HEALTHY LIFESTYLES

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Childhood Obesity

Update of Policy Options and Research

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Introduction

Obesity rates continue to rise in the United States, and childhood obesity remains a pressing public health concern. Currently, 66 million Americans are overweight or obese. During the past three decades, obesity rates have nearly tripled for children ages 2 to 5 (from 5 percent to 14 percent), more than tripled for youth ages 12 to 19 (from 5 percent to 17 percent), and more than quadrupled for children ages 6 to 11 (from 4 percent to 19 percent). Of children and adolescents ages 6 to 19, 17.1 percent are overweight[1] (9 million children), and almost 30 percent do not exercise three or more days per week.

Being overweight puts children and teenagers at greater risk for developing type 2 diabetes; risk factors for heart disease at an earlier age; and other health conditions, including asthma, sleep apnea, and psychosocial effects such as decreased self-esteem. In one widely cited study, 61 percent of overweight 5- to 10-year-olds already had at least one risk factor for heart disease, and 26 percent had two or more risk factors for the disease.[2] There is a 70 percent chance that an overweight adolescent will be overweight or obese as an adult. By adulthood, obesity-associated chronic diseases—heart disease, some cancers, stroke, diabetes—are the first, second, third and sixth leading U.S. causes of death.

Moreover, obesity is costly. Annual obesity-attributable U.S. medical expenses were estimated at $75 billion for 2003. Taxpayers fund about half this amount through Medicare and Medicaid. Fortunately, healthy eating and a physically active lifestyle can help children and adults achieve and maintain a healthy weight and reduce obesity-related chronic diseases.

In 2006, legislatures continued to consider policy options to address the obesity epidemic. Aiming to prevent the onset of chronic conditions, legislators considered a variety of policy approaches to facilitate opportunities for a healthier diet and more exercise, beginning in childhood.

Table 1 provides a 50-state overview of the more prevalent legislative approaches considered or enacted in 2006. Table 2 summarizes the research base for each policy option.

Table 1. State Legislation on Childhood Obesity Policy Options 2006					
State	**Nutrition Standards for Schools**	**Nutrition Education**	**Body Mass Index (BMI)**	**Physical Activity, Recess or Physical Education**	**Trans Fat in School Foods and Other Nutrition Content Information**
Alabama		Considered		Considered	
Alaska	Considered				Considered
Arizona				Considered	
Arkansas			Enacted modification		
California	Enacted			Enacted	Considered
Colorado	Enacted			Vetoed	
Connecticut	Enacted			Enacted	
Delaware			Enacted pilot	Enacted	
Florida				Enacted	
Georgia				Considered	
Hawaii	Considered	Considered		Considered	
Idaho					
Illinois	Enacted				
Indiana	Enacted			Enacted	Enacted
Iowa	Considered		Enacted pilot	Considered	
Kansas	Enacted			Enacted	Considered
Kentucky	Enacted			Considered	
Louisiana	Enacted				
Maine	Enacted				
Maryland	Enacted		Considered		
Massachusetts	Considered		Considered	Considered	Considered
Michigan					
Minnesota				Considered	
Mississippi	Considered			Considered	
Missouri	Considered				
Montana	Considered				
Nebraska	Considered				
Nevada					
New Hampshire	Considered	Considered		Considered	Considered
New Jersey	Considered in Legislature Implemented by Agriculture Department		Considered		Enacted

Table 1. State Legislation on Childhood Obesity Policy Options 2006 (continued)					
State	**Nutrition Standards for Schools**	**Nutrition Education**	**Body Mass Index (BMI)**	**Physical Activity, Recess or Physical Education**	**Trans Fat in School Foods and Other Nutrition Content Information**
New Mexico	Enacted				
New York	Considered		Considered	Considered	Considered
North Carolina	Enacted				Considered
North Dakota	Considered				
Ohio	Considered				
Oklahoma	Enacted			Enacted	
Oregon	Considered				
Pennsylvania	Considered	Enacted		Enacted	
Rhode Island	Enacted			Considered	
South Carolina	Enacted				
South Dakota					
Tennessee	Considered			Enacted	
Texas	Legislation Enacted Standards also implemented by Agriculture Department				
Utah	Sent to Lt. Governor				
Vermont	Considered	Enacted			
Virginia	Considered			Considered	
Washington					
West Virginia	Enacted		Enacted modification	Enacted	
Wisconsin				Considered	
Wyoming				Considered	
Source: National Conference of State Legislatures, Last updated April 30, 2007.					

Table 2. Summary of State Childhood Obesity Policy Options and Evidence 2006

Policy Option	Evidence Summary
Nutrition Standards for School Foods and Beverages	• Long-standing evidence of the developmental and cognitive benefits of adequate nutrition. • Many studies confirm that proper nutrition enhances academic achievement, while poor nutrition impedes academic performance. • Studies generally indicate that school food revenues remain steady or increase when schools sell healthy foods and federal school meal reimbursements to states may increase.
Nutrition Education	• Nutrition education programs of longer duration, more contact hours, and more components—such as parent involvement and changes in school meals—result in more positive outcomes. • One USDA-contracted review of 217 studies found that nutrition education can be a significant factor in improving dietary practices, when behavior change is the goal and educational strategies are designed with those goals as a purpose.
Measurement of Student Body Mass Index (BMI)	The third annual review of Arkansas' 2003 legislative Act 1220 to Combat Childhood Obesity that, among other provisions, includes measuring student BMI and reporting it to parents concluded that: • Arkansas has succeeded in halting the progression of obesity rates among the state's school children. • Students classified as overweight decreased slightly from 20.9 percent in 2003-2004 to 20.4 percent in 2005-2006. • Despite initial opposition, the majority of parents feel comfortable with the BMI measurement and confidential reporting process in its third year.
Trans Fat in School Foods and Nutrition Content Information for School Foods	• Replacing trans fat (partially hydrogenated fat) in the U.S. diet with natural, unhydrogenated vegetable oils would prevent approximately 30,000 premature coronary deaths per year (epidemiologic evidence suggests this number is closer to 100,000 premature deaths annually). • In a 2003 study at six urban, suburban and rural Pennsylvania high schools, students were more likely to select healthy options when schools posted nutrition information at the cafeteria counter. Worksite cafeterias that posted nutrition information also reported significantly fewer sales of high-fat items, or total calories per tray, or both.
Physical Education or Physical Activity in Schools	• Research consistently demonstrates that regular physical activity is associated with a healthier, longer life and lower risk of heart disease, high blood pressure, diabetes, obesity and some cancers. • School-based physical education programs as a means to increase physical activity are recommended based on "strong evidence," according to the *Guide to Community Preventive Services*, a federally sponsored initiative. • Links between physical activity and academic achievement have been consistently demonstrated. More physically active and fit students have higher achievement test scores and better grades. • Physical education classes taught in schools that enhance class length or activity levels are effective in improving both physical activity levels and physical fitness among school-age children.
Diabetes Noninvasive Screening for Schoolchildren	• A recent study calculated the cost of diabetes in the United States at $57 billion in 2006, including $23 billion in health care expenses. • Changes in lifestyle, including better diet and moderate levels of physical activity, have been shown to prevent or delay the onset of diabetes in high-risk adults. • Recognizing diabetes risk and establishing healthy lifestyle habits in childhood therefore may help to stave off diabetes and its complications such as blindness, amputations and kidney disease.

