, an important leadership task is to promote broad goals for academic success in which schools are expected to prepare students for healthy, satisfying, and productive adult lives. Education leaders at all levels can vocalize the importance of an active lifestyle at every age as being essential to health, well-being, and the enjoyment of life. A quality school meals program, nutrition education, physical education, and other efforts to develop healthy lifestyles should be considered vital components of a complete education.

Second, education leaders can promote and facilitate the adoption of evidence-based policies. The model policies in this chapter are intended to address all aspects of the school setting that influence a young person's eating patterns; they are designed to establish health-promoting school environments that make it easy and convenient for students and staff to develop and practice healthy eating behaviors on a daily basis.

The Energy Gap

A recent study sponsored by the Robert Wood Johnson Foundation quantified the “energy gap” among young people—the difference between the number of calories U.S. children and teens consumed each day and the number they required to support normal growth, physical activity, and body function—to be an average of 110 to 165 extra calories. Over a 10-year period, this energy gap has led to an average of 10 pounds of excess body weight.

The authors calculate that the energy gap for a typical 9-year-old could theoretically be addressed by drinking one fewer 150-calorie soft drink per day, by replacing 1.9 hours of sitting with the same amount of time walking, or by increasing the frequency of physical education classes at school.
A Comprehensive and Ambitious Approach

“We must remind ourselves that social changes to transform public perceptions and behaviors regarding seatbelt use, smoking cessation, breastfeeding, and recycling would have sounded unreasonable just a few decades ago, yet we have acted vigorously and with impressive results....Reversing the rapid rise in obesity among American children and youth will require a multipronged approach by school, families, communities, industry, and government that would be as comprehensive and ambitious as national anti-smoking efforts.”

—Institute of Medicine

“Organizational change occurs through gentle pressure, relentlessly applied.”

—Anonymous

basis. Lessons are available from the many states and school districts that have already successfully changed their practices.

Third, efforts to change and improve the school nutrition environment may require firm and persistent leadership to overcome staff or community resistance. To a large extent, broad economic forces operating over a period of decades have shaped the current nutrition environment, and some staff members may feel they have a vital financial stake in maintaining the status quo in spite of negative effects on students’ eating behaviors. Chronically tight education budgets have led many schools to finance extracurricular programs through vending machine revenues and fundraising activities that rely on the sale of foods and beverages that are high in fat, salt, and sugar and low in important vitamins and minerals. The greater availability of these “competitive foods” on school grounds have drawn students away from reimbursable school meals, reduced reimbursements from the federal government, and tightened food service budgets. As most school food service programs are expected to be self-supporting, child nutrition directors have felt obligated to offer individual food and drink items—such as pizza slices, chips, and sodas—for sale outside of the reimbursable school meal (referred to as à la carte sales) to try to make up lost revenues. However, many schools have successfully altered this complex dynamic of financial forces, improving the nutritional quality of foods without loss of revenue. Strategic promotion of healthier food and beverage choices and lowering the price of healthier foods (e.g., fruits, vegetables, and low-fat snacks) in school cafeterias are strategies that can minimize financial risk.

Fourth, because fresh ingredients and healthier preparation methods frequently cost more money, education policymakers and administrators need to advocate higher school meal reimbursement rates in legislative budget committees at the national and state levels. In a 2007 survey of school district child nutrition directors, by the School Nutrition Association, 64 percent of respondents stated that the National School Lunch Program reimbursement was insufficient because it did not cover the costs of producing a meal. California and Connecticut are examples of states that supplement federal subsidies with additional state funds tied to changes to food preparation practices.

Education leaders can also advocate in the legislature and at the community level for complementary laws, policies, practices, and programs to promote healthy eating for children, youth, and adults, such as:

- encouraging the development of farmers’ markets and farm-to-school programs that help bring fresh local produce into the schools;
NASBE Public Education Position on Healthy Eating in Schools

The state delegates of the National Association of State Boards of Education have adopted the following public education position:

“All schools should… encourage that all students are adequately nourished and learn lifelong habits of healthy eating by encouraging:

a. maximum use of quality school meal programs that are operated under the supervision of certified foodservice directors in accordance with applicable federal and state laws and regulations;

b. adequate time to eat in pleasant surroundings;

c. that all foods and beverages sold or served during school hours are consistent with a nutritious, energy-balanced diet as recommended in the current Dietary Guidelines for Americans;

d. nutrition education that teaches essential knowledge, skills, and behaviors; and

e. staff members to model a healthy lifestyle.”

—National Association of State Boards of Education

Many other education leadership associations also recognize that healthy eating is an essential foundation for learning, including the National School Boards Association (NSBA), the Council of Chief State School Officers (CCSSO), and ASCD.
Using Zoning to Keep Fast-Food Outlets Away from Schools

On a typical day, 30 percent of U.S. children and adolescents eat fast food. Not surprisingly, children and adolescents aged 4–19 who eat fast food consume more total energy, fat, more saturated fat, carbohydrates, added sugars, and sugar sweetened drinks, and less fluid milk, fiber, fruits, and non-starchy vegetables than those who do not eat fast food.

A 2005 study found that fast-food chain outlets in Chicago are clustered within a short walking distance from schools; three to four times as many fast-food outlets were located within a mile of schools than would have been expected if the outlets had been distributed throughout the city unrelated to school locations. In half of Chicago’s schools, students need only walk about five minutes to reach a fast-food outlet.

As of 2006, 14 percent of middle schools and 27 percent of high schools nationwide had open campuses, allowing students to leave school for lunch and consume food at sources just outside the school. Zoning laws can help to reduce students’ access to fast-food restaurants and stores. The U.S. Supreme Court has confirmed the general validity of enacting zoning ordinances to promote public health, and historically, public health has always provided the strongest legal basis for zoning laws. As an example of what can be done, Detroit, Michigan has a zoning ordinance that requires, with respect to certain types of carry-out, fast-food, and drive-in restaurants, that “[a] minimum distance of five hundred (500) feet shall exist between the subject site and the nearest point of an elementary, junior high, or senior high school site.”

The City Planner’s Guide to the Obesity Epidemic: Zoning and Fast Food and an accompanying 90-page legal monograph detail the scientific and legal basis for fast food zoning laws and review court decisions upholding such laws. Access these resources at www.publichealthlaw.net/Projects/ZoningObesity.php.

White House Task Force on Childhood Obesity released a report and action plan in April 2010 as part of the national Let’s Move Campaign. The coordinated, interagency action plan aims “to end childhood obesity within a generation” and presents 70 recommendations including specific recommendations for healthy schools and the role of schools. Access the full report and information about the Let’s Move Campaign at www.letsmove.gov.

The U.S. Department of Health and Human Services (HHS) and the U.S. Department of Agriculture (USDA) jointly publish the Dietary Guidelines for Americans (DGA) every five years. DGA provides authoritative advice on how good dietary habits and a physically active lifestyle can promote health and reduce risk for major chronic diseases. Visit www.healthierus.gov/dietaryguidelines to view the most recent DGA.

The U.S. Institute of Medicine (IOM), a private nonprofit corporation that is part of the Congressionally chartered National Academy of Sciences (NAS), acts as an adviser to the federal government on issues related to health and well-being.
of medical care, research, and education. The IOM secures the voluntary services of eminent members of appropriate professions on ad hoc committees to examine policy matters pertaining to the public’s health. In recent years, the IOM has issued two landmark, science-based reports of interest to education leaders:

- In 2005, the Committee on Prevention of Obesity in Children and Youth produced *Preventing Childhood Obesity: Health in the Balance*, which provides a broad-based examination of the nature, extent, and consequences of obesity in U.S. children and youth; a prevention-oriented action plan that identifies the most promising array of short-term and longer-term interventions; and recommendations for the roles and responsibilities of numerous stakeholders in various sectors of society, including schools. Access the report at www.nap.edu/catalog.php?record_id=11015.

- In 2007, the Committee on Nutrition Standards for Foods in Schools produced *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*, which reviews and offers specific recommendations about appropriate national nutrition standards and guidance for the sale, content, and consumption of foods and beverages at school, with attention given to foods and beverages offered in competition with federally reimbursable meals and snacks. The standards are based on the 2005 *Dietary Guidelines for Americans*. Access the report at www.nap.edu/catalog.php?record_id=11899.

The U.S. Surgeon General’s office produces reports that synthesize scientific research findings in order to draw out policy recommendations, which are available at www.surgeongeneral.gov/library/index.html. Three recent reports regarding healthy eating and youth include:


- *The Surgeon General’s Call to Action to Prevent and Decrease Overweight and Obesity* (2001), www.surgeongeneral.gov/library/calls/obesity/index.html; and


The National Schools Boards Association (NSBA) maintains a school health website that includes “Healthy Eating 101” and packets of information and sample policies on other key topics; a School Health Resource Database; current news, reports, and data on health topics relevant to school leaders; NSBA health-related publications; and links to relevant websites. Visit www.nsba.org/schoolhealth.

The Food Research and Action Center (FRAC) is a nonprofit organization working to improve public policies and public-private partnerships to eradicate hunger and undernutrition in the United States. For up-to-date information on school food programs and legislative proposals, visit www.frac.org.

Alliance for a Healthier Generation, Schools are powerful places to shape the health, education and well-being of our children. That is why the Alliance’s Healthy Schools Program supports more than 14,000 schools across the U.S. in their efforts to create environments where physical activity and healthy eating are accessible and encouraged. For more information, visit schools.healthiergeneration.org.

Action for Healthy Kids, a nonprofit, public-private partnership of more than 50 national organizations (including NASBE) and government agencies, was formed in 2002 specifically to address the epidemic of overweight, undernourished, and sedentary youth. The organization supports action teams in every state to improve nutrition and increase physical activity by leveraging changes in school policies, programs, and practices. For practical guidance and how-to information, including many policy examples and extensive resource lists, visit www.actionforhealthykids.org.

The Robert Wood Johnson Foundation (RWJF) publishes a valuable weekly news digest that features childhood obesity and sponsors a great deal of prevention and policy research. Visit my.rwjf.org/login.do to sign up to receive the digest. One of the foundation’s supported activities is the Healthy Eating Research
The program, which sponsors research on environmental and policy strategies to promote healthy eating among children in order to prevent childhood obesity, especially among the low-income and racial and ethnic populations at highest risk for obesity. Visit www.healthy-eatingresearch.org.

- The American Heart Association (AHA) and RWJF jointly produced *A Nation at Risk: Obesity in the United States: A Statistical Sourcebook* that shows how prevalent obesity has become and examines the factors that contribute to it. It is available online at www.rwjf.org/files/publications/other/AH_NationAtRisk.pdf.

- The Trust for America's Health produced *F as in Fat: How Obesity Policies Are Failing in America*, which examines each state’s obesity rates and related health statistics. The report is periodically updated. Visit healthyamericans.org/reports/obesity2010.

- The Academy of Nutrition and Dietetics (formerly the American Dietetic Association), the membership organization of registered dieticians and other food and nutrition professionals, helps to translate the science of nutrition into practical solutions for healthy living. Recent policy statements can be found at www.eatright.org/HealthProfessionals/content.aspx?id=4294967306.

- The Center for Science in the Public Interest (CSPI) is a nonprofit organization that addresses consumer-oriented nutrition and health issues. Its Nutrition Policy website offers numerous reports and policy guides at www.cspinet.org/nutritionpolicy.

- The Council of State Governments (CSG) produces a variety of publications addressing important public health issues, including healthy eating and obesity prevention among youth. Visit /knowledgecenter.csg.org/drupal/view-policy-areas/78.