Table 2. Summary of State Childhood Obesity Policy Options and Evidence 2006

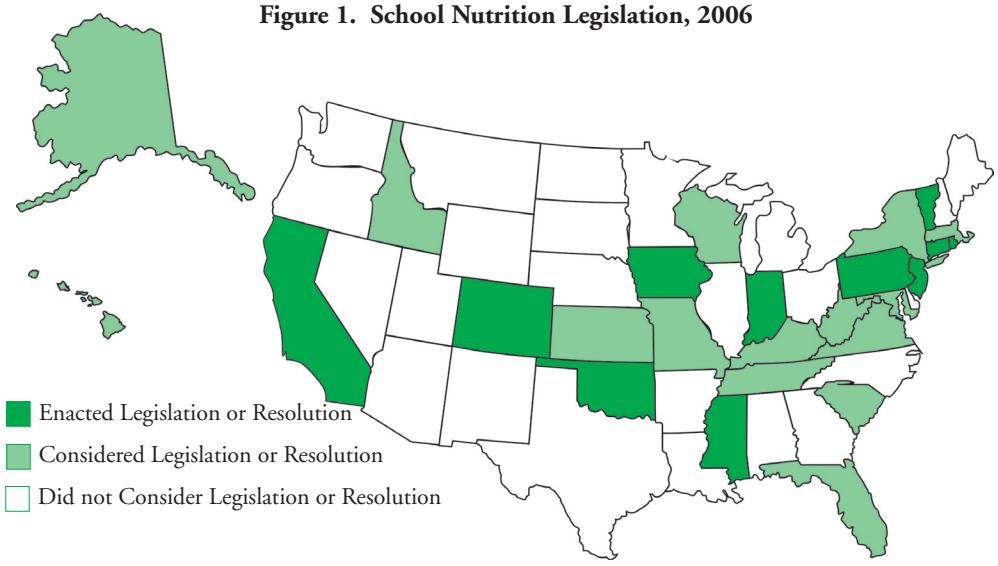
Policy Option	Evidence Summary
Diabetes Management at School	• Opponents believe that certain aspects of diabetes care, such as administration of insulin, require trained medical personnel. • Proponents point to a shortage of school nurses as the reason for training additional school personnel to provide diabetic care or assist with at-school diabetes management for students. • Evidence does not firmly support one approach or the other.
School Wellness Policies	• Evidence supports the effectiveness of school nutrition standards and physical activity programs that provide moderate to vigorous activity levels for students, both required components of school wellness policies. • Both community-wide campaigns and social support for increasing physical activity are effective in encouraging people to be more physically active and are recommended based on "strong evidence" by the *Guide to Community Preventive Services*, a federally sponsored initiative of the Centers for Disease Control and Prevention that reviews research evidence for efficacy of population-based interventions for health. • After reviewing 112 school wellness policies representing urban, suburban, and rural districts from 42 states, the advocacy group Action for Healthy Kids (AFHK) concluded that, "compliance with the federal policy guidelines varies dramatically among school districts, with only 54 percent of the districts meeting all of the minimum requirements."
Raising Awareness	• The Centers for Disease Control and Prevention's 2002-2006 VERB mass media and events campaign addressed childhood obesity through television advertising and community outreach promoting daily physical activity for children ages 9 to 13. It was found to be effective. Six million children from lower-middle-income households showed a 25 percent increase in free-time physical activity sessions, despite barriers such as transportation issues, safety concerns and less access to physical activity resources. • CDC's *Guide to Community Preventive Services* recommends mass media campaigns, combined with other educational efforts and interventions, based on "strong evidence" of effectiveness in such public health campaigns as increased breast and cervical cancer screening and reduced initiation of tobacco use by youth. • The *Guide to Community Preventive Services* states, however, that the evidence for mass media campaigns to promote physical activity is, at present, insufficient to determine effectiveness.
Taxes on Foods or Beverages with Minimal Nutritional Value	• Advocates point to studies that a tax on foods and/or beverages of minimal nutritional value would generate considerable revenue that then could be used to fund public health programs. • Critics of proposed "snack taxes" are equally vocal in arguing that such a tax would disproportionately affect poor people and that it would be extremely difficult for vendors to administer such a tax and to determine which foods are subject to the tax.

Source: Compiled by the National Conference of State Legislatures, based on research cited in this report, June 2007.

School Nutrition Legislation

At least 25 states—Alaska, California, Colorado, Connecticut, Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Mississippi, Missouri, New Jersey, New York, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia, West Virginia and Wisconsin—considered school nutrition legislation in 2006. Of these states, at least 11—California, Colorado, Connecticut, Indiana, Iowa, Mississippi, New Jersey, Oklahoma, Pennsylvania, Rhode Island and Vermont enacted new or additional policies designed to help ensure that students have access to healthier food and beverage options at school.

Figure 1. School Nutrition Legislation, 2006



Source: National Conference of State Legislatures, 2007.

Summaries of 2006 School Nutrition Legislation That Passed Both Chambers of the Legislature

California

CA AB 469 (2005-2006, vetoed by governor 9/29/06) – Would have required the Department of Education to develop and maintain nutrition guidelines for all food and beverages served, as well as those sold, on public school campuses. Would have added sugar and sodium to ingredients covered by school nutrition guidelines.

CA AB 569 (2005-2006, enacted, Chapter 702) – Requires each school site that meets the federal severe need qualification reimbursement to offer breakfast beginning with the 2007-2008 school year. Authorizes waivers under specified conditions. Requires priority funding for schools that offer the federal breakfast program for the first time. (As introduced, would have required nutrition content labeling on all food items sold in schools.)

CA SB 1674 (2005-2006, vetoed by governor 9/29/06) – Would have provided an increased reimbursement rate for free and reduced-price school meals and full-price schools meals only for those schools that followed specified state and federal nutrition guidelines and certain meal

pattern and menu planning requirements. Would have made the increased reimbursement rates available immediately by removing provisions relating to funds being available contingent upon a specified appropriation date. As of July 2007, would have prohibited schools from serving deep-fried items.

Colorado

CO HB 1056 (2006, vetoed by governor) – Would have encouraged healthy nutrition alternatives in public schools by requiring each school district board of education to adopt a policy providing that at least 50 percent of all items offered in vending machines located in public schools meet acceptable nutritional standards.

CO SB 127 (2006, enacted, Session Law Chapter 242) – Creates a program to make free fruits and vegetables available to students in public schools; requires that a certain percentage of the public schools participating in the program are schools that are eligible for free or reduced-cost lunch under the National School Lunch Act; and sets application requirements for schools that wish to participate in the program.

Connecticut

CT SB 373 (2006, enacted, Public Act 06-63) – Effective July 1, 2006, this act 1) restricts the types of beverages that may be sold to students in schools; 2) requires the State Department of Education (SDE) to set nutritional standards for food sold to students in schools; and 3) provides a financial incentive for school boards, charter and other schools to certify that their schools meet the SDE standards. Supersedes a requirement that school boards provide nutritious and low-fat drink options whenever drinks are available for purchase by students. Extends the requirement that school boards provide nutritious and low-fat food options to the governing authorities of state charter schools, interdistrict magnet schools, and endowed academies.

Indiana

IN SB 111 (2006, enacted, Public Law 54-2006) – Covers both student nutrition and physical activity. Requires the Department of Education to provide information concerning health, nutrition and physical activity. Requires that at least 50 percent of food items sold in schools qualify as "better food choices" and, among other definitions, specifies that better food choices are those in which A) Not more than 30 percent of their total calories are from fat; B) Not more than 10 percent of their total calories are from saturated and trans fat; and C) Not more than 35 percent of their weight is from sugars that do not occur naturally in fruits, vegetables, or dairy products. Provides that the requirements do not apply after school hours or to fundraisers. Lowers the percentage in the definition of "qualifying school building" from 25 percent to 15 percent beginning July 1, 2007, for the school breakfast and lunch programs. Requires school boards to establish a coordinated school health advisory council to develop a local wellness policy that complies with certain federal requirements. Requires daily physical activity for elementary school students in public schools, with certain exceptions. Allows a school to continue a vending machine contract in existence before the passage of this bill.

Iowa

IA SB 2124 (2006, enacted, Section 135.27) – Establishes a nutrition and physical activity community obesity prevention grant program aimed at increasing fruit and vegetable consumption and physical activity among elementary schoolchildren in each of six regions of the state, contingent upon funding.

Mississippi

MS HB 319 (2006, enacted, Chapter 401) – Recognizes the problem of childhood obesity and student physical inactivity in Mississippi. Directs local school boards to establish local school health councils for each school by Nov. 1. 2006. Provides that the council's duties may include developing coordinated school health programs, including health education, physical education, nutritional services, parental involvement, alcohol and tobacco use prevention education, health services, healthy environment, counseling and psychological services; and providing guidance on the development and implementation of a local school wellness plan that each local school board is required to adopt by the beginning of the 2006-2007 school year in conformity with federal law.

New Jersey

NJ AB 370 (2006, enacted, Chapter 14, Public Laws 2006) – Permits boards of education to establish prepaid school lunch programs so that parents can prepay for more nutritious lunches served in school cafeterias rather than give lunch money to their children and then learn it was used to purchase unhealthy foods in vending machines.

NJ SB 1218, AB 883 - identical (2006-2007, enacted, Public Law 2007, Chapter 45) – Establishes certain nutritional restrictions on food and beverages served, sold or given away to pupils in public and certain nonpublic schools. Prohibits serving, selling or giving away as a free promotion anywhere on school property at any time before the end of the school day, or in the reimbursable After School Snack Program: 1) foods of minimal nutritional value, as defined by the U. S. Department of Agriculture; 2) all food and beverage items listing sugar, in any form, as the first ingredient; and 3) all forms of candy as defined by the New Jersey Department of Agriculture. Directs schools to reduce the purchase of any products containing trans fats beginning Sept. 1, 2007.

Oklahoma

OK HB 2655 (2006, enacted, OS 2-1960.1-60.6) – Creates the Oklahoma Farm to School Programs to link schools and Oklahoma farms in order to provide schools with fresh and minimally processed farm commodities for inclusion in school meals and snacks, to help children develop healthy eating habits, and to improve Oklahoma farmers' incomes and direct access to markets.

OK SB 1459 (2006, enacted, OS 70-24-100b) – Directs the state's Department of Education to provide technical assistance and information to schools for use in establishing healthy school nutrition environments; reducing childhood obesity; developing quality physical education and activity programs; and establishing, implementing and evaluating school wellness policies. Encourages Oklahoma's Healthy and Fit Schools Advisory Committees to use the Centers for Disease Control and Prevention's School Health Index and Oklahoma Healthy and Fit Schools Scorecard as program assessment and monitoring instruments.

Pennsylvania

PA HB 185 (2006, enacted, Act 114) – Provides for competitive food or beverage contracts and for nutritional guidelines for food and beverage sales in schools. Provides for certain health services and for advisory health councils. Provides for local wellness policies and directs the Department of Education to establish a clearinghouse of wellness policies and information, for an interagency coordinating council for child health and nutrition, for other duties of the Department of Education and for physical education. Provides for physiology and hygiene.

Rhode Island

RI HB 6968 (2006, enacted, Chapter 231) – Places guidelines on the sale of sweetened beverages in schools and promotes nutritional, healthy choices for snacks sold in elementary, middle and junior high schools.

RI SB 2696 (2006, enacted, Chapter 234) – Prohibits the sale and distribution of certain beverages and food items at all elementary, middle, junior and senior high schools beginning Jan. 1, 2007, and requires the sale and distribution of healthy beverages and snacks.

South Carolina

SC HJR 5023 (2006, proposed) – Would have given legislative approval to regulations of the Board of Education relating to nutrition standards for elementary school food service meals and competitive foods.

Vermont

VT HB 456 (2006, enacted, Act 145) – Directs the commissioner of education to award small grants to schools that use Vermont products in their food services programs and provide nutrition education for students; and directs the commissioner of education to report to the General Assembly regarding school district adoption of nutrition policies.

Other school nutrition policy actions in 2006 included the following.

- School Wellness Policies – Beginning with the 2006-2007 school year, federal law requires all schools participating in federal school meals programs—nearly every school district in the nation—to develop a local school wellness policy. Policies must include nutrition guidelines for all foods available on school campuses during the school day, with the goal of promoting student health and reducing childhood obesity. (The federal law is the Child Nutrition and WIC Reauthorization Act of 2004, Public Law 108 - 265.) See below for a summary of state legislation on school wellness policies

- Beverage and Food Industry Agreements – Beverage industry representatives and the Alliance for a Healthier Generation (a partnership of the American Heart Association and the William J. Clinton Foundation) reached an agreement for voluntary guidelines to shift to lower-calorie, more nutritious beverages for children's consumption during the regular and extended school day. Advocates have raised concerns that the guidelines have no enforcement mechanism and continue to permit sports drinks or fruit drinks with a high sugar content. The industry is striving to fully implement the guidelines voluntarily by the 2009-2010 school year. A separate voluntary agreement between the Alliance and five (of approximately 75) snack food manufacturers provides guidelines for school foods designed to encourage more nutritious snacks, foods, fat-free and low-fat dairy products and to place limits on calories, fat, saturated fat, trans fat, sugar and sodium in school foods.

- Regulatory Action – New Jersey implemented school nutrition standards through its Department of Agriculture under the governor's direction in 2005, effective for the 2007-2008 school year. In January 2007, the Legislature codified the nutrition standards into law, effective Sept. 1, 2007.

In Texas, a public school nutrition policy became effective Aug. 1, 2004, under the auspices of the state's agriculture commissioner, who was authorized by the governor to administer the state's National School Lunch Program, School Breakfast Program, and After School Snack Program.

Research on School Nutrition

Nutrition and academics – Longstanding research establishes the developmental and cognitive benefits of adequate nutrition. Proper nutrition enhances academic achievement, while nutritional deficiencies impede academic performance.[3] Being overweight—along with other factors, such as socioeconomic status—is associated with worse academic performance, as early as kindergarten and first grade.[4]

Effects of school nutrition policy changes – Many recent policy efforts to prevent childhood obesity focus on setting nutrition standards for school foods, in order to present students with healthier choices. Schools are an excellent place to begin to address healthy eating and to establish healthy habits for life. More than 53 million young people spend 13 influential, formative years in the nation's 121,000 schools.[5] Students, especially those from poorer households, often consume both breakfast and lunch at school. Many find non-nutritious snacks, a la carte items and beverages available on campus before, during or after school. A recent review of the literature, summarizing the results of 129 studies of nutrition and physical activity policy and environmental interventions, concluded that among those with "the strongest evidence for influencing behavior" were the "availability of nutritious foods" and "point of purchase" strategies.[6]

Studies also are beginning to show the effects of healthier school food offerings resulting from policy changes.

State-level nutrition standards

The California Legislature enacted the Childhood Obesity Prevention Act of 2003 (Senate Bill 677) that prohibited the sale of soft drinks to pupils in elementary, middle or junior high schools beginning July 1, 2004. Elementary schools could sell no beverages other than water, milk, 100 percent fruit juices, or fruit-based drinks composed of no less than 50 percent fruit juice with no added sweeteners. Middle schools could also sell electrolyte replacement beverages. Following passage of the bill, efforts by parents and community groups led the San Francisco Unified School District to adopt even more stringent school nutrition standards for grades kindergarten through 12. San Francisco's standards limited fat and sugar content and portion sizes of foods, required minimum nutrient levels for snack foods, disallowed the sale of foods of minimal nutritional value as defined by U.S. Department of Agriculture standards, and extended limits on soft drink sales to high schools. Researchers studying the effects of the district's nutrition standards at a middle school that was the first to implement the new standards found two notable effects: 1) school food revenues increased and 2) participation in the federally subsidized school lunch program increased (and continued to do so dramatically in both middle and high schools as the nutrition standards were implemented across the district).[7] It should be noted that the U.S. Department of Agriculture's Food and Nutrition Service provides federal cash reimbursements to states for each school meal served that meets federal requirements. As more full school meals are purchased by students, the amount of federal reimbursement received by states for these meals increases.

Revenue effects

Previous studies also suggest that offering healthier foods and beverages at school has a positive or neutral effect on school food revenues.[8] Arizona legislators requested that the state's Department of Education study the revenue effects of healthier school fare before the Legislature tackled school nutrition standards. Study results from eight pilot schools indicated that no revenue loss was shown in the five-month test, during which sales of soft drinks and foods of minimal nutritional value were banned during the school day and healthier foods and beverages were sold in their stead.[9] A joint report by the U.S. Department of Agriculture (USDA), Centers for Disease Control and Prevention (CDC) and the U.S. Department of Education lists a wide variety of approaches used to improve student nutrition. The most consistent theme to emerge from these case studies is that students will buy and consume healthful foods and beverages, and schools can make money from healthful options.[10]

Fresh fruit and vegetable programs

Two recent studies suggest that increasing the availability of fresh fruits and vegetables at school may be an effective way to increase consumption of these healthier foods.

- In Sacramento, Calif., the Students Today Achieving Results for Tomorrow (START) after-school program serves 8,000 low-income, ethnically diverse children in 44 elementary schools and serves snacks to the students through the USDA's after-school snacks program. A change in policy that required program snacks to be more consistent with then current five-a-day USDA guidelines increased fruit consumption by 83 percent. Researchers concluded that "organizational policy change can be an effective means to meet nutritional guidelines, particularly in school settings."[11]

- During the 2004-2005 school year, the Mississippi Fresh Fruit and Vegetable Pilot Program distributed fresh fruits and vegetables free of charge during the school day and provided nutrition education to support fruit and vegetable consumption at 25 schools. Although results varied by grade level (fifth graders were less likely to enjoy new foods than were eight and 10th graders), overall student consumption of fruit increased significantly, as did intake of dietary fiber and the variety of fruits and vegetables that the students had ever tried. Overall consumption of vegetables did not change. Distributing free fresh fruit at school is an effective way to change students' eating habits, researchers concluded, but changes in program implementation might be necessary to encourage students to eat more vegetables.[12]

A la carte school foods and snacks

A recent review of research on school foods sold outside the federal meals program found availability of a la carte snacks and drinks linked to higher intake of calories, total fat and saturated fat and lower consumption of nutrients such as calcium and Vitamin A, fruits, vegetables and milk. By contrast, in 20 schools surveyed where school food policies limited access to foods high in fats and sugar, students purchased these foods less frequently. School food practices—such as allowing students to have foods or beverages in classrooms and hallways, or using food or beverages as rewards or incentives or for fundraising—increased students' risk for weight gain and was associated with higher student body mass index in high school students.[13] Another meta-analysis of 88 previously published studies reported that consuming sugary drinks is clearly associated with lower intake of milk, calcium and other nutrients and an increased risk of type 2 diabetes.[14]

Expert recommendations for school nutrition standards

Consistent with these studies, the Institute of Medicine of the National Academy of Sciences and the Centers for Disease Control and Prevention were directed by Congress to review and make recommendations about nutritional standards for the availability, sale, content and consumption of school foods. Their work culminated in the April 2007 report *Nutrition Standards for Foods in Schools: Leading the Way Toward Healthier Youth*. This report recommends federal school meals programs as the main source of school nutrition, with opportunities for competitive, a la carte foods limited, if available, to nutritious fruits, vegetables, whole grains, and nonfat or low-fat milk and dairy products in accord with the 2005 Dietary Guidelines for Americans.[15] The expert panel issuing the report concluded that lifelong healthy eating patterns would be encouraged this way.