- The National Conference on State Legislatures (NCSL) is a bipartisan nonprofit organization that maintains a resource website on current legislation, reports, surveys, and policies on various issues, including health finance (www.ncsl.org/programs/health/finance.htm), healthy eating (www.ncsl.org/programs/health/healthy-foodres.htm), and obesity (http://www.ncsl.org/programs/health/obestatres.htm).

- The American Academy of Pediatrics (AAP) periodically releases policy statements, reports, and parent handouts that synthesize the current scientific and medical consensus on key child health issues, all of which can be found at aappolicy.aappublications.org.

**NOTE:** The organizations included as resources in this guide offer a broad range of assistance, have a national scope, are easily accessed, have materials available at either low or no cost, and/or offer specialized expertise. The lists are not exhaustive. Scores of other organizations provide high-quality assistance and advice to educators; in addition, hundreds of informative books and articles are available. Consider the resources listed here as starting points only.

All Internet sites listed in this publication were accessed during April 2012 to check for accuracy and ensure the links were live at that point in time.
2. A Comprehensive Approach to Promoting Healthy Eating Environments in Schools

Students need to learn how to eat healthy in school, so they will continue to eat healthy in college and beyond. It is so easy to eat healthy if given the right choices. Healthy food makes such an impact on people’s overall health.

— Andrea Levinsky, Student Member, Maine State Board of Education

School policies help shape social norms that influence the dietary habits of students and staff. All aspects of a school’s environment should consistently promote and facilitate healthy eating as the desirable and convenient choice for students and staff members. Policies should aim to ensure that, at every possible eating occasion, students have the opportunity to practice what they are taught in nutrition education and to choose nutritious meals and snacks that are low in fat, sodium, and added sugars. Preparing a comprehensive, integrated policy aimed at promoting lifelong healthy eating can help address all aspects of a healthy environment and ensure that throughout the school campus, the healthy choice becomes the easiest choice.

An integrated healthy eating policy:

- defines the purpose and goals of school nutrition programs and practices;
establishes principles to guide school staff engaged in school meals program operations, delivery of nutrition education, and professional pupil services;

spells out standards for all food and beverages to be served or sold at school and the conditions under which they are served or sold; and

assigns responsibilities for implementation, includes accountability provisions, and requires ongoing policy evaluation and review.

An integrated policy to promote healthy eating should aim to help all students and staff meet the Dietary Guidelines for Americans (DGA). The DGA, developed jointly by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services and updated every five years, is the definitive set of recommendations that are the basis of all federal government food and nutrition education programs. Based on rigorous nutrition research findings, the DGA recommends that persons aged two years and older choose a healthful assortment of foods that includes vegetables; fruits; grains, especially whole grains; fat-free or low-fat milk products; and fish, lean meat, poultry, or beans (a summary of the recommendations are included at the end of this chapter). The guidelines further emphasize the importance of choosing foods that are low in saturated fat and added sugars most of the time.

Below are general descriptions of the major elements of an integrated policy. More detailed policy guidance is provided in the later sections of this chapter and in other chapters of the Fit, Healthy, and Ready to Learn series of policy guides.

Developing an Integrated Policy

Most states, districts, and schools already have some nutrition policies in effect, but a systemic, integrated policy framework can help provide consistency and thoroughness. Written policies can be adopted at the state, territorial, tribal, school district, or school level—or all of these levels—depending on the education governance system. To assist with policy development, model language for an integrated policy to promote healthy eating is provided at the end of this section. The resource list in this section highlights a number of additional tools that provide valuable guidance on policy development. Particularly useful is CDC’s School Health Index: A Self-Assessment and Planning Guide, which enables schools to identify the strengths and weaknesses of current policies and practices and develop an action plan for improvement.

Chapter B: The Art of Policymaking of Fit, Healthy, and Ready to Learn describes basic tasks that generally need to be accomplished for a policy to move from good intentions to policy adoption and effective implementation. These tasks, which may occur in any order depending on the context, include the following:

- assessing current policy and program practices, needs, and available resources;
- determining priorities;
- researching best practices;
- drafting policy language, with review by legal counsel;
- building broad-based support among school staff, families, students, medical personnel, and other influential community members—anyone with a stake in the outcome;
- shepherding the proposed policy through the adoption process;
- overseeing policy implementation; and
Before adopting any new nutrition policy, whether at the state, school district, tribal, or school level, the current set of school health “foundation policies” should be critically assessed for quality and completeness. Policy advocates could decide to initially focus on strengthening these foundations and filling gaps, as discussed in chapters A through C of *Fit, Healthy, and Ready to Learn*. Foundation policies include the following:

- a vision statement, which expresses an educational philosophy that includes addressing students’ overall mental, social, and physical growth and development and recognizes that the schools share a responsibility for protecting health and fostering students’ lifelong health behaviors (addressed in Chapter A: “Education and Health Goals”);
- policy development procedures and rules that define the necessary participants in the policymaking process and establish a fair and open process with protocols, timelines, and means for involving the public (addressed in Chapter B: “The Art of Policymaking”);
- a coordinated school health program policy that establishes an overall framework of eight school health components as recommended by CDC and many other organizations (addressed in Chapter C: “School Health Foundation Policies”);
- a school health council policy that establishes a standing coordinating body composed of family members, community representatives, and education staff to oversee the development, operation, and evaluation of all aspects of the school health program (Chapter C);
- requirements for a prekindergarten through 12th grade health education program that promotes lifelong physical activity (Chapter C); and
- a staff health promotion program designed to motivate all staff members to adopt personal prevention behaviors (Chapter C).

A strong statement of purpose and goals helps justify the policy to staff and the public, communicates policymakers’ priorities, and guides program implementation. Policy developers should examine evidence of effectiveness for every policy concept under consideration. The policy itself should also require the collection and analysis of implementation data to evaluate the policy’s effectiveness on a regular basis.

A policy may be short and concise or long and detailed. Some jurisdictions prefer to adopt brief goals statements as policies and then develop separate implementation guidance documents that contain more detailed instructions.

### Updating Local School Wellness Policies

Local school wellness policies should already have been adopted at the school district level; such a policy is now required of every district that participates in federal school meals programs. Changes to these local wellness policies could stimulate ongoing discussions in the community on ways to help students establish healthy eating and physical activity behaviors while at school.

Among other provisions, each school district’s wellness policy must include the following:

1. goals for nutrition education, physical activity, and other school-based activities that are designed to promote student wellness in a manner that the local education agency determines appropriate;
2. nutrition guidelines for all foods available on each school campus during the school day, with the objectives of promoting student health and reducing childhood obesity;
3. a plan for measuring implementation of the wellness policy, including the designation of one or more persons charged with operation-
The West Virginia State Board of Education adopted a policy that addresses nutrition standards and holds districts and schools accountable for implementation of local wellness policies. The West Virginia policy excerpts below, illustrating accountability policy language, are taken from “Title 126, Series 86, Board Policy 4321.1 – Standards for School Nutrition,” passed in 2008.

Local Wellness Policy (126-86-12)

12.1 The Child Nutrition and WIC Reauthorization Act of 2004, Section 204 of Public Law 108-265, requires that all local education agencies participating in the National School Lunch Program develop a local wellness policy by the first day of the 2006-2007 school year. The local wellness policy provides an opportunity for schools to create an environment that promotes wellness. Sponsors must at a minimum complete an assessment of each school to identify areas of improvement. Policy provisions must exceed current state and federal minimum requirements to demonstrate improvement.

12.2 Development of the policy shall involve a broad spectrum of the school and community members including health care providers, food service personnel, teachers, students, parents, board members and educational administrators.

12.3 The policy must address the following: nutrition education, physical activity, nutrition guidelines for all foods and beverages available on school campus; and other school-based activities to promote student wellness.

12.4 The policy must include an evaluation plan for measuring the implementation of the policy and progress that is being made.

12.5 A timeline must be established for implementation, assessment and evaluation of the policy. A county-wide assessment must be conducted biannually to determine progress in targeted areas and to identify areas needing improvement.

12.6 The Local Wellness Policy must be county board approved.

12.7 The county-wide policy must govern all schools and must be submitted to the West Virginia Department of Education (WVDE), Office of Child Nutrition biannually. Additionally, the policy must include current revisions and evidence of yearly progress.

12.8 Failure to submit the local wellness policy to the WVDE’s Office of Child Nutrition as required may result in sanctions that include suspension or recovery of federal reimbursements.

Accountability and Compliance (126-86-13)

13.1 County boards of education and local school administrators shall provide a safe and healthy learning environment for all students and proper accountability for all funds received from food and beverage sales. Methods for monitoring compliance may include, but are not limited to:

13.1.1 Coordinated Review Effort, School Meals Initiative Review, Independent Audits, annual site monitoring by food service directors, and reviews conducted by the WVDE.

13.2 Compliance with the standards set forth in this policy is required to enable schools to provide students with nutritious food and beverage choices that will enhance learning and promote healthy behaviors that can be maintained throughout life. School child nutrition programs shall be the main source of foods and beverages available at school. These programs have specific requirements to ensure that adequate nutrients are offered to promote health.

13.2.1 Noncompliance with the rules and standards stipulated in section 126-86-4 of this policy may result in sanctions that include suspension or recovery of federal reimbursements.

13.2.2 Noncompliance with the rules and standards stipulated in section 126-86-5 of this policy may result in sanctions that include a recovery of local general funds and/or removal of vending privileges.

13.2.3 Noncompliance with the rules and standards stipulated in section 126-86-11 of this policy may result in sponsor disqualification from the Child Nutrition Program’s State Revenue Matching distribution pending compliance. Failure to complete the annually required 15 clock hours of staff development related to Child Nutrition Programs and offered or granted prior approval by the WVDE shall result in a rollover of deficient hours into the next school year(s).

13.2.4 Noncompliance with the rules and standards stipulated in section 126-86-12 of this policy may result in the institution of a probationary period requiring an approved corrective action plan.

—West Virginia State Board of Education"
al responsibility for ensuring that the school meets the local wellness policy; and

4. involvement of parents, students, representatives of the school food authority, the school board members, school administrators, and the public in the development of the school wellness policy.

Education leaders should review their existing local wellness policies to determine if they need strengthening, particularly in terms of provisions for implementation and evaluation. Many local wellness policies lack quality and strength. For example, an analysis of 2008-2009 local wellness policies from a nationally representative sample showed that while policies were in place, no policy met the 2007 Institute of Medicine (IOM) competitive food standards, and standards for sugary beverages were especially weak. A convenience sample of 140 school districts in 49 states conducted by the School Nutrition Association (SNA) in late 2006 found that 87 percent of the policies addressed nutrition standards for foods and beverages available in vending machines, but only 69 percent addressed nutrition standards/guidelines for fundraisers held during school hours and 66 percent addressed classroom celebrations and parties. Another study of 256 approved local wellness policies from districts in 49 states with small, medium, and large student enrollments found that 68 percent of policies were consistent with the requirements in the federal law.

However, 32 percent did not address one or more required goal areas, including evaluation and monitoring. Another recent review of local wellness policy implementation found inconsistencies in policy content and strength across school districts, and noted that evaluation and monitoring were the most challenging aspects of implementation.

Policy Implementation and Accountability

Adopting a sound policy is just one step in a larger process of change. An excellent policy may fade away unnoticed unless the responsibility for implementation is clearly placed and mechanisms are established to ensure ongoing accountability. A 2003 study by the Robert Wood Johnson Foundation drew attention to the reality that state health and physical education requirements are often poorly enforced. The authors concluded that issues such as local control, competing academic standards, and decreased budgets inhibit state education agencies from independently strengthening their policies on nutrition and physical education.

Engaging School Superintendents

Most, if not all, superintendents support the idea of healthy schools and healthy kids, and many also recognize the link to academic achievement. However, they often are hampered by lack of resources, have difficulty integrating wellness into the curricula, and frequently lack time in the school day given many other pressing priorities.