Additional Childhood Obesity Policy Legislation for 2006

As detailed below, states have considered or enacted additional policy approaches to address childhood obesity. These approaches include nutrition education or wellness initiatives in schools, measuring body mass index and reporting the information confidentially to parents, providing opportunities for physical activity during the school day, providing information about the nutrition content of school foods, or taxing snack foods that have minimal nutritional value.

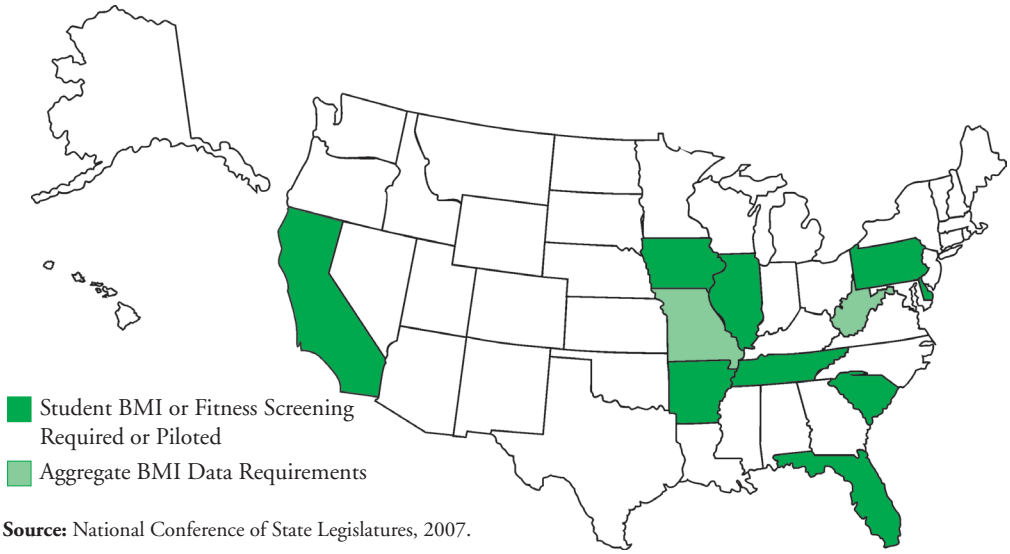
The listing of bills below provides an overview of other policy approaches considered during the 2006 legislative session. Proposed legislation has not become law, unless otherwise noted. This document is not intended as an endorsement or recommendation of any specific legislation.

Body Mass Index (BMI) Legislation and Student Fitness Screening

In 2006, Delaware and South Carolina added student fitness screening requirements, both as part of more comprehensive physical education and fitness bills. As of March 2007, states that currently have some type of student BMI reporting requirements in effect are Arkansas, California, Delaware (pilot program for BMI measurement as part of student fitness testing), Florida, Iowa (pilot program to track student height and weight), Missouri, Pennsylvania, South Carolina (phasing in student fitness testing), Tennessee and West Virginia. Some of these state requirements are aggregate BMI data reporting requirements, rather than requirements for individual BMI reports to parents.

The Arkansas, California, Delaware, Missouri, South Carolina, Tennessee and West Virginia requirements were enacted legislatively. In Florida and Pennsylvania, state health departments require measuring BMI as part of annual student growth screenings. In Arkansas, the first state to enact BMI legislation (Act 1220 of 2003), legislation was introduced in 2005 and 2007 to repeal the state's BMI reporting requirement and, in 2007, legislation was enacted to change the frequency of BMI screening from annually to every other year and to provide an option for parents to submit a written refusal to the school for their children to participate in BMI screening. California enacted legislation in 2003 (AB 766, Cal. Ed. Code §49452.6) that requires noninvasive screening of seventh grade (female) and eighth grade (male) students for type 2 diabetes risk, including measurement of body mass index as one of four diabetes risk factors. This pilot program has been renewed to 2008.

Figure 2. Existing BMI Requirements as of March 2007



Source: National Conference of State Legislatures, 2007.

Arkansas

AR HB 1173 (2007, enacted, Chapter 76, 20-7-135) – Changes student BMI screenings to every other year, beginning in kindergarten and then in even-numbered grades. Permits any parent to refuse to have their child's body mass index percentile for age assessed and reported, by providing a written refusal to the school. Exempts students in grades 11 and 12 from BMI requirements. (Arkansas Act 1220 of 2003 required annual body mass index screenings for all public school students, with the results reported to parents confidentially by letter via U.S. mail, as part of a more comprehensive approach that halted the increase of childhood obesity in the state.)

California

Individual student BMI is reported to parents via confidential letter as part of a noninvasive diabetes screening pilot program for seventh and eighth graders (California Education Code §49452.6)

Delaware

DE HB 372 (2006, enacted, Volume 75, Chapter 409) – The state is piloting implementation of a new law that requires physical fitness testing for students and includes measuring BMI as part of the testing in some local school districts. The law requires the Department of Education to develop a regulation requiring each local school district and charter school to assess the physical fitness of each student at least once at the elementary, middle and high school levels and to outline the grades at which the assessment will be given. Assessment results are to be provided to the parent, guardian or relative caregiver. The intent is to provide baseline and periodic updates on fitness levels for each student to his or her parent, and to share knowledge of obesity and other chronic illnesses.

Florida

Florida Statute §381.0056(5) – Requires school health services programs administered jointly by the Department of Health and the Department of Education to ad-

minister growth and development screening for students. BMI is encouraged as part of these screenings for all students in first, third, sixth and, optionally, ninth grades.

Illinois

Illinois Statute, 105 ILCS 5/27-8.1 – Requires health examinations for students within one year prior to entering kindergarten or first grade; entering school in Illinois for the first time; or entering the fifth and ninth grades in public, private or parochial schools. Data relating to obesity, height and weight is required on the prescribed statewide health examination form, and the National Association of State Boards of Education reports that body mass index also is a required part of the school physical examination form.

Iowa

IA SB 2124 (2006, enacted, Chapter 135, §135.27) – Establishes a nutrition and physical activity community obesity prevention grant program, contingent upon the receipt of public health funding. Funding has been allocated as of July 2006. Pilot program activities in six locations selected to receive grants must include measurement, reporting and tracking the height and weight of students in elementary schools.

Missouri

The state's legislatively established Model School Wellness Program, funded by Child Nutrition and WIC (Women, Infants and Children) Reauthorization federal grant money, created pilot programs in school districts to encourage students to avoid tobacco use, balance their diets, exercise regularly, and become familiar with chronic conditions resulting from being overweight. A required evaluation after the 2005-2006 school year was to include aggregate data on changes in body mass index and measurement of changing behaviors related to nutrition, physical activity and tobacco use.

Pennsylvania

The state's health department requires school nurses to compute a body mass index height-to-weight ratio for students in grades one through eight during annual growth screenings. BMI measurement will be required for students in all grades during the 2007-2008 school year. Parents receive letters about the BMI results that encourage them to share the information with their family physician.

South Carolina

SC HB 3499 (2005, enacted, Chapter 10, Act 0102) – The South Carolina legislature passed the Student Health and Fitness Act in the spring of 2005. Among other provisions related to student health, nutrition, physical education and fitness, the law requires all K-12 schools in the state to participate in the South Carolina Physical Education Assessment and requires that fitness reports be sent to parents of fifth and eighth graders and high school students. Body mass index screening is not specifically mentioned in the legislation.

Tennessee

TN HB 445 (2005, enacted, now Public Chapter 194) – The state requires reporting student BMI to parents as part of a confidential health report card and providing parents with basic information about what BMI means and what they can do with this information.

West Virginia

WV SB 785 (2006, enacted, Chapter 73) – Changes the state's current BMI measurement policy by requiring that only a scientifically valid sample of students be assessed. Student confidentiality is protected and all body mass index data is reported in aggregate to the governor, the State Board of Education, the Healthy Lifestyles Coalition and the Legislative Oversight Commission on Health and Human Resource Accountability.

Proposed BMI requirements

In 2006, at least six state legislatures—Maryland, Massachusetts, New Jersey, New York, Oklahoma and Virginia—considered, but did not enact, student body mass index reporting requirements. In 2005, 13 state legislatures considered student body mass index legislation, and two of those states (West Virginia and Tennessee) enacted BMI legislation. The 11 states that considered, but did not enact, BMI legislation in 2005 were Alaska, Connecticut, Georgia, Iowa, Maine, New Jersey, New York, North Carolina, Oregon, South Carolina and Texas.

Research on Body Mass Index or Fitness Screening for Students

Arkansas' childhood obesity program began with the Legislature's passage of Act 1220 of 2003 to Combat Childhood Obesity.[16] The law established a comprehensive, coordinated approach to address childhood obesity, which included measurement of student body mass index as one of its components. In addition to the statewide BMI assessments, the legislation also required community- and school-based actions. Results of the Arkansas Act 1220 effort have been extensively evaluated in annual reports. For each of the first two years of the program, the state's previously rising childhood obesity rates held steady at 38 percent.[17] In the most recent evaluation report, researchers conclude "…three years after the passage of Act 1220, Arkansas has succeeded in halting the progression of the obesity epidemic among public school children. Specifically, the percentage of students classified as 'overweight' decreased slightly from 20.9 percent during 2003-2004 to 20.4 percent in 2005-2006. Data also show that the percentage of students 'at risk of being overweight' declined slightly over the same period from 17.2 percent to 17.1 percent." In addition to data collection, researchers surveyed parents and other key stakeholders. They concluded that "… although mandated annual body mass index (BMI) screenings for every public school student raised controversy initially, the majority of parents felt comfortable with the measurement and confidential reporting process in the third year. School administrators experienced fewer problems with the process and parents reported an increased awareness of health risks associated with childhood obesity."[18]

Diabetes Screening and Management at School

Legislation to require noninvasive screening, risk analysis or testing of school children for diabetes was enacted in 2003 in California and Illinois. California enacted legislation to encourage additional diabetes awareness raising in 2005, and Hawaii's Legislature passed and transmitted to the governor legislation permitting medication administration by, and liability protections for, school personnel responding to diabetic students. Massachusetts, Missouri, New Jersey

and Pennsylvania considered, and Texas enacted, legislation in 2005 to facilitate the prevention, diagnosis or treatment of type 2 diabetes in school children. Illinois passed legislation in 2005 for programs to reduce racial and ethnic disparities in diabetes. Four more states enacted legislation for student diabetes care in 2006 as summarized below.

Nebraska

NE LB 1107, (2006, enacted, Section 79-225) – Relates to schools; provides for student self-management of diabetes at school and school-related activities; requires a written request from a parent or guardian; limits school liability.

Tennessee

TN SB 2658, HB 3870 (2006 enacted, Public Act, Chapter 542) – Allows for students with diabetes to perform blood glucose checks, administer insulin, treat hypoglycemia and hyperglycemia, and otherwise attend to the care and management of the student's diabetes in any area of the school or school grounds and at any school-related activity. Clarifies that students are permitted to possess at all times all necessary diabetes monitoring and treatment supplies.

Utah

UT SB 8 (2006 enacted, Session Law Chapter 215) – For the care of students with diabetes in school, directs public schools to train school personnel who volunteer to be trained in the administration of glucagon in an emergency and permits a student to possess—or to possess and self-administer—diabetes medication, when requested by parents.

West Virginia

WV HB 2548 (2006 enacted, Chapter 66) – Relates to the establishment of individual diabetes care plans for students with diabetes by county boards of education; requires the State Board of Education to adopt guidelines for the development and implementation of such plans; requires each county board of education to adopt such a plan that meets these guidelines; requires the state board to report to the Legislature regarding the adoption of the guidelines and the establishment of such plans by county boards.

Research on Diabetes Screening and Management

Evidence of the long-term costs and consequences of diabetes continues to rise, along with the prevalence and earlier onset of type 2 diabetes in the United States. More than 18 million people in the United States suffer from diabetes; it is the sixth most frequent cause of death. In the first study to examine the prevalence and costs of diabetes-related health problems, researchers calculated that diabetes cost the United States approximately $57 billion in 2006, including $23 billion in health care expenses.[19] Diabetes and its complications are more likely to strike those with the lowest incomes who can least afford out-of-pocket expenses and missed work. Many do not know they have diabetes until they develop serious complications such as heart disease, stroke, eye damage, chronic kidney disease or foot problems necessitating amputation. Studies have shown that type 2 diabetes can be delayed or even avoided with proper diet and exercise and that earlier diagnosis and proper diabetes management with diet, exercise, medication and frequent check-ups can reduce complications.[20] "The problem," researchers say, "is that people don't recognize diabetes early enough, so by the time of diagnosis, about half of people with diabetes already have a complication that took years to develop."

Screening school children for their risk for the disease and reporting the information to parents may lead to earlier diagnosis and treatment of diabetes, thus preventing future complications. The National Association of School Nurses (NASN), the Centers for Disease Control and Prevention (CDC) and The National Diabetes Education Program (NDEP)—"National Program to Promote Diabetes Education Strategies in Minority Communities: The National Diabetes Education Program"—have joined to provide the program *Managing and Preventing Diabetes and Weight Gain Project (MAP)* to school nurses. This program engages school nurses in the care and management of children diagnosed with diabetes, screening students at-risk for diabetes, and educating students about how to reduce that risk and prevent the onset of diabetes.[21]

According to the American Diabetes Association, legislation or regulations to improve diabetes care in schools have passed in 17 states.[22] Some advocates favor training school personnel to respond to diabetic students in emergencies and point to a shortage of school nurses as a reason to train additional school personnel. Others argue that certain aspects of diabetes care, such as administering insulin, require trained medical personnel. The U.S. Department of Health and Human Service's *Guide to Community Preventive Services* task force on the topic of "educating school personnel about diabetes" (it is unclear if this topic includes diabetes care for students) states that there is "insufficient evidence to determine effectiveness."[23] The *Guide* explains that "insufficient evidence" should not be interpreted as ineffective but, rather, as requiring additional research to strengthen the evidence.

Trans Fat in School Foods and Other Nutrition Content Information

A number of states have recently considered or enacted legislation to restrict or prohibit school foods that contain trans fat or to specify the nutritional composition of school foods. In 2006, bills to limit or ban the use of trans fat in school foods or to specify its nutrition content were considered or enacted in at least eight states, as detailed below. This listing does not include legislation to require nutrition labeling or menu information for food and drink items in all chain restaurants or retail food establishments or to restrict or ban trans fat in restaurant foods. That information is available on NCSL's trans fat and menu labeling legislation web page at http://www.ncsl.org/programs/health/transfatmenulabelingbills.htm.

Alaska

AK SB 199 (2006, proposed) – Would have provided nutrition support grants to school districts that adopted policies prohibiting the sale of foods of minimal nutritional value on school campuses during the school day and one hour before and after school, and would have included within the definition of foods of minimal nutritional value those that contain a combined saturated and trans fat caloric content of more than 10 percent.

California

CA AB 90 (2007-2008, proposed) – Would prohibit schools or school districts from making any food containing artificial trans fat available to pupils during school hours. Would also prohibit the use of artificial trans fat in the preparation of a food item served to pupils.

CA AB 569 (2005-2006, enacted, Chapter 702, 2006) – Requires each school site that meets the federal severe need qualification reimbursement to offer breakfast beginning with the 2007-

2008 school year. Authorizes waivers under specified conditions. Requires priority funding for schools that offer the federal breakfast program for the first time. (As introduced, would have required nutrition content labeling on all food items sold in schools.)

Indiana

IN SB 111 (2006, enacted, Public Law 54) – Requires at least 50 percent of food items sold in schools to qualify as "better food choices" and, among other definitions, specifies that better food choices are those in which (A) not more than 30 percent of their total calories are from fat; (B) not more than 10 percent of their total calories are from saturated and trans fat; and (C) not more than 35 percent of their weight is from sugars that do not occur naturally in fruits, vegetables or dairy products.

Kansas

KS HB 2870 (2006, proposed) – Among other school nutrition standards, would have required, beginning with the 2007-2008 school year, that schools include a request for trans fat information in all product specifications. Beginning with the 2009-2010 school year, would have directed schools to attempt to eliminate the purchase of all products containing trans fats where practical.

Massachusetts

MA HB 4452 (2005-2006, proposed) – Among other school nutrition standards, would have required that not more than 10 per cent of total calories or 2 grams maximum per packaged food be from saturated fat plus trans fat. These provisions also would have applied to non-prepackaged food items sold in a la carte food lines or any place in schools where non-prepackaged food items are sold.