To make progress in engaging this audience, identify superintendents who have embraced wellness at some level, and then help them advance to a higher level of involvement. Share the following messages:

- “Investments you make in health and wellness today will likely pay off down the road with increased student achievement.”
- “There are numerous wellness changes that you can make in your schools in the short term that are low- or no-cost improvements and are easy to implement.”

When superintendents hear from a combination of parents, community leaders, and school board members, they are more likely to respond with action. In large districts, consider seeking out an assistant superintendent who has specific responsibilities for health and wellness or offering to help develop a presentation that communicates the importance of school wellness to the entire central office staff.

—Action for Healthy Kids
Policy Example Illustrating Oversight/Roles for Implementation: Connecticut State Board of Education

Position Statement on Nutrition and Physical Activity

The Connecticut State Board of Education believes that children’s health is essential to their success in school. Research studies over the past decade have consistently concluded that student health status and school achievement are directly connected and, in fact, that student health is one of the most significant influences on learning and achievement. Healthy eating and regular physical activity are essential components of a healthy lifestyle. Well-planned and effectively implemented nutrition and physical activity programs have been shown to enhance students’ overall health, behavior, and academic achievement.

The Connecticut State Board of Education is committed to promoting policies that support a learning environment conducive to healthy lifestyles. School districts must engage students, parents, school staff members, and community members to develop, implement, and monitor policies and practices to promote and support healthy eating and sufficient physical activity.

The Role of Schools

School policies and practices play a significant role in promoting a healthy environment. Schools must create an environment that gives students consistent, accurate health information and ample opportunity to use it. The classroom, cafeteria, and school activities should provide clear and consistent messages that explain and reinforce healthy eating and physical activity. Students must be taught skills for making healthy lifestyle choices not only in the school building, but also in their daily activities outside of school.

Local school boards must establish and enforce policies and procedures that:

- help schools promote good nutrition and regular physical activity;
- incorporate nutrition and physical activity goals into school improvement plans;
- require schools to allow time in the curriculum for nutrition education, physical education, and physical activity, and to incorporate these concepts throughout all subjects;
- seek revenue sources that do not require raising funds by competing with nutritious school meals;
- make decisions regarding the sale and use of foods and beverages at school-sponsored activities (such as fundraisers, parties, and sports events) based on healthy eating goals;
- promote positive local media coverage of schools’ efforts to improve the overall health of students and their families; and
- support families’ efforts to provide a healthy diet and daily physical activity for their children by providing education, resources, and activities that help with positive role modeling.

The Role of Families

Good nutrition and physical activity practices begin at home. Family involvement is crucial. Families can help children develop healthy habits by providing healthy choices, talking about good nutrition, encouraging an
interest in cooking, encouraging safe and positive physical activity, serving as positive role models, and participating in school health and nutrition programs. Schools must provide education and support so that families can:

- understand the importance of preparing nutritious meals and engaging in regular physical activity with their children;
- reinforce messages about the importance of proper nutrition and physical activity, and serving as role models for healthy living;
- advocate for a healthy and active school environment for their children, including providing healthy foods for school events;
- understand the goals of the school curriculum and encourage appropriate nutrition education and physical education; and
- understand the value of and encourage children’s participation in quality school meal programs.

The Role of Students

Students have a responsibility for protecting their own health. Students must take advantage of opportunities to learn about nutrition and physical activity, and apply this knowledge by making healthy choices for themselves. Schools must support students by teaching and providing opportunities for students to:

- set personal goals for healthy eating and physical activity, and make healthy choices;
- actively engage in physical education and enjoy physical activity;
- advocate for nutrition education and physical activity options at school;
- take an active role in advocating for healthy food choices at school, not only in the cafeteria, but in vending machines, school stores, and fundraising activities; and
- serve as role models for younger children.

The Role of Communities

Communities play an important role in promoting healthy lifestyles by investing in the health, fitness, safety, and well-being of children and their families. Community agencies can collaborate to provide integrated support services that build upon existing community resources and linkages with public schools.

Schools must partner with communities to:

- work with families to support strategies that contribute to improved nutrition, increased physical activity, and overall healthy lifestyles;
- provide and/or seek funds needed to support the school district’s healthy lifestyles initiatives;
- develop and coordinate networks for communicating information and services that support nutrition and physical activity programs; and
- make facilities and programs available, accessible, and affordable for the pursuit of individual as well as group physical activities and sports.

—Connecticut State Board of Education
At every level, either the policy itself or administrative directives need to clearly state who is in charge of ensuring that the spirit and the letter of the policy is implemented with fidelity. CDC recommends that state education and health departments work together and that each state employs a full-time coordinator for school health programs. At the local level, a person in the district central office and each school building can be designated to have responsibility for coordinating the various aspects of an integrated policy. This person could be the school health coordinator, the school nutrition director, or another administrative staff person.

A new policy is more likely to be smoothly implemented and consistently enforced if it receives strong administrative support and if all staff members are oriented to the policy and the rationale behind it. These leadership actions convey the importance of the initiative to staff members and encourage them to incorporate healthy lifestyle messages into their interactions with students.

A school health advisory council, school improvement team, or similar representative committee is a logical choice for overseeing and evaluating the impact of an integrated policy on an ongoing basis (see Chapter C: Core School Health Policies). Such a council can meet regularly to assess needs; consider and respond to student, family, or community suggestions and concerns; discuss implementation progress, challenges, and enforcement strategies; and oversee evaluation of policies, programs, and services. The council can also prepare reports to the district or state school board on implementation challenges and make recommendations for policy improvement.

Policy evaluation can be carried out through:

- ongoing monitoring of food sales and food waste in the cafeteria and other locations;
- reviewing of self-reported student behaviors collected in state- or district-sponsored student surveys such as the YRBS;
- conducting student, staff, and family satisfaction surveys; and
- reviewing policies and practices.

Schools can consult with evaluation specialists at universities, school districts, or their state departments of education and health to identify methods and materials for evaluating their efforts. Valid evaluations can improve the quality of school practices; increase family and community support; help schools reward faculty, staff members, and students for exceptional work; and support grant applications to enhance activities and services.

Model language that school districts or schools can use to develop an integrated policy to promote healthy eating appears on page 24. The model policy reflects the research findings and best practices discussed throughout this chapter. Policymakers should keep in mind that what is reasonable, feasible, and acceptable in any given jurisdiction depends on resources, circumstances, and the results of the local policymaking process.

Selected Resources on Policy Development

- State and local education agencies and health departments can be valuable sources of statistical information, advocacy materials, policy referrals, details about state law, and technical assistance for program planning.
- CDC’s Division of Adolescent and School Health (DASH) offers a variety of assistance for education policymakers at [www.cdc.gov/HealthyYouth/Nutrition](http://www.cdc.gov/HealthyYouth/Nutrition). Among the many policy resources are the following:
  - [Guidelines for School Health Programs to Promote Lifelong Healthy Eating](http://www.cdc.gov/healthyyouth/npao/strategies.htm); an updated version is forthcoming
  - [School Health Index: A Self-Assessment and Planning Tool](http://www.cdc.gov/healthyyouth/shi/index.htm);
  - [Health Education Curriculum Assessment Tool (HECAT)](http://www.cdc.gov/healthyyouth/hecat/index.htm);
  - [Making It Happen: School Nutrition Success Stories](http://www.cdc.gov/healthyyouth/mih/index.htm); and
  - an extensive hyperlink list of local wellness policy tools and resources.
The National Association of State Boards of Education (NASBE) operates an online state school health policy database that includes every state's laws and regulations regarding school food services, school food environments, nutrition education, and wellness. Visit www.nasbe.org/healthy_schools/hs/index.php.

The National Schools Boards Association (NSBA) operates a school health resource database that contains many sample policies. Key documents and sample school district policies are compiled in a “Healthy Eating 101” packet, available online at www.nsba.org/schoolhealth.

The Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) maintains an informational Wellness Policy website at teamnutrition.usda.gov/Healthy/wellnesspolicy.html.

Action for Healthy Kids offers an online Wellness Policy tool to provide practical guidance and how-to information about the wellness policy process, including many policy examples and extensive resource lists, which is available at www.actionforhealthykids.org/for-schools/wellness-policy-tool/. In addition, the organization offers several publications with advice on effectively pursuing a policy development process, including From the Top Down: Engaging School Leaders in Creating a Healthier, More Physically Active School Environment. Access this and other reports at www.actionforhealthykids.org/.

The Alliance for a Healthier Generation, a joint project of the American Heart Association and the William J. Clinton Foundation that was launched in 2006, operates a Healthy School Program that works with schools in all 50 states. Participating schools receive access to action plans, trainings, technical assistance, and opportunities to collaborate with other schools. For more information visit www.healthiergeneration.org.

The Wellness School Assessment Tool (WellSAT) is an online tool for evaluating the quality, comprehensiveness, and strength of existing school wellness policies. The WellSAT was developed by researchers at the Rudd Center for Food Policy & Obesity at Yale University. The WellSAT is an abbreviated version of the 96-item Comprehensive Coding System to Measure the Quality of School Wellness Policies developed by the Robert Wood Johnson Foundation’s Healthy Eating Research Program working group. Access the online policy tool at www.wellsat.org.

Selected State and Local Resources

The California Department of Education produced Taking Action for Healthy School Environments: Linking Education, Activity, and Food in California Secondary Schools, which describes how educational and community leadership in 18 school districts developed new policy and program approaches to create healthier schools. Download it and several related publications at www.cde.ca.gov/ls/nu/be/nutredres.asp.

Project PA is a partnership between Penn State University and the Pennsylvania Department of Education that provides training and assistance to child nutrition directors in the state. Their website contains a wealth of policy guidance materials at nutr88.hhdev.psu.edu/projectpa/2010/.


Eat Smart Move More North Carolina, a statewide partnership among state agencies, organizations, communities, and individuals to promote increased opportunities for healthy eating and physical activity, offers Eat Smart: North Carolina’s Recommended Standards for All Food Available in School as a practical planning tool for educators, parents, and community leaders. Download it at www.eatsmartmovemorenc.com/EatSmartSchoolStandards.pdf.
Model Policy: Integrated Policy to Promote Healthy Eating in Schools

[Note: The following is model language for policy at the state, school district, or school level, applicable to public or private schools. Users will need to adapt this model policy to fit their state and local education governance structure and established policy format, particularly the phrases in italics.]

GOAL. Schools share responsibility with families and the community to help students meet the Dietary Guidelines for Americans. All schools shall encourage and provide opportunities for students and staff members to practice making healthy eating choices on a daily basis, and shall educate every student on essential knowledge and skills for a lifetime of healthy eating. Nutritious school meals should be the main source of foods and beverages available at school; other foods and beverages that may be available shall also provide necessary nutrients.

RATIONALE. The link between nutrition and learning is well documented. Healthy eating is essential for students to achieve their academic potential, full physical and mental growth, and lifelong health and well-being. Well-planned and implemented school meals programs have been shown to positively influence students’ health, academic performance, and eating habits. The overall school environment plays a significant role in teaching and modeling eating and health behaviors.

HEALTH-PROMOTING SCHOOL CULTURE. Each school, in consultation with the school health advisory council/staff members/family representatives/student government, shall foster and actively promote a safe, supportive, and health-promoting social environment for student growth and learning. School leaders shall emphasize respect, support, caring, academic achievement, and healthy lifestyles, and adopt a mission statement and code of conduct that includes expectations and standards of behavior for students and staff. Teasing or bullying based on weight, body size, or other personal attributes shall not be tolerated.