New Hampshire

NH L.S.R. 846 (2006-2007, proposed) – Would prohibit the use of trans fats in the preparation of foods consumed in restaurants and school cafeterias.

New Jersey

NJ SB 1218, AB 883 – identical (2006-2007, enacted, Public Law 2007, Chapter 45) – Establishes certain nutritional restrictions on foods and beverages served, sold or given away to pupils in public and certain nonpublic schools. Requires that, based on manufacturers' nutritional data or nutrient facts labels, school foods contain no more than 8 grams of total fat per serving, with the exception of nuts and seeds, and no more than 2 grams of saturated fat per serving. Among its provisions, the law states: "Schools shall reduce the purchase of any products containing trans fats beginning September 1, 2007."

New York

NY AB 7564 (2006, proposed) – Among other provisions, would have required that foods sold in schools, both within and outside the school meals program, contain no more than 10 percent of total calories from saturated fat and trans fat combined.

North Carolina

NC HB 855 - (2005, Enacted, Chapter 2005-457) – Directs the State Board of Education to set nutritional standards for school foods, including meals, beverages and a la carte items, that promote gradual changes to increase fruits and vegetables; increase whole grain products, and

decrease foods high in total fat, trans fat, saturated fat and sugar. Phases in standards beginning in elementary schools in 2007-2008, followed by middle schools and high schools.

Research on Trans Fat in School Foods and Nutrition Content Information

Trans fat, a substance that is mainly man-made, is created when manufacturers add hydrogen to liquid vegetable oil—a chemical process called hydrogenation—to make the oils more solid. Hydrogenation increases the shelf life and flavor stability of some foods. Foods that may contain trans fat include vegetable shortenings, some margarines, crackers, cookies, candies, baked goods, snack foods and other foods, such as salad dressings, that are made with or fried in partially hydrogenated oils. Small amounts of trans fat also occur naturally in certain meat and dairy products. Scientific evidence shows that consuming trans fat and saturated fat raises levels of LDL—or "bad"—cholesterol and lowers levels of HDL—or "good"—cholesterol. Trans fat can clog the arteries and increase the risk of heart attack and stroke. This is concerning because heart disease is the leading cause of death in the United States and also is a major cause of disability. Nearly 13 million Americans suffer from coronary heart disease, and each year almost 700,000 people die of heart disease in the United States. That's about 29 percent of all U.S. deaths.[24]

Research reported in the *New England Journal of Medicine* estimates that removing trans fats from the manufactured food supply in the United States could prevent tens of thousands of heart attacks and cardiac deaths annually. Replacing partially hydrogenated fat in the U.S. diet with natural unhydrogenated vegetable oils would prevent approximately 30,000 premature coronary deaths per year (although epidemiologic evidence suggests this number is closer to 100,000 premature deaths annually).[25] Although eliminating trans fat from foods can be a challenge for restaurants and food manufacturers that want to preserve taste and shelf life, reports indicate that in other countries trans fats have been replaced with unsaturated fats without increasing product cost or reducing the quality or availability of foods.

Research also indicates that making nutrition content information available for school foods, especially at the point of consumption, can help students make healthy choices in foods sold and served at school. A study conducted at six Pennsylvania high schools in the fall of 2003 found that students were more likely to select healthy options when schools posted nutrition information at the cafeteria counter. Results were consistent in urban, suburban and rural areas of the state and across varying socioeconomic groups.[26] Nutrition labeling also has been studied in the context of worksite cafeterias and, generally, cafeterias that posted nutrition information for individual food items sold reported significantly fewer sales of high-fat items, or total calories per tray, or both.[27]

Nutrition Education

Many states have school health education requirements, but in recent years legislators have considered or enacted bills that specifically require nutrition education to prevent childhood obesity as a component of school health curricula. California, Colorado, Indiana, Louisiana, Maine, New Hampshire, South Carolina, Texas, West Virginia and Vermont laws currently require some form of nutrition education in schools. States that considered or enacted nutrition education

legislation in 2006 include Alabama, Hawaii, New Hampshire, Pennsylvania and Vermont.

Alabama

AL HB 400 (2006, proposed) – Relates to the K-12 core curriculum; would have authorized local boards of education to devote, in addition to or in lieu of character education, at least 10 minutes per instruction day to health and nutrition education or physical activity pursuant to regulations adopted by the state Board of Education.

Hawaii

HI HB 377 and HI SB 493 (2005, carried over to 2006) – Both bills would require the state's Department of Education to encourage schools to provide culturally appropriate nutrition education and farm-to-table education programs.

New Hampshire

NH SB 290 (2006, proposed) – Would have established a wellness program in New Hampshire schools that would have combined nutrition education and physical exercise.

Pennsylvania

PA HB 185 (2006, enacted, Act 114) – Among other provisions related to local wellness policies and nutritional guidelines for food and beverage sales in schools, provides that the Pennsylvania Child Wellness Plan shall include recommendations for "teaching about nutrition and obesity." Directs the secretary of education to establish an interagency coordinating council for child health, nutrition and physical education. Provides for and directs the Department of Education to establish a clearinghouse of wellness policies and information, and for other duties of the Department of Education and for physical education. Provides for physiology and hygiene.

Vermont

VT HB456 (2006, enacted, Act 145) – Directs the commissioner of education to award small grants to schools that use Vermont products in their food services programs and provide nutrition education for students. Also directs the commissioner of education to report to the General Assembly regarding school district adoption of nutrition policies.

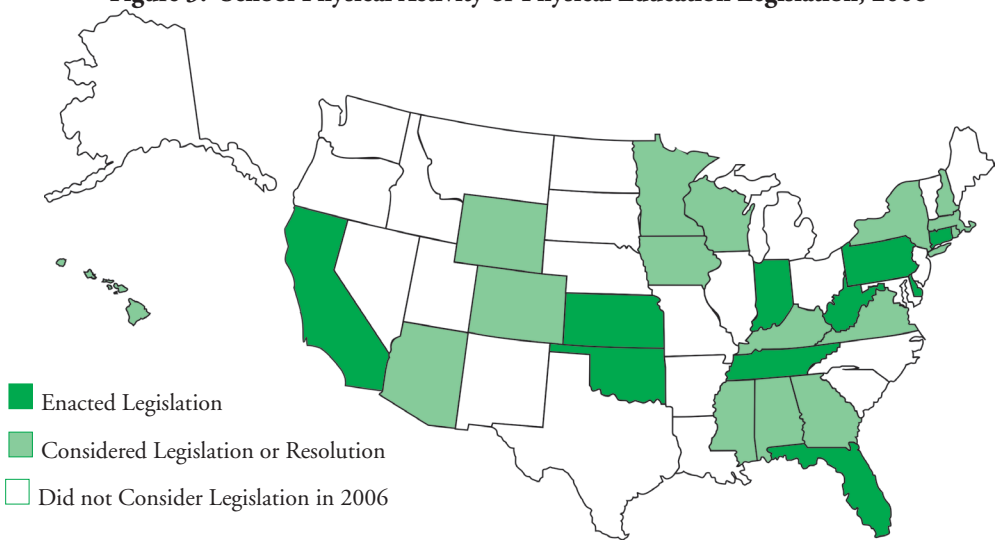
Research on Nutrition Education

A USDA-contracted review of 217 studies found that nutrition education is a significant factor in improving dietary practices when behavior change is the goal and educational strategies are designed with those goals as a purpose.[28] Nutrition education programs of longer duration, more contact hours, and more components—such as parent involvement and changes in school meals—result in more positive outcomes concluded another study.[29] Additional research supports involving parents in nutrition education. A researcher from the Economic Research Service of the U.S. Department of Agriculture found that greater parental nutrition knowledge is associated with a lower prevalence of overweight children.[30] A study of Virginia's Expanded Food and Nutrition Education Program (EFNEP)—a 30-year program of the Cooperative State Research, Education, and Extension Service, United States Department of Agriculture, that helps limited resource youth and families with young children acquire the knowledge, skills, attitudes and changed behavior necessary for nutritionally sound diets—found that the benefits far exceeded costs of the program, generating a cost-benefits ratio of $1.00: $10.64, a significant return on investment.[31]

Physical Activity or Physical Education in Schools and Recess Legislation

Forty-nine states require physical education in schools, but the scope of the requirement varies greatly. In 2006, at least 26 states (Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Indiana, Iowa, Kansas, Kentucky, Massachusetts, Minnesota, Mississippi, New Hampshire, New York, Oklahoma, Pennsylvania, Rhode Island, Tennessee, Virginia, West Virginia, Wisconsin, Wyoming) considered legislation related to physical activity or physical education in schools and at least 10 of these states enacted legislation or passed resolutions, including California, Connecticut, Delaware, Florida, Indiana, Kansas, Oklahoma, Pennsylvania, Tennessee and West Virginia. States have focused on refining or increasing physical education requirements or encouraging positive physical activity programs for students during and after the school day. A number of states considered legislation related to recess, which is reported separately below. Both the cost of physical education programs and an emphasis on academics have sometimes been considered barriers to increasing physical education in schools, but recognition is growing that physical activity during the school day may increase student achievement. Physical education and physical activity legislation that passed both chambers of the legislature in 2006 is summarized below.

Figure 3. School Physical Activity or Physical Education Legislation, 2006



Source: National Conference of State Legislatures, 2007.

Physical Education and Physical Activity Legislation That Passed Both Chambers of Legislature in 2006

California

CA SB 638 (2005-2006, enacted, Chapter 380, Statutes of 2006) – Among other provisions related to before and after school programs, requires that grants made to public elementary, middle and junior high schools relating to community learning centers for specified fiscal years, continue to be funded in each subsequent fiscal year immediately following the expiration of the grant. Requires that program training and support provided by the Department

of Education include the development and distribution of voluntary guidelines for physical activity programs.

Colorado

CO HB 1021 (2006, vetoed by governor) – Would have prohibited school districts from employing as a physical education teacher any person who did not hold a physical education endorsement on his or her teacher's license or who was not highly qualified, as determined by the school district.

Connecticut

CT SB 204 (2006, enacted, Public Act 06-44) – Encourages exercise and student wellness in schools by requiring local and regional boards of education to adopt guidelines to coordinate services and programs to address the physical, mental, social and emotional needs of students, including plans for engaging students in daily physical exercise during regular school hours and strategies for engaging students in daily physical exercise before and after school.

Delaware

DE HB 372 (2006, enacted, Volume 75, Chapter 409) – Requires the Department of Education to develop a regulation to require each local school district and charter school to assess the physical fitness of each student at least once at the elementary, middle and high school levels and to outline the grades at which the assessment will be given. The assessment results are to be provided to the parent, guardian or relative caregiver. The intent is to provide baseline and periodic updates for each student and his or her parent, guardian or relative caregiver, and to share knowledge of obesity and other chronic illnesses. Includes measuring body mass index as part of fitness testing in some local school districts.

DE HB 471 (2006, enacted, Volume 75, Chapter 420) – Provides for a physical education/physical activity pilot program in at least six of Delaware's elementary, middle or high schools; requires the department to provide technical assistance in the development and any training related to implementation; provides that the department also could work with an outside entity, such as the Nemours Health and Prevention Services, to conduct an evaluation.

DE SB 289 (2006, enacted, Volume 75, Chapter 330) – Creates a statewide Health Advisory Council, as recommended by the Physical Education Task Force, to provide advice and guidance to the Department of Education regarding current and future physical education and physical activity programs in state schools; provides for a report on childhood obesity.

Florida

FL SB 772 (2006, enacted, Chapter 2006-301) – Among other provisions, requires that school district physical education programs and curricula be reviewed by a certified physical education instructor and encourages school districts to provide physical education for a specified amount of time.

Indiana

IN SB 111 (2006, enacted, Public Law 54) – Beginning with the 2006-2007 school year, requires the governing body of each school corporation to provide daily physical activity for students in elementary school. The physical activity must be consistent with the curriculum and programs developed under IC 20-19-3-6 and may include the use of recess. On a day when there is inclement weather or unplanned circumstances have shortened the school day, the school corporation may provide physical activity alternatives or elect not to provide physical activity.

Kansas
KS HR 6011 (2006, enacted, signed by governor March 10, 2006) -– Expresses the House of Representatives' support for physical education classes for all grades from kindergarten through 12, and urges the state Board of Education to require some type of scheduled physical education class for grades kindergarten through 12.

Oklahoma
OK SB 1459 (2006, enacted, OS 70-24-100b) – Directs the state's Department of Education to provide technical assistance and information to schools for use in establishing healthy school nutrition environments; reducing childhood obesity; developing quality physical education and activity programs; and establishing, implementing and evaluating school wellness policies. Encourages Oklahoma's Healthy and Fit Schools Advisory Committees to use the Centers for Disease Control and Prevention's School Health Index and Oklahoma Healthy and Fit Schools Scorecard as program assessment and monitoring instruments.

Pennsylvania
PA HB 185 (2006, enacted, Act 114) – Provides for competitive food or beverage contracts and for nutritional guidelines for food and beverage sales in schools. Provides for certain health services and for advisory health councils. Provides for local wellness policies and directs the Department of Education to establish a clearinghouse of wellness policies and information, for an interagency coordinating council for child health and nutrition, for other duties of the Department of Education, and for physical education. Provides for physiology and hygiene.

Tennessee
TN HB 3750, (2006, enacted, Public Acts 2006, Chapter 1001) – Requires each local education agency to integrate a minimum of 90 minutes of physical activity per week into the instructional school day for elementary and secondary school students. Opportunities to engage in physical activity may include walking, jumping rope, playing volleyball, or other forms of physical activities that promote fitness and well-being.

West Virginia
WV SB 785, (2006, enacted, Chapter 73) – Requires the state's Department of Education to establish the requirement that each child enrolled in public school actively participate in physical education classes during the school year to the level of his or her ability. Specifies participation time by grade level as: elementary school - not less than 30 minutes of physical education, including physical exercise and age-appropriate physical activities for not less than three days per week; middle school - not less than one full period of physical education, including physical exercise and age-appropriate physical activities, each school day of one semester of the school year; and high school - not less than one full course credit of physical education required for graduation, including physical exercise and age-appropriate physical activities and the opportunity to enroll in an elective lifetime physical education course.

Recess Legislation Considered or Enacted in 2005-2006

Connecticut
CT Senate Substitute Bill 204, (2006, enacted, Public Act 06-44) – Requires the Connecticut Department of Education to develop guidelines for addressing the physical health needs of students that

include, among other things, plans for engaging students in daily physical exercise during regular school hours. (Note – the bill does not use the word "recess" or specify a certain number of minutes.)

CT HB 5252 (2006, proposed) – Would have required local boards of education to provide students an opportunity to engage in 20 minutes of exercise during the school day.

Iowa

IA Senate Study Bill 3065 (2006, proposed) – Proposed a study of minimum hours of instructional time for grades one through 12, including a proposal that not more than one hour per day be devoted to recess and lunch for grades one through six.

Indiana

IN SB 111 (2006, enacted, Public Law 54) – Beginning with the 2006-2007 school year, requires the governing body of each school corporation to provide daily physical activity for students in elementary school. The physical activity must be consistent with the curriculum and programs developed under IC 20-19-3-6 and may include the use of recess. On a day when there is inclement weather or unplanned circumstances have shortened the school day, the school corporation may provide physical activity alternatives or elect not to provide physical activity.

New Hampshire

NH SB 290 (2005, proposed) – As part of a more comprehensive school wellness bill, would have required development of a model school wellness policy that included a "physical activity program," including, in addition to regular physical education classes, minimum daily physical activity for each student provided through activities such as recess and other recreation periods and participation in athletics either during or after regular school hours.

New York

NY AB 2095 (2005, proposed) – This bill proposed to establish time standards for physical education and also stated the legislative intent that, "Physical education instruction is the cornerstone of a comprehensive school physical activity program that also includes health education, elementary school recess, after-school physical activity clubs and intramurals, high school interscholastic athletics, walk/bike to school programs and staff wellness programs."

Pennsylvania

PA HB 189 (2005, proposed) – As part of a more comprehensive nutrition and physical education bill, would have required that, in addition to physical education, at least 15 minutes of daily recess be offered in the elementary grades for each two and one-half periods of instructional time in core subject areas.

South Carolina

HB 3499 (2005, enacted, Act 102) – As part of a bill phasing in physical education standards statewide, provides that each elementary school shall designate a physical education teacher to serve as its physical education activity director. The physical education activity director shall plan and coordinate opportunities for additional physical activity for students that exceed the designated weekly student physical education instruction times that may include, but not be limited to, before, during and after school dance instruction, fitness trail programs, intramural programs, bicycling programs, walking programs, recess, and activities designed to promote physical activity opportunities in the classroom.

Texas

SB 42 (2005, enacted) – Encourages school districts to promote physical activity for children through classroom curricula for health and physical education. Allows the state Board of Education, by rule, to require students in kindergarten to grade nine to participate in up to 30 minutes of daily physical activity as part of a school district's physical education curriculum, through structured activity or during a school's daily recess. Provides for consultation with educators, parents and medical professionals to develop physical activity requirements.