INTEGRATED POLICY. The state department of education/All school districts shall develop, adopt, and implement a multifaceted, integrated policy to help students and staff members meet the Dietary Guidelines for Americans and prepare students for a lifetime of healthy eating. The integrated policy shall include the following elements:

- school meals programs with appropriately trained and certified or qualified staff who efficiently serve a variety of healthy and nutritious meals that meet federal nutrition standards and appeal to students;
- active encouragement of students and staff members to participate in reimbursable school meals programs;
- pleasant dining areas with free drinking water and hand washing facilities;
- adequate time for unhurried eating, i.e., at least 20 minutes seat time for lunches and 10 minutes seat time for breakfasts served at school;
- lunch served after recess and as close to the middle of the day as possible;
- nutrition standards for all foods and beverages sold or offered at school that are not part of reimbursable school meals programs that align with the Institute of Medicine’s Nutrition Standards for Foods in Schools;
• a sequential program of behavior-focused nutrition instruction that aims to influence students' knowledge, attitudes, planning skills, and eating habits; is part of the comprehensive school health education curriculum; is taught by qualified staff; and is coordinated with school meals programs;

• encouragement and opportunities for school staff to model healthy eating habits;

• procedures to ensure that students with diabetes, special nutritional needs, eating disorders, and other nutrition-related health problems are provided with or referred to appropriate counseling or medical treatment services; and

• collaboration with related agencies and programs in the community.

ACCOUNTABILITY. The state/tribal/district board of education and local school administrators shall comply with the provisions of this policy and ensure proper accountability for all funds received from food and beverage sales.

The child nutrition director/school nutrition manager/school health program coordinator/team leader shall be held responsible for:

• ensuring the implementation of all elements of the integrated policy;

• providing information about best practices to staff implementing the policy;

• facilitating communication among child nutrition, physical education, school health program, and other school staff, as well as collaborating agencies;

• conducting policy evaluation activities, such as student, family, and staff satisfaction surveys; and

• submitting an annual progress report that includes recommendations for policy improvement to the state board of education/district board of education/school health advisory council.

All the model policies from Fit, Healthy, and Ready to Learn chapters are available at nasbe.org/project/center-for-safe-and-healthy-schools/. Users are encouraged to download these model policies to adopt or adapt to fit their governance system and locally determined points of view. They were designed to be used at the state, school district, or school level and are applicable to public or private schools. If used, the following courtesy attribution is requested: “These policies first appeared in Fit, Healthy, and Ready to Learn: A School Health Policy Guide by the National Association of State Boards of Education. Reprinted with permission of the author.”
3. A Closer Look: School Meals Programs

The foundation of an integrated healthy eating policy is the reimbursable school meals* program. Studies find that most school meals are healthy and more nutritious than most alternative meals purchased in vending machines, snack bars, or fast food outlets. Indeed, one study of elementary school students found that those who ate lunches brought from home were significantly less likely to meet DGA standards for fat, protein, calcium, vitamin A, and iron than students who ate the school lunch. The average brown bag lunch typically contains more saturated fat and less variety than the reimbursable school meal.

A recent USDA analysis of data collected in the 2004-05 school year found that students had opportunities to select low-fat lunch options in about 90 percent of all schools nationwide. In a 2007 survey, the School Nutrition Association (SNA) found that 97 percent of schools offered fat-free or low-fat milk, 96 percent offered fresh fruits and vegetables, 88 percent offered salad bars or pre-packaged salads, 63 percent offered from-scratch baked items, and 52 percent offered vegetarian meals. Students who participate in the National School Lunch Program (NSLP) have been found to consume significantly greater amounts of protein and several essential nutrients than nonparticipants. NSLP participants are four times more likely (75 versus 19 percent) to consume milk at lunch and half as likely (37 versus 19 percent) to consume desserts, snacks, and other beverages not part of reimbursable meals than nonparticipants. Students participating in the school meals program

* The term “school meals” is used in this guide as shorthand for all breakfasts, lunches, snacks, suppers, and milk distribution supported by federal child nutrition programs.
The 2010 Healthy, Hunger-Free Kids Act

In December 2010, Congress passed and President Obama signed the 2010 Healthy, Hunger-Free Kids Act reauthorizing all federally funded child nutrition programs.

Key components of the law that affect schools include:

- **Performance-based school meal reimbursement**: Schools following USDA’s school meal standards based on the 2009 Institute of Medicine Report will receive an additional $.06 per meal.

- **School-wide nutrition standards**: USDA can create standards for all foods sold on campus throughout the school day. States and local entities may still have more stringent standards. Exemptions are made for fundraisers (except those that are fundraising through vending, à la carte, school stores) that are infrequent and approved by the school.

- **Expanding access**: Students in communities of high poverty will no longer have to complete paper applications to qualify for the program. All students who are in foster care or whose families participate in the Supplemental Nutrition Assistance Program have automatic certification for the free school meal program.

- **Water**: Requires schools to make free potable water available where meals are served.

- **Local Wellness Policies**: Districts are now required to make the creation of the local wellness policies more transparent and include greater community input. Policies must highlight a plan for implementation and compliance.

- **Farm to School**: States will receive funding to promote school gardens and encourage locally grown produce to be served in their schools.

- **Afterschool program meals**: All states are now eligible to receive funding to serve meals in afterschool programs.

- **Professional standards for school food service**: USDA will establish a program of required education, training, and certification for school food service directors and state agency directors.


are also likely to have a better sense of what constitutes a nutritionally complete meal.89

Yet, many students do not take advantage of these convenient opportunities to eat low-cost, well-balanced meals. During the 2004-2005 school year, 62 percent of U.S. students participated in the NSLP on a typical school day. Those most likely to participate were elementary school students and low-income students eligible for free or reduced-price meals. Furthermore, 18 percent of students participated in the School Breakfast Program.90 Although many students eat breakfast at home, many others do not:
Model Policy: Child Nutrition Program

GOAL. The state legislature/state board of education/district school board acknowledges that providing food for children is primarily the responsibility of families. To supplement their efforts, during the school day all students shall have affordable access to the varied and nutritious foods they need to stay healthy and learn well. A quality school nutrition program is an essential educational support activity, integral to the school experience; although food preparation and service must be managed in a cost-effective manner, budget concerns will not take precedence over the nutritional needs of students.

SCHOOL NUTRITION PROGRAM. Every school shall efficiently operate a school nutrition program under the administration of a child nutrition director at the school district level and a school nutrition manager at each school. Schools shall participate in available federal meals programs including the National School Lunch and Breakfast Programs and, if eligible, reimbursable after-school snacks, the Fresh Fruit and Vegetable Snack Program, and the Child and Adult Care Food Program. As a child’s nutritional needs continue during breaks in the school calendar, all schools with at least 50 percent enrollment of students eligible for reimbursable meals shall participate in the federal Summer Food Service Program or collaborate with other agencies and community groups to serve eligible students.

The school nutrition program shall have adequate equipment, facilities, supplies, and staff to meet the current Dietary Guidelines for Americans and operate in accordance with the regulations, policies, instructions, guidelines, and nutrition standards of the Richard B. Russell National School Lunch Act (42 USC 1751 et seq.); the Healthy, Hunger-Free Kids Act of 2010, Public Law 111-296-December 13, 2010 (124 STAT. 3183); and applicable laws and regulations of the State of ______. Meal preparation and service operations, equipment, and facilities must also meet applicable federal, state, and local regulations and standards regarding safe food preparation, handling, and storage; drinking water; sanitation; workplace safety; and emergency planning. Staff shall cooperate with efforts in the community to recover wholesome excess food for distribution to people in need.

All students and staff members shall be actively encouraged to regularly participate in the reimbursable school meals program as their primary source of food and beverages at school. Meal payment systems must be organized to preclude the overt identification and stigmatization of students who may be eligible for free or reduced-price meals and snacks. All revenues shall be used solely for the operation or improvement of the school nutrition program.

The school nutrition program shall offer variety and choice; serve fresh fruits and vegetables; use whole-grain ingredients high in dietary fiber; and utilize preparation methods that minimize saturated fat, trans fat, cholesterol, sugar, and sodium. Schools may not deep fry, flash fry, or pan fry menu items. Milk products must be non-fat or one percent low-fat milk. Menus should be planned with periodic input from students, family members, and school staff and take into account
the cultural norms and preferences of the student body. Information about the ingredients and nutritional value of school meal items shall be published on each school's public website and posted in the dining areas of middle and high schools.

**SPECIAL DIETARY NEEDS.** Substitutions or modifications in school meals shall be made for students with disabilities or health conditions when the need is supported by a student’s Individualized Education Program (IEP), Individual Health Plan (IHP), or statement signed by a licensed physician that identifies the nature of the student’s special need, the food or foods to be omitted from the student’s diet, and the food or choice of foods that must be substituted. Requests for other food accommodations, such as additional portions for pregnant and lactating students, will be considered by the school nutrition manager/school nurse on a case-by-case basis. Denial of requests may be appealed to the district superintendent.

**À LA CARTE SALES.** The school nutrition program may sell individually priced foods, beverages, and entrée items from the National School Lunch Program menu. All revenues shall accrue to the program. Entrée items must have a sodium content of 480 mg or less, less than 10 percent of total calories from saturated fats, and 35 percent or less of calories from total sugars. All other à la carte sales items must meet the school’s nutrition standards for foods and beverages that are not part of the reimbursable school meals program.

**DINING AREAS.** Students and staff shall have adequate space to eat meals in pleasant surroundings and have sufficient time to eat, relax, and socialize: at least 10 minutes after sitting down for breakfast and 20 minutes after sitting down for lunch. Lunch shall be scheduled between 11:00 AM and 1:00 PM. Activities that limit student participation in school meals programs may not be scheduled during meal service times. For preschool, kindergarten, and elementary school classes, lunchtime recess shall be scheduled before mealtime. Schools are encouraged to arrange bus schedules and utilize serving methods and locations that facilitate participation in school breakfast and lunch programs.

Dining room supervisory staff and volunteer monitors shall be provided appropriate training in how to promote considerate student behavior and maintain safe and enjoyable eating environments. The school nutrition manager shall regularly consult with health education instructional staff on opportunities to reinforce healthy eating lessons in the school dining room.

All students are required to wash or sanitize their hands before eating meals and snacks and encouraged to practice proper oral hygiene. Students shall have convenient access to hand washing facilities near dining areas and free safe drinking water with disposable cups at no charge.

**CLOSED CAMPUS FOR LUNCH.** Students are not permitted to leave school grounds during school meals service hours. Signs to this effect will be posted at appropriate locations. School district leaders are encouraged to collaborate with local planning and zoning authorities to regulate the establishment of stores and restaurants that sell foods or beverages high in fat, sugar, or sodium within 440 yards, or one-quarter mile, of any school campus.
SCHOOL NUTRITION STAFF. Each school district with at least [##] students shall employ a qualified child nutrition director to administer and supervise the district’s school meals program. School districts with fewer than [##] students may collaborate with other districts to share a child nutrition director.

A state or school district child nutrition director must have a bachelor’s degree in nutrition, foodservice management, or a related field from an accredited institution of higher education, and have earned within 3 years of his/her date of employment and thereafter maintain specialized state certification, Level 3 certification from the School Nutrition Association, the school nutrition specialist (SNS) credential, and/or licensure as a registered dietitian (RD). The state shall offer, and directors shall participate in, regular professional development opportunities that address topics directly relevant to the operation of the school district’s school meals programs.

Each school shall employ a qualified School Nutrition Manager to lead the operation of the school meals program. A school nutrition manager must have an associate’s degree in nutrition, foodservice management, or a related field from an accredited institution of higher education, and have earned within three years of his/her date of employment and thereafter maintain specialized state certification and/or Level 2 certification from the School Nutrition Association and a recognized food safety credential. The school district shall offer, and school nutrition managers shall participate in, regular professional development opportunities that address topics directly relevant to the operation of the school meals program.

All full- and part-time employees of the school foodservice program shall satisfactorily complete a 10-hour course in food safety and sanitation before beginning their service.

CONTRACTED MANAGEMENT SERVICES. Specified administrative and operational services of the school nutrition program may be contracted out to foodservice management companies or other vendors following established bidding procedures. The contractor(s) shall fully comply with federal and state nutritional standards and staff certification requirements for school nutrition programs, and be subject to district monitoring and auditing processes. The district child nutrition director shall be responsible for administering school nutrition program contracts, and the school district is ultimately responsible for meeting all federal program requirements.

COORDINATION WITH OTHER PROGRAMS. The child nutrition director/school foodservice manager shall regularly consult with health education instructional staff, physical education staff, and health services staff on methods to reinforce healthy eating lessons in the school dining room.

ACCOUNTABILITY. The state/tribal/district board of education and local school administrators shall comply with the provisions of this policy and ensure proper accountability for all funds received from food and beverage sales. Methods used by the state/district for monitoring and enforcing compliance may include a Coordinated Review Effort (CRE), School Meals Initiative
surveys have found that 8 percent of children aged 6–8 years, 14 percent aged 9–13 years, and 31 percent aged 14–18 years eat nothing for breakfast on any given day.91

Encouraging participation in the nutritious, reimbursable school meals program is a “win-win” situation for students, families, schools, and society. Some education leaders may not be aware that as the number of students participating in school meal programs increases, the school district collects more reimbursement; child nutrition programs are authorized as automatic entitlements in the federal budget and therefore are not subject to the annual appropriations process. In the 2009-10 school year, the NSLP reimbursement rates were $2.70 for lunches served free to the lowest-income children, $2.30 for each reduced-price lunch, and $0.25 for each full-price lunch.92 The federal government also reimburses school districts for breakfasts and snacks, makes available farm commodities worth an estimated $0.19 per lunch, and provides occasional “bonus” commodities. If all eligible low-income students in California had participated in the school meal programs in 2005, for example, that state’s school districts would have received approximately $812 million in additional federal funding.93

Selected Resources on Quality School Meals

General Resources

➢ The Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA) provides comprehensive information, regulations, cooking and food safety tips, and helpful guidance for federal child nutrition programs at www.fns.usda.gov/cnd.

➢ The Team Nutrition initiative of FNS provides training, technical assistance, and resources for school leaders and foodservice staff at teamnutrition.usda.gov.

➢ The Healthy Meals Resource System (HMRS) is the technical assistance and training arm of Team Nutrition, developed by USDA and maintained at the National Agricultural Library’s Food and Nutrition Information Center in collaboration with the University of Maryland. HMRS provides a large number of valuable national resources for Child Nutrition Program personnel, such as Fruits and Vegetables Galore: Helping Kids Eat More and, most

➢ The National Food Service Management Institute (NFSMI) provides information, conducts and disseminates applied research, and offers online and in-person staff training opportunities for child nutrition personnel. Access the Institute’s online courses and research reports at www.nfsmi.org.

➢ The School Nutrition Association (SNA), its 52 state affiliates, and hundreds of local chapters provide education and training, as well as distribute regulatory, legislative, industry, and nutritional information for school nutrition professionals. Access SNA’s online resources at www.schoolnutrition.org.

➢ The Food Research and Action Center (FRAC) offers an extensive amount of information and guidance documents on policies, laws, best practices, and advocacy tips. Visit www.frac.org.

➢ The Action for Healthy Kids website features a large number of resources on school meals programs and after-school programs at www.actionforhealthykids.org/resources.php.

Food Safety:


➢ FoodSafety.gov is a common gateway to a vast amount of food safety information from four government agencies: the Centers for Disease Control and Prevention (CDC), the U.S. Department of Agriculture (USDA), the Food and Drug Administration (FDA), and the Environmental Protection Agency (EPA).

Farm to School programs:

➢ The National Farm to School Network, supported by eight regional lead agencies, offers training and technical assistance, information services, policy development, and media and marketing activities. Visit www.farmtoschool.org.


The Institute of Medicine’s “School Meals: Building Blocks for Healthy Children”

In 2009, the Institute of Medicine released a new standard for menu planning and school meals to align with the Dietary Guidelines for Americans. Key recommendations include:

- Meeting both a minimum and a maximum calorie level over a five-day period;
- Increasing access to fruits and vegetables by serving:
  - More fruit at breakfast, including whole fruit,
  - A greater amount and variety of vegetables should be available at lunch, and
  - Both fruit and vegetables at lunch;
- Serving more whole grain food items with less refined grains;
- Serving only fat-free (flavored/unflavored) or plain low-fat (one percent) milk;
- Addressing fats/oils by:
  - Reducing saturated fats,
  - Increasing unsaturated oils within calorie limits, and
  - Minimizing trans fats; and
- Reducing sodium content to recommended levels by 2020.
4. A Closer Look: Creating a Healthy Eating Environment throughout the School

The national school meals programs were originally intended to address hunger and under-nutrition. But in recent years another type of crisis—obesity—has become a public health priority. Many young people consume too many high-calorie foods and beverages, often at school, while engaging in too little physical activity. The issue requires education policymakers to look beyond the school meals program and pay attention to other foods and beverages available to students.

Estimates indicate that as much as one-fifth of the average increase in adolescent weight is attributable to the increase in the availability of junk food in schools. In 2006, 33 percent of elementary schools, 71 percent of middle schools, and 89 percent of high schools had a vending machine or a school store, canteen, or snack bar where students could purchase foods or beverages in competition with the school meals program. Even more schools sell foods and beverages à la carte (i.e., extra entrées, side items, and beverages on a per-item basis) in the cafeteria outside of the school meals program. Although most schools have fruit available for sale, à la carte items do not have to meet USDA nutrition standards: the most popular item is pizza (fig. 4). Many à la carte items are high in fat, added sugars, and sodium—SHPPS found that 24 percent of high schools sold deep-fried foods at lunch every day in 2006.
Several years ago, Congress called on the Institute of Medicine to review all relevant research and develop science-based recommendations for nationwide nutrition standards. Basing its work on the 2005 *Dietary Guidelines for Americans* (DGA), the committee released its landmark report *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth* in 2007. The report’s set of guiding principles included the following:

- The federally reimbursable school nutrition programs will be the primary source of foods and beverages offered at school.

- All foods and beverages offered on the school campus will contribute to an overall healthful eating environment.

The committee emphasized that all foods and beverages available to students on school grounds, including à la carte service in the school cafeteria, school stores and snack bars, vending machines, fundraising activities, and classroom celebrations, should be consistent with the 2005 DGA. The model policies in this guide are explicitly based on the national IOM school foods standards as the ideal that all states, tribes, school districts, and schools should follow.

### Selected Resources on Foods and Beverages at School

- The Institute of Medicine’s Committee on Nutrition Standards for Foods in Schools produced *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*, which offers specific recommendations and guidance for the sale, content, and consumption of all foods and beverages available at school. Access the report to read online or order a hard copy at [www.nap.edu/catalog.php?record_id=11899](http://www.nap.edu/catalog.php?record_id=11899).

- The Centers for Disease Control and Prevention and USDA’s Team Nutrition program jointly developed “Making It Happen! School Nutrition Success Stories,”

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**Figure 4. Most Popular Items Sold à la Carte among Students, 2007**

<table>
<thead>
<tr>
<th>Item</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pizza</td>
<td>23%</td>
</tr>
<tr>
<td>Beverages</td>
<td>18%</td>
</tr>
<tr>
<td>Chips/salty snacks</td>
<td>14%</td>
</tr>
<tr>
<td>Cookies</td>
<td>11%</td>
</tr>
<tr>
<td>All other entrees</td>
<td>9%</td>
</tr>
<tr>
<td>Chicken (typically nuggets/strips)</td>
<td>9%</td>
</tr>
<tr>
<td>Ice cream</td>
<td>6%</td>
</tr>
<tr>
<td>French fries</td>
<td>4%</td>
</tr>
<tr>
<td>All other desserts</td>
<td>3%</td>
</tr>
<tr>
<td>Mexican foods</td>
<td>2%</td>
</tr>
<tr>
<td>Fruits/juices</td>
<td>1%</td>
</tr>
</tbody>
</table>

Source: School Nutrition Association
Model Policy: Healthy School Nutritional Environment

GOAL. Reimbursable school meals programs should be the primary source of foods and beverages offered at school. All other foods and beverages sold or offered to students on school grounds must contribute to a healthy lifestyle and not add unnecessary calories, fat, sugar, sodium, or additives.

FREE WATER AVAILABLE AT SCHOOL. Safe drinking water that meets the National Primary Drinking Water Standards and applicable state or local standards shall be conveniently available to students throughout the school day at no charge.

FOODS BROUGHT FROM HOME. Families and students shall be encouraged to participate in reimbursable school meals programs; at the same time, schools should also make clear that lunches from home are welcome, and school nutrition directors can provide helpful suggestions for nutritious foods that students can bring. Due to food safety concerns and some students’ dietary restrictions, foods and beverages from outside the school may be consumed only by the individual students for which they were brought or delivered and not shared with other students.

NUTRITION STANDARDS. By the start of school year _____, the state/school district/school shall implement the standards recommended by the Institute of Medicine Committee on Nutrition Standards for Foods in Schools in its 2007 report, Nutrition Standards for Foods at School: Leading the Way Toward Healthier Youth, regarding food composition, portion size, and availability for all foods and beverages sold or offered to students anywhere on school grounds that are not part of a reimbursable school meal.

Individual food items available on all school grounds during school hours, referred to as “Tier 1” foods, must be fruits, vegetables, whole grains, and related combination products that contain a total of one or more servings of fruit, vegetables, or whole grain products per portion; and nonfat and one percent low-fat dairy products. Each Tier 1 food product, or portion as packaged, must:

- be limited to 200 calories or less, unless it is a National School Lunch Program menu entrée item being sold à la carte;
- derive no more than 35 percent of total calories from fat;
- derive less than 10 percent of total calories from saturated fats;
- contain 0 grams of trans fat;
- derive 35 percent or less of calories from total sugars, except for: 1) 100 percent fruits in all forms without added sugars, 2) 100 percent vegetables without added sugars, and 3) flavored or unflavored low-fat and nonfat yogurt with no more than 30 grams of total sugars per 8-ounce portion; and
- contain 200 mg or less of sodium per portion, except that National School Lunch menu entrée items being sold à la carte may contain up to 480 milligrams of sodium.

Individual beverage items available on all school grounds during school hours, referred to as Tier 1 beverages, may include:

- water without flavoring, additives, nonnutritive/artificial sweeteners, or carbonation;
• 8-ounce portions of one percent low-fat and nonfat milk and nutritionally equivalent lactose-free and soy beverages, which may contain no more than 22 grams of total sugars for flavor;

• 4-ounce portions of 100-percent fruit or vegetable juices in elementary and middle schools, or 8-ounce portions in high schools.

After school hours at the high school level only, students are permitted access to additional “Tier 2” foods and beverages. Tier 2 snack foods are not limited to fruits, vegetables, and whole grains, but they must meet the same calorie, fat, sugar, and sodium limits as Tier 1 foods. Tier 2 foods and beverages must have fewer than 200 calories per portion as packaged, with or without nonnutritive sweeteners, carbonation, or flavoring, and may not be caffeinated or fortified with nutrients.

All foods and beverages that contain caffeine, except for trace amounts of naturally occurring caffeine substances, are not permitted at school for student consumption. Caffeinated beverages are permitted for consumption by adults in faculty lounges, other staff-only areas, and during evening and weekend events attended by adult visitors. The district/school may choose to waive any or all nutrition standards for meetings, lectures, or other events that involve only adults.

At the discretion of school athletic program coaches, “sports drinks” that provide electrolytes, energy, and hydration may be made available to students after school who are engaged in vigorous physical activity lasting an hour or more. The procurement, storage, and distribution of these beverages will be the responsibility of the school meals program staff.

The nutrition standards will be publicized to students, families, and staff members in the district policy manual/school handbook/other means.

FOOD SALES OVERSIGHT. The district child nutrition director or the director’s designee must approve the sale, sales location, and sales scheduling of all foods and beverages on school grounds to assure nutritional integrity and to control their possible competition with the reimbursable school meals program. All revenues from the sales of foods or beverages in vending machines, school stores, snack bars, and concession stands will accrue to the school meals program or student organizations approved by [whom].

Foods and beverages sold during athletic events, musical and dramatic performances, and other evening and weekend events attended by adult visitors are encouraged to meet Tier 1 and Tier 2 standards; however, each such food or beverage item must be approved in advance by the district child nutrition director and/or local wellness committees.

VENDING CONTRACTS. Contracts or agreements with commercial food and beverage vendors shall be publicly and competitively bid in accordance with procurement requirements set forth in applicable state/local laws or regulations. All items available for sale must comply with the nutrition standards included in this policy. Contracts that extend beyond one year must contain a clause allowing termination of the contract upon 120-day notice. Vending machines shall be placed in areas of low student traffic away from school meals dining areas. Machine exteriors may not depict commercial products or logos or suggest that consumption of vended items conveys a health or social benefit. Contracts shall be reviewed by the district child nutrition director to assure consistency with all provisions of this policy before final approval by the district board of education.
MARKETING AND COMMERCIAL MESSAGES AT SCHOOL. School leaders are encouraged to solicit financial support for educational and extracurricular activities, equipment, supplies, or events from private businesses, and any such sponsorship shall be publicly and gratefully acknowledged. When acknowledging a sponsor verbally or in writing, school leaders shall clarify that the school does not endorse any product or company and compensation was received for the privilege of displaying the company name or logo. Advertising, academic reward programs, coupons, free products, and other promotional activities for commercial products are not permitted on school grounds, websites, or printed materials. Relationships between schools and commercial interests shall be continually monitored to maintain the integrity of the school and its educational mission.

FOODS AND BEVERAGES AS REWARD, INCENTIVE, OR PUNISHMENT. Foods and beverages can not be withheld or provided as a reward, incentive, or punishment.

FUNDRAISING. Only student organizations and legally constituted, nonsectarian, nonpartisan organizations approved by [whom] are permitted to engage in fundraising on school grounds at any time. Each organization is limited to one selling period per week. Tier 1 foods or beverages may be sold during school hours thirty minutes after the last lunch period if approved by the school health advisory council/district child nutrition director/school cafeteria manager. Tier 2 foods and beverages may be sold only after school at the high school level. Organizations engaged in fundraising are encouraged to sell services or items other than foods and beverages.

CLASSROOM CELEBRATIONS. Tier 1 foods and beverages may be served for holiday, seasonal, cultural, or birthday celebrations after the last school lunch period has ended. Due to food safety concerns and some students’ dietary restrictions, foods and beverages from outside the school may be consumed only by the individual students for whom they were brought or delivered. As an alternative to celebrations involving food, teachers are encouraged to schedule additional recess periods or other activities suggested by students.

JOINT-USE AGREEMENTS. The state/tribal/district board of education and local school administrators shall collaborate with community programs to allow use of kitchen equipment and other community areas such as playgrounds to encourage access to healthy opportunities throughout the day.

ACCOUNTABILITY. The state/tribal/district board of education and local school administrators shall comply with the provisions of this policy and ensure proper accountability for all funds received from food and beverage sales. Noncompliance with any provision of this policy may result in appropriate sanctions that include suspension or recovery of state/district reimbursements/suspension of vending privileges/other.

The child nutrition director/school nutrition manager/school health program coordinator/team leader shall conduct policy evaluation activities and submit an annual Healthy Eating at School progress report to the state/tribal/district board of education/school health advisory council that summarizes implementation activities and includes recommendations for policy improvement.
which includes stories from 32 schools and school districts that have improved the nutritional quality of foods and beverages offered and sold on school campuses, outside the school meals programs. Supplementary materials used by the schools and districts are included as well. Go to: teamnutrition.usda.gov/Resources/makingithappen.html.

➤ USDA’s Team Nutrition program also developed Changing the Scene: Improving the School Nutrition Environment to help students meet the U.S. Dietary Guidelines for Americans by making healthy choices more convenient. The kit includes a variety of tools for use at the local level to raise awareness and address school environment issues that influence students’ eating and physical activity practices. See teamnutrition.usda.gov/Resources/changing.html.

➤ The Action for Healthy Kids website features an extensive list of resources to improve the school food environment, available at www.actionforhealthykids.org/resources.php.

➤ The Center for Science in the Public Interest (CSPI) offers a number of advocacy-oriented resources to help improve the school nutrition environment, including the periodically updated School Foods Report Card: A State-by-State Evaluation of Policies for Foods and Beverages Sold through Vending Machines, School Stores, à la Carte, and Other Venues Outside of School Meals. Visit cspinet.org/nutritionpolicy.

➤ The Commercialism in Education Research Unit (CERU) at Arizona State University produces in-depth research reports on business and privatization trends in schools. Visit epicpolicy.org/ceru-home.

State-Developed Resources:


➤ The Montana Office of Public Instruction (OPI) offers the All It Takes Is Nutritious SEN$E: Students Encouraging Nutritious Snacks Everyday! to assist those desiring to provide and promote healthful foods and beverages at a student store while maintaining profitability. The kit also covers food safety issues for school stores. Go to opi.mt.gov/Programs/SchoolPrograms/School_Nutrition/Wellness.html.
5. A Closer Look: Prevention Education

We need to ensure students are able to enjoy healthy lifestyles, both through action and learning.

— Zhan Okuda-Lim
Student Board Member
Nevada State Board of Education

Education leaders today may remember classroom nutrition education (if they received any at all) as mostly learning about nutrients and food groups, aimed at increasing factual knowledge about the components of a balanced diet. Traditional knowledge-based programs have been found to be less effective than today’s state-of-the-art health education curricula that focus on behavioral change. A growing body of research emphasizes the importance of teaching functional health information (i.e., essential concepts that have a practical purpose); shaping personal values that support healthy behaviors; shaping group norms that value a healthy lifestyle; and developing the essential skills necessary to adopt, practice, and maintain health-enhancing behaviors. These skills include meal planning and cooking nutritious meals using fresh ingredients. Most effective programs also build in family involvement strategies.

Nutrition education should not be taught as a stand-alone subject, but rather as one strand of a comprehensive, sequential preK-12 health education program based on the National Health Education Standards. Teachers need to be specifically trained to teach health and nutrition, and should be provided opportunities to participate in staff wellness activities.
Even within this framework, not all nutrition education curricula are equally effective. CDC has developed the Health Education Curriculum Analysis Tool (HECAT) to help teachers, school districts, state agencies, and others thoroughly assess health education curricula so that they can improve existing health education, develop new and improved curriculum programs, or select commercial health education curricula that best meets the health education needs of students and priorities of the school and community. The HECAT is based on a synthesis of research and CDC’s guidelines for school health programs, the National Health Education Standards, guidance from the U.S. Department of Education, and the expertise of health education practitioners. The tool can be downloaded from www.cdc.gov/HealthyYouth/hecat/index.htm.

### Selected Resources on Healthy Eating Education

- **Contact your state education agency** to find out what nutrition education materials and professional development opportunities might be available.

- **The Health Education Curriculum Analysis Tool (HECAT)** from the Centers for Disease Control and Prevention (Division of Adolescent School Health) is an assessment tool for examining school health education curricula. One of the HECAT modules addresses Healthy Eating. HECAT results can help schools select or develop appropriate and effective health education curricula and improve the delivery of health education. The HECAT is customizable to meet local community needs and conform to the curriculum requirements of the state or school district. Access HECAT at www.cdc.gov/HealthyYouth/hecat/index.htm.

- **The Team Nutrition program** of the U.S. Department of Agriculture’s Food and Nutrition Service provides a broad range of materials, training, and technical assistance support for education professionals and families. Among the resources available online at teamnutrition.usda.gov/library.html are the following:
  - Choose MyPlate includes numerous educational materials, lesson plans, graphics, interactive games, and posters for consumers, educators, and health care professionals. Available at www.choosemyplate.gov.
  - “Nutrition Essentials” is a kit of materials and lessons for middle and high schools, including posters, an interactive CD, games, and nutrition education information. Available at www.fns.usda.gov/tn/resources/nutritionessentials.html.
  - **Empowering Youth with Nutrition and Physical Activity** is a manual for use in classrooms and after-school programs with youth 11–18 years old. In addition to current nutrition and physical activity information, the manual includes ideas for how to incorporate nutrition education and physical activity into youth programs and events, as well as resources to help youth develop a nutrition- or physical activity-related community project. Available at teamnutrition.usda.gov/Resources/empoweringyouth.html.
  - **The Power of Choice: Helping Youth Make Healthy Eating and Fitness Decisions** is a healthy lifestyle toolkit for leaders of after-school programs for young adolescents. It provides activities and reproducible materials that are also useful for nutrition education during the school day, in classrooms, or in cafeteria-based education. See www.fns.usda.gov/tn/resources/power_of_choice.html.

- **USDA’s Food and Nutrition Information Center (FNIC)** at the National Agricultural Library operates the Education and Training Materials Database, a compilation of educational materials developed by universities, private industry, and local, state, and federal government agencies for school personnel, available online at healthymeals.nal.usda.gov/schoolmeals/Resource_Cafe/Resource_Search.php. FNIC also provides information about grant funding opportunities.

- **The National Cancer Institute (NCI) of the National Institutes of Health (NIH)** has identified a group of nutrition education programs with scientifically credible evidence of effectiveness at influencing eating behaviors. As of early 2011, NCI considers 13 programs that focus on school-age children worthy of being recommended for use. Find a table of nutrition-oriented Research-Tested Intervention Programs at rtipscancer.gov/rtipstopicPrograms.do?topicId=102266&choice=default.

- **The National Food Service Management Institute (NFSMI)** at the University of Mississippi offers train-
GOAL. All students shall be provided effective health and nutrition education that equips them with the knowledge, skills, and motivation to build habits for a lifetime of healthy eating and regular physical activity. School staff members shall reinforce these lessons at every opportunity.

SCHOOL CLIMATE. Each school, in consultation with the school health advisory council/staff members/family representatives/student government, shall foster and actively promote a safe, supportive, and health-promoting environment for growth and learning. School leaders shall emphasize respect, support, caring, and academic achievement, and adopt a mission statement and code of conduct that includes expectations and standards of behavior for students and staff. Teasing or bullying based on weight, body size, or other personal attributes shall not be tolerated.

INSTRUCTIONAL PROGRAM. Lessons to promote healthy eating shall be integrated within a sequential, comprehensive health education program taught at every grade level, preK–12. The program shall:

- be based on theories and methods proven effective by published research;
- focus on influencing students’ eating and activity behaviors to help them meet the recommendations of the Dietary Guidelines for Americans and the MyPyramid Food Guidance System;
- develop students’ knowledge and skills as delineated in the National Standards for Health Education and the state’s/district’s health education standards/guidelines/framework;
- address the realities of students’ lives; and
- engage families as partners in their children’s education.

The school health council/school health coordinator/other shall use the Health Education Curriculum Assessment Tool (HECAT) from the Centers for Disease Control and Prevention to evaluate nutrition education curriculum materials for accuracy, completeness, balance, and consistency with the National Health Education Standards, the Dietary Guidelines for Americans, and the state’s/district’s educational goals and standards. Materials developed by food marketing boards or corporations shall be examined for inappropriate commercial messages and consistency with the Dietary Guidelines.

EDUCATIONAL REINFORCEMENT. Health and nutrition instruction shall be closely coordinated with the school meals program, the physical education program, other components of the school health program, the family and consumer sciences education program, and the career and technical education program. To the extent possible, nutrition concepts shall be used to meet education standards in other subject areas such as science, math, geography, and economics.

The district/school shall support families’ efforts to foster healthy lifestyles through such means as offering conveniently scheduled discussion groups on healthy eating, effective parenting skills, and healthy shopping and cooking methods. Schools should encourage parents of children who do not participate in the reimbursable school meals program to pack healthy lunches and snacks and refrain from including foods and beverages high in fat, sugar, or sodium. The district/school shall publish in the school handbook a list of foods and beverages that meet the district’s snack standards and ideas for celebrations, parties, rewards, and fundraising activities that do not involve food.
To the extent possible, the school-based nutrition education program shall coordinate messages and activities with similar programs in the community. Schools are encouraged to cooperate with other agencies and community groups to provide opportunities for student volunteer work related to nutrition, such as assisting with food recovery efforts or preparing nutritious meals for house-bound people.

**STAFF QUALIFICATIONS.** Staff responsible for teaching health education shall be adequately prepared and properly certified by the State of _____, and regularly participate in professional development activities to effectively deliver the educational program as planned. Preparation and professional development activities shall address:

- basic knowledge of nutrition;
- the goals of the *Dietary Guidelines for Americans* and the education concepts of the MyPyramid Food Guidance System;
- instructional techniques and strategies designed to promote healthy eating habits; and
- skill practice in program-specific activities.

**HEALTHY ROLE MODELING.** School staff members are encouraged to model healthy eating behaviors, including participating in the school meals program and conforming to school nutrition standards. *Districts/schools* are encouraged to offer employee wellness programs that include personalized instruction about healthful living.

School personnel shall not offer food or food coupons as a performance incentive or reward, and may not withhold food or meal program access from students as punishment.

**POLICY EVALUATION.** The child nutrition director/school nutrition manager/school health program coordinator/team leader shall conduct policy evaluation activities and submit an annual Healthy Eating at School progress report to the state/tribal/district board of education/school health advisory council that summarizes implementation activities and includes recommendations for policy improvement.

The National Institutes of Health of the U.S. Department of Health and Human Services provides “We Can! Ways to Enhance Children’s Activity and Nutrition,” a national program designed as a one-stop resource of practical tools to help children 8-13 years old stay at a healthy weight. Resources include a 200-page toolkit for community action, research information on childhood obesity, bilingual fact sheets on nutrition, physical activity, and heart health, a parent handbook, and student activities. Access the program at www.nhlbi.nih.gov/health/public/heart/obesity/wecan.

The Society for Nutrition Education (SNE) operates the MyPlate e-Catalog, a searchable listing of peer-reviewed nutrition education curricula and other materials—many of them free—that incorporate substantive content from MyPlate and the *Dietary Guidelines for Americans*. Visit www.sne.org/myplate/.

Action for Healthy Kids operates a resource database that includes a review of each item and a score that references its *Criteria for Evaluating School-Based Approaches*...
to Increasing Good Nutrition and Physical Activity. For the report, visit a4hk.org/pdf/criteria_report.pdf.

➢ The Partnership for Food Safety Education (PFSE), a coalition of more than 20 consumer groups, federal agencies, industry associations, and professional societies in food science, nutrition, and health, conducts the “Fight BAC!” campaign to educate consumers about simple practices that can help reduce the risk of foodborne illness. Classroom resources are available for all grade levels. Visit www.fightbac.org.

➢ The Center for Weight and Health of the University of California at Berkeley maintains a large collection of curricula, toolkits, and other educational resources in English and Spanish for schools and families. Among the materials the Center has developed is the Nutrition Education in School Food Service Tool Kit for elementary schools, which includes activities for foodservice staff to use in school, as well as for parents to use at home. Go to cwh.berkeley.edu for access to all the Center’s resources. To access the Nutrition Education in School Food Service Tool Kit go to cwh.berkeley.edu/resource/nutrition-education-school-food-service-tool-kit-overview-english-spanish.

➢ The Council of Chief State School Officers (CCSSO) sponsors the Health Education Assessment Project (HEAP), a collaborative of states working to improve school health education and assessment to improve student health literacy. For more information visit www.ccsso.org/heap.

Parent/Family Education:

➢ The National PTA maintains a webpage of nutrition information for parents with downloadable resources including PTA Healthy Lifestyles: A Parent’s Guide. Visit www.pta.org/topic_nutrition.asp.

➢ The Academy of Nutrition and Diatetics provides timely and objective food and nutrition information for dietary professionals and the general public at www.eatright.org.

➢ The Nemours Foundation maintains KidsHealth, a website that provides physician-reviewed health information about children from before birth through adolescence that is up to date and free of jargon. The website has separate areas for young children, teens, and parents, each with its own design, age-appropriate content, and tone. Visit www.kidhealth.org.

Learning to Grow and Cook Food

➢ The California Department of Education produced Kids Cook Farm-Fresh Food: Seasonal Recipes, Activities, and Farm Profiles that Teach Ecological Responsibility, an 18-chapter curriculum for kindergarten through 7th grade that contains activities, recipes, and correlations to academic content standards for English-language arts, history and social sciences, mathematics, and science. The curriculum is available for download at www.cde.ca.gov/ls/nu/he/documents/kidscookcomplete.pdf.

➢ Santa Fe Partners in Education sponsored the development of “Cooking with Kids,” a program in English and Spanish that engages elementary school children in hands-on learning with fresh, affordable foods from diverse cultures. Visit www.cookingwithkids.net.

➢ The California School Garden Network represents a variety of state agencies, private companies, educational institutions, and nonprofit organizations that are dedicated to the mission of sustaining gardens in every willing school in California. The Network serves as a central organization to distribute school garden resources and support. Access their resources online at www.csgn.org.

➢ Slow Food USA, a movement that promotes thoughtful, informed decisions about food, including who grows it, how it is grown, how it is prepared, and with whom it is enjoyed. The movement sponsors “Garden to Table” projects that range from after-school cooking classes to farm tours to schoolyard gardens in order to help children develop an appreciation for real, wholesome food and an understanding of sustainable food practices. For more information visit www.slowfoodusa.org/index.php/programs/details/children_and_food/.

Parent/Family Education:

➢ The Partnership for Food Safety Education (PFSE), a coalition of more than 20 consumer groups, federal agencies, industry associations, and professional societies in food science, nutrition, and health, conducts the “Fight BAC!” campaign to educate consumers about simple practices that can help reduce the risk of foodborne illness. Classroom resources are available for all grade levels. Visit www.fightbac.org.

➢ The Center for Weight and Health of the University of California at Berkeley maintains a large collection of curricula, toolkits, and other educational resources in English and Spanish for schools and families. Among the materials the Center has developed is the Nutrition Education in School Food Service Tool Kit for elementary schools, which includes activities for foodservice staff to use in school, as well as for parents to use at home. Go to cwh.berkeley.edu for access to all the Center’s resources. To access the Nutrition Education in School Food Service Tool Kit go to cwh.berkeley.edu/resource/nutrition-education-school-food-service-tool-kit-overview-english-spanish.

➢ The Council of Chief State School Officers (CCSSO) sponsors the Health Education Assessment Project (HEAP), a collaborative of states working to improve school health education and assessment to improve student health literacy. For more information visit www.ccsso.org/heap.

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Students with disabilities, food allergies, poor oral health, diabetes and other chronic illnesses, or who are pregnant, may need special meals as well as personalized health services provided by school nurses and other trained personnel. Policymakers need to ensure that school staff members are available and prepared to recognize, assess, and appropriately accommodate students’ special needs. Such accommodations are mandated by various federal laws (see *Fit, Healthy, and Ready to Learn*, Chapter H: Policies on Asthma, School Health Services, and Healthy Environments).106

Schools can use several types of planning processes to determine what unique services and accommodations are appropriate. Procedures need to be designed to:

- systematically identify and monitor students who have special medical and nutritional needs;
- determine and provide appropriate accommodations on a case-by-case basis, documented in a periodically updated written plan (e.g., IEP, IHP, or other type of plan) prepared in consultation with the students’ parents/guardians and health care providers; and
- share information about individual students’ needs—and any emergency response procedures their conditions might require—with appropriate school staff on a “need-to-know” basis, with due concern for medical confidentiality and respect for parents’ and students’ privacy rights.107

USDA, the National Food Service Management Institute, and state agencies provide child nutrition directors with detailed guidance and training on how to plan and implement nutritional
and Chapter I: “Policies to Promote Safety and Prevent Violence” for guidance on establishing a community-wide system of mental health and social services).

Weight Management Counseling

Many of the nation’s schools provide nutrition- or weight-related counseling services. According to SHPPS, about half (43–55 percent) of schools at all levels provided nutrition and dietary behavior counseling in 2006, and more than a third (34–44 percent) provided weight management services. However, little is known about the nature of these efforts and how effective they are.

Traditional methods of weight management employed by the health care system for overweight children and youth,
including periodic educational counseling, structured diets, and medications, generally have poor long-term success (experts generally do not recommend surgery for youth unless they are morbidly obese). Results on the effectiveness of weight management services provided to students at school also tend to be modest and to quickly fade. The lack of proven weight management methods for youth is one reason public health authorities emphasize the need to prevent obesity among young people.

Eating Disorders

The 2009 YRBS found that many high school students were practicing unhealthy eating behaviors in an attempt to manage their weight (fig. 5). Such behaviors can lead to serious medical problems. Nationwide, about 1-3 percent of students have an eating disorder and need immediate professional treatment.

Common types of eating disorders include the following:

- **bulimia nervosa** is characterized by recurrent and frequent episodes of eating unusually large amounts of food (binging) during which a person feels a lack of control over the eating, followed by purging behavior such as vomiting, fasting, use of diuretics (water pills), or excessive exercise;

- **anorexia nervosa** is characterized by emaciation, a relentless pursuit of thinness and extremely disturbed eating behaviors, such as deliberate self-starvation; and

- **binge-eating disorder** is characterized by recurrent binge-eating episodes during which a person feels a loss of control similar to bulimia; unlike bulimia, however, binge-eating episodes are not followed by purging, excessive exercise, or fasting.

Professional pupil services personnel should be prepared and trained to recognize an eating disorder, to assist the student in a nonjudgmental manner, and to make an appropriate treatment referral. These professionals could be asked in turn to brief other school staff about danger signs and symptoms to watch for. Yet few school districts have been providing the necessary staff development for mental health and social services professionals. In the two years preceding the SHPPS 2006 survey, only 36 percent of districts provided funding for or offered staff development on

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**Figure 5. Percentage of U.S. Students in Grades 9-12 Who Practiced Certain Unhealthy Eating Behaviors to Lose Weight or Keep from Gaining Weight during the 30 Days before the Survey, 2009**

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Went without eating for 24 hours or more</td>
<td>7%</td>
<td>15%</td>
</tr>
<tr>
<td>Took diet pills, powders, liquids without a doctor’s advice</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Vomited or took laxatives</td>
<td>3%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Model Policy: Nutrition-Related School Services

**GOAL.** Schools will help identify students in need of health or counseling services to address eating- or weight-related disorders and assist in providing appropriate services or referrals.

**SERVICES FOR EATING OR WEIGHT-RELATED HEALTH PROBLEMS.** School counselors, nurses, psychologists, social workers, and other professional student services staff members shall be prepared to recognize eating disorders and other potentially harmful nutrition-related health and mental health problems. Schools shall ensure that appropriate services are provided to students and their families on an individual or group basis in accordance with professional standards of care, either at school or through monitored referrals to appropriate providers in the community.

**ASSESSING STUDENT WEIGHT STATUS.** Schools may choose to measure student height and weight and calculate body mass index (BMI) to monitor the percentage of students who are underweight, healthy weight, overweight, or obese or to assess an individual student’s weight status. If a school decides to conduct a school-based BMI measurement program, it should be accompanied by a multifaceted plan to promote healthy eating and physical activity. Parents/guardians must be notified in advance of a BMI measurement program and be given the option of declining permission to measure their child’s BMI. Measurements must be conducted by properly trained staff in a respectful and private manner designed to minimize weight-related teasing. The **state department of education/state department of health/school district** shall establish common measurement protocols, provide the necessary equipment and staff training, and coordinate the collection and reporting of results.

If schools conduct a school-based BMI measurement program for the purpose of identifying each individual student’s weight status, then BMI findings should be confidentially provided to parents/guardians and to students in grade 4 and older, along with information about healthy lifestyles and guidance for follow-up action, if appropriate. Schools should ensure that sufficient community medical care providers and diagnostic and treatment services are available and accessible to all students, including those with low family incomes or without insurance. Students who need follow-up (i.e., students classified as underweight, overweight, or obese) should be referred to local medical care providers. Aggregated results without individual student identifiers may be shared with public health departments, be reported publicly, and made available to researchers with the approval of the **district superintendent/school principal/school health coordinator**. As a person’s BMI is influenced by additional factors outside of the school setting that are beyond the control of students and teachers (such as genetics, body composition, physical maturation, community environment, and family environment), results shall not be used to determine course grades or to assess the performance of individual teachers in physical education or health education.

**POLICY EVALUATION.** The **school health program coordinator/school health team leader** shall conduct policy evaluation activities and submit an annual progress report to the **state/tribal/district board of education/school health advisory council** that summarizes activities to implement this policy and includes recommendations for policy improvement.
treatment for eating disorders, 35 percent on nutrition and dietary behavior counseling, and 25 percent on weight management. Staff development provided to school nurses on these topics was reported at similar levels. Policymakers should ask what types of training are being provided.

**Selected Resources on Nutrition-Related Student Services**

- Policymakers who wish to establish a coordinated system of mental health and social services can obtain practical guidance from the following organizations:
  - Center for School Mental Health Analysis and Action at the University of Maryland School of Medicine at csmh.umaryland.edu;
  - Center for Mental Health in Schools at the University of California at Los Angeles at smhp.psych.ucla.edu; and
  - National Assembly on School-Based Health Care at www.nasbhc.org.

- The National Institute of Allergy and Infectious Diseases (NIAID) of the National Institutes of Health (NIH) conducts and supports research to better understand the human immune system and how certain foods trigger an allergic reaction. For information and resources visit www.niaid.nih.gov/topics/foodallergy/Pages/default.aspx.

- The Allergy and Asthma Network/Mothers of Asthmatics (AANMA) is a national nonprofit network that produces timely and practical guidance for families and schools on preventing and treating food allergies and other health problems. Visit www.aanma.org/category/school.

- The National Women’s Health Information Center of the Office of Women’s Health at the U.S. Department of Health and Human Services offers complete information and links to other organizations regarding eating disorders. Visit www.womenshealth.gov/bodyimage/eatingdisorders.

- The National Eating Disorders Association (NEDA) provides basic information for individuals, families, educators, coaches, and concerned friends; publishes the *Eating Disorders Survival Guide*; operates a toll-free help line at 1-800-931-2237; and maintains an online national database of doctors, nutritionists, counselors, and support groups. Go to www.nationaleating-disorders.org.
Appendix. Nutrition Standards for Foods in Schools
Institute of Medicine Committee on Nutrition Standards for Foods in Schools, 2007

GUIDING PRINCIPLES
The committee recognizes that:

1. The present and future health and well-being of school-age children are profoundly affected by dietary intake and the maintenance of a healthy weight.

2. Schools contribute to current and lifelong health and dietary patterns and are uniquely positioned to model and reinforce healthful eating behaviors in partnership with parents, teachers, and the broader community.

3. Because all foods and beverages available on the school campus represent significant caloric intake, they should be designed to meet nutrition standards.

4. Foods and beverages have health effects beyond those related to vitamins, minerals, and other known individual components.

5. Implementation of nutrition standards for foods and beverages offered in schools will likely require clear policies; technical and financial support; a monitoring, enforcement, and evaluation program; and new food and beverage products.

The committee intends that:

1. The federally reimbursable school nutrition programs will be the primary source of foods and beverages offered at school.

2. All foods and beverages offered on the school campus will contribute to an overall healthful eating environment.

3. Nutrition standards will be established for foods and beverages offered outside the federally reimbursable school nutrition programs.

4. The recommended nutrition standards will be based on the Dietary Guidelines for Americans, with consideration given to other relevant science-based resources.

5. The nutrition standards will apply to foods and beverages offered to all school-age children (generally ages 4 through 18 years) with consideration given to the developmental differences between children in elementary, middle, and high schools.

STANDARDS FOR NUTRITIVE FOOD COMPONENTS

Standard 1: Snacks, foods, and beverages meet the following criteria for dietary fat per portion as packaged:
- no more than 35 percent of total calories from fat;
- less than 10 percent of total calories from saturated fats; and
- zero trans fat.

Standard 2: Snacks, foods, and beverages provide no more than 35 percent of calories from total sugars per portion as packaged. Exceptions include:
- 100 percent fruits and fruit juices in all forms without added sugars;
- 100 percent vegetables and vegetable juices without added sugars; and
- unflavored nonfat and low-fat milk and yogurt; flavored nonfat and low-fat milk with no more than 22 grams of total sugars per 8-ounce serving; and flavored nonfat and low-fat yogurt with no more than 30 grams of total sugars per 8-ounce serving.

Standard 3: Snack items are 200 calories or less per portion as packaged and à la carte entrée items do not exceed calorie limits on comparable National School Lunch Program items.

Standard 4: Snack items meet a sodium content limit of 200 milligrams or less per portion as packaged or 480 milligrams or less per entrée portion as served for à la carte.

STANDARDS FOR NONNUTRITIVE FOOD COMPONENTS

Standard 5: Beverages containing nonnutritive sweeteners are only allowed in high schools after the end of the school day.

Standard 6: Foods and beverages are caffeine free, with the exception of trace amounts of naturally occurring caffeine-related substances.

STANDARDS FOR THE SCHOOL DAY

Standard 7: Foods and beverages offered during the school day are limited to those in Tier 1.

Standard 8: Plain, potable water is available throughout the school day at no cost to students.

Standard 9: Sports drinks are not available in the school setting except when provided by the school for student athletes participating in sport programs involving vigorous activity of more than one hour duration.

Standard 10: Foods and beverages are not used as rewards or discipline for academic performance or behavior.

Standard 11: Minimize marketing of Tier 2 foods and beverages in the high school setting by:
- locating Tier 2 food and beverage distribution in low student traffic areas; and
- ensuring that the exteriors of vending machines do not depict commercial products or logos or suggest that consumption of vended items conveys a health or social benefit.

STANDARDS FOR THE AFTER-SCHOOL DAY

Standard 12: Tier 1 snack items are allowed after school for student activities for elementary and middle schools. Tier 1 and 2 snacks are allowed after school for high school.

Standard 13: For on-campus fund-raising activities during the school day, Tier 1 foods and beverages are allowed for elementary, middle, and high schools. Tier 2 foods and beverages are allowed for high schools after school. For evening and community activities that include adults, Tier 1 and 2 foods and beverages are encouraged.
# Foods and Beverages That Meet Tier 1 and Tier 2 Standards

## Tier 1 for Students at All Levels during the School Day

### Foods

Tier 1 foods are fruits, vegetables, whole grains, and related combination products* and nonfat and low-fat dairy that are limited to 200 calories or less per portion as packaged and:

- No more than 35 percent of total calories from fat
- Less than 10 percent of total calories from saturated fats
- Zero trans fat (≤ 0.5 g per serving)
- 35 percent or less of calories from total sugars, except for yogurt with no more than 30 g of total sugars, per 8-oz. portion as packaged
- Sodium content of 200 mg or less per portion as packaged

À la carte entrée items meet fat and sugar limits as listed above and:

- Are National School Lunch Program (NSLP) menu items
- Have a sodium content of 480 mg or less

*Combination products must contain a total of one or more servings as packaged of fruit, vegetables, or whole-grain products per portion

**200-calorie limit does not apply; items cannot exceed calorie content of comparable NSLP entrée items

### Beverages

Tier 1 beverages are:

- Water without flavoring, additives, or carbonation
- Low-fat (1 percent) and nonfat milk (in 8 oz. portions):
  - Lactose-free and soy beverages are included
  - Flavored milk with no more than 22 g of total sugars per 8-oz. portion
- 100 percent fruit juice in 4-oz. portion as packaged for elementary/middle school and 8 oz. (two portions) for high school
- Caffeine-free, with the exception of trace amounts of naturally occurring caffeine substances

## Tier 2 for High School Students After School

### Foods

Tier 2 snack foods are those that do not exceed 200 calories per portion as packaged and:

- No more than 35 percent of total calories from fat
- Less than 10 percent of total calories from saturated fats
- Zero trans fat (≤ 0.5 g per portion)
- 35 percent or less of calories from total sugars
- Sodium content of 200 mg or less per portion as packaged

### Beverages

Tier 2 beverages are:

- Non-caffeinated, non-fortified beverages with less than 5 calories per portion as packaged (with or without nonnutritive sweeteners, carbonation, or flavoring)


5. Murphy et al., “Relationship between Hunger and Psychosocial Functioning.”


10. Ibid.


35. Gail C. Rampersaud, Lynn B. Bailey, Gail P.A. Kauwell, “National Survey Beverage Consumption Data for Children and Adolescents Indicate the


43. Greer et al. "Optimizing Bone Health."


45. Ibid.

46. Louise Arseneault, Elizabeth Walsh, Kali Trzesniewski, Rhiannon Newcombe, et al., “Bullying Victimization Uniquely Contributes to Adjustment Problems in Young Children: A Nationally Representative Cohort Study,” *Pediatrics* 118, no. 1 (July 2006), 130-138, pediatrics.aappublications.org/cgi/content/abstract/118/1/130.


56. Committee on Prevention of Obesity in Children and Youth, Preventing Childhood Obesity.


67. O’Toole et al., “Nutrition Services and Foods and Beverages Available at School.”


71. Mair et al., The Use of Zoning.


86. Gordon and Fox, School Nutrition Dietary Assessment Study III.


88. Gordon and Fox, School Nutrition Dietary Assessment Study III.


90. Gordon and Fox, School Nutrition Dietary Assessment Study III.


96. Anderson and Butcher, “Reading, Writing, and Raisinets.”

97. O’Toole et al., “Nutrition Services and Foods and Beverages Available at School.”


99. O’Toole et al., “Nutrition Services and Foods and Beverages Available at School.”


102. Centers for Disease Control and Prevention, Health Education Curriculum Analysis Tool (Atlanta, GA: CDC, 2007), www.cdc.gov/HealthyYouth/HECAT.

103. Ibid.

105. Ibid.


The National Association of State Boards of Education is a nonprofit, private association that represents state and territorial boards of education. Our principal objectives are to strengthen state leadership in education policymaking; promote excellence in the education of all students; advocate equality of access to educational opportunity; and assure responsible lay governance of public education.