Virginia

VA HB1450 (2006, proposed) – Would have required local school boards to prohibit the denial of daily outdoor recess or unstructured play to a student for disciplinary reasons, unless the parent of the student notifies the school principal in writing that the student may be excused from all or part of recess or play time as a means to discipline the student.

Research on Physical Activity and Physical Education

Research consistently demonstrates that regular physical activity is associated with a healthier, longer life and lower risk of heart disease, high blood pressure, diabetes, obesity and some cancers. School-based physical education programs as a means to increase physical activity continue to be recommended based on "strong evidence," according to the *Guide to Community Preventive Services*, a federally sponsored initiative to document the effectiveness of various population-based interventions. A systematic review of published studies, conducted on behalf of the Task Force on Community Preventive Services by a team of experts, found that physical education (PE) classes taught in schools that enhanced class length or activity are effective in improving both physical activity levels and physical fitness among school-age children. On the basis of strong evidence of effectiveness, the task force recommended implementing programs that increase the length of, or activity levels in, school-based PE classes.[32]

Links between physical activity and academic achievement have been consistently demonstrated. More physically active and fit students have higher achievement test scores and better grades,[33] as demonstrated in a number of studies.

- In a study of two parochial schools, class time for academics was reduced by 240 minutes per week in an experimental group to enable increased physical activity exposure. Mathematics test scores were consistently higher for this group than for a group that did not have increased time for physical activity.[34]

- Schools that offer intense physical activity programs see positive effects on academic achievement, including increased concentration; improved mathematics, reading and writing test scores; and reduced disruptive behavior, even when time for physical education classes reduces the time for academics.[35]

- In a two-year study of the effects of a health-related school physical education program on the standardized academic achievement scores of 759 children, despite devoting twice as many minutes per week to physical education as a control group, the health-related physical education program either had favorable effects on students' academic achievement or did not interfere with academic achievement.[36]

- In a study of 214 middle school students, children who participated in vigorous physical activity, such as sports, performed better in school, according to a study released by the American College of Sports Medicine (ACSM). The examination of activity and physical education compared to academic achievement showed that the most active kids more often have better grades. The study was conducted to determine the effect of physical education class enrollment and overall physical activity on academic achievement. The link between activity and academic performance was most significant when kids met Healthy People 2010 guidelines for vigorous activity 20 minutes per day, at least three days per week. Grades were not affected among kids who were moderately active for 30 minutes at least five days a week. Most of the vigorous activity was achieved outside the classroom, in sports such as soccer, football, basketball and baseball or softball. Since academic performance was favorably influenced by this level of activity, the researchers suggest incorporating vigorous activity in PE classes.[37]

School Wellness Policies

The federal Child Nutrition and WIC Reauthorization Act of 2004 (Public Law 108 - 265) required each local school district that participates in the National School Lunch and/or Breakfast Program to establish a local wellness policy by the beginning of the 2006-2007 school year. School districts were required to involve a broad group of stakeholders in developing wellness policies and set goals for nutrition education, physical activity, campus food provision, and other school-based activities designed to promote student wellness. Plans for measuring policy implementation were required to be included. Statewide legislation for wellness policies was considered or enacted in 2005 independently or in response to the federal requirement in California, Colorado, Illinois, Ohio, Rhode Island and Tennessee. In 2006, Delaware, Florida, Indiana, Kentucky, Mississippi, Oklahoma and Pennsylvania also enacted legislation related to wellness policies, and Tennessee moved forward with a coordinated school health program, as summarized below. Legislators also have acted on individual policies that are part of school wellness goals, such as improving the nutritional quality of school foods, providing greater opportunities for physical activity, and ensuring that adequate nutrition education is part of the school curriculum, as reported under the separate topics above. Additional information about federal wellness policy requirements can be found on the U.S. Department of Agriculture web site at: http://www.fns.usda.gov/tn/Healthy/wellnesspolicy.html.

Delaware

DE SB 289 (2006, enacted, Volume 75, Chapter 330) – Creates a statewide Health Advisory Council (as recommended by the Physical Education Task Force created by HCR 37 of the 143rd General Assembly in 2005) to provide advice and guidance to the Department of Education regarding current and future physical education and physical activity programs in Delaware schools. Council responsibilities include ensuring that every Delaware public school has a school health leadership team, consistent with its district wellness policy, to serve as a conduit to school health leadership teams to facilitate the exchange of ideas, progress, data, analysis and best practices.

Florida
FL SB 772 (2006, enacted, Chapter 2006-301) – Among other provisions, requires each school district to submit to the Department of Education, by a specified deadline, copies of the district's school wellness policy and physical education policy; requires the school district to review those policies annually; requires the department and school districts to post links to those policies on their websites; requires the department to provide website links to certain resources; and prescribes the types of information those resources must provide.

Indiana
IN SB 111 (2006, enacted, Public Law No. 54) – Among other provisions related to student nutrition and physical activity, requires school boards to establish a coordinated school health advisory council to develop a local wellness policy that complies with federal requirements. Also requires the Department of Education to provide information concerning health, nutrition and physical activity; and to establish requirements for food and beverage items available for sale to students outside of federal school meal programs.

Kentucky
KY HB 646 (2006 enacted, Act No. 137) – As part of the Governor's Wellness and Physical Activity Initiative for all Kentucky citizens, establishes the Governor's Council on Wellness and Physical Activity to raise public awareness and promote citizen engagement.

Mississippi
MS HB 319 (2006, enacted, Chapter 401) – Recognizes the problem of childhood obesity and student physical inactivity in Mississippi. Directs local school boards to establish local school health councils for each school by Nov. 1, 2006. Provides that the council's duties may include developing coordinated school health programs, including health education, physical education, nutritional services, parental involvement, alcohol and tobacco use prevention education, health services, healthy environment, counseling and psychological services. The councils also may provide guidance on the development and implementation of a local school wellness plan that each local school board is required to adopt by the beginning of the 2006-2007 school year in conformity with federal law.

Oklahoma
OK SB 1459 (2006, enacted, OS 70-24-100b) – Directs the state's Department of Education to provide technical assistance and information to schools for use in establishing healthy school nutrition environments; reducing childhood obesity; developing quality physical education and activity programs; and establishing, implementing and evaluating school wellness policies. Encourages Oklahoma's Healthy and Fit Schools Advisory Committees to use the Centers for Disease Control and Prevention's School Health Index and Oklahoma Healthy and Fit Schools Scorecard as program assessment and monitoring instruments.

Pennsylvania
PA HB 185 (2006, enacted, Act 2006-114) – Amends the Public School Code of 1949. Provides for competitive food or beverage contracts and for nutritional guidelines for food and beverage sales in schools. Provides for certain health services and for advisory health councils. Provides for local wellness policies, for an interagency coordinating council for child health and nutrition, for duties of the Department of Education and for physical education. Provides for physiology and hygiene.

Tennessee

TN HB 3750 (2006, enacted, Public Acts 2006, Chapter 1001) – Authorizes each local education agency to implement an expanded coordinated school health program under the guidelines developed by the commissioner of education, in consultation with the Department of Health, during the 2006-2007 school year, and requires implementation of these programs by the 2007-2008 school year. Existing coordinated school health programs were authorized under Tennessee Code Annotated §49-1-1002, the Coordinated School Health Improvement Act of 2000.

Research on School Wellness Policies

Federal law required school wellness policies to be in place by the beginning of the 2006-2007 school year in all school districts participating in federal school meals programs, including a plan for evaluation of policy implementation. Because the policies have just gone into effect, a research base regarding the effect of specific district-level policies has not yet been developed in response to the federal requirement. There is, however, evidence for the effectiveness of nutrition education and physical activity, both required components of school wellness policies (as discussed earlier in this document). Research also supports the efficacy of broad, multi-faceted, community-wide campaigns to promote wellness and enable citizens to live physically active, healthy lifestyles. A systematic review of 10 published studies by an expert team organized by the CDC's Task Force on Community Preventive Services found that community-wide campaigns are effective in getting people to be more physically active and recommended implementation of such efforts based on "strong evidence."[38] Also according to the *Guide to Community Preventive Services*, the CDC's federally sponsored initiative to document the effectiveness of various population-based interventions for health, social support for increasing physical activity is effective and is recommended based on "strong evidence" from nine studies reviewed.[39]

A specific, community-wide wellness effort in the sociodemographically diverse community of Somerville, Mass. recently studied by researchers, also achieved positive results. Researchers studied 1,178 children in grades 1 to 3 who attended public elementary schools that participated in an intervention designed to bring the energy equation into balance by increasing physical activity options and availability of healthful foods within the before-, during-, after-school, home and community environments. Many groups and individuals within the community (including children, parents, teachers, school food service providers, city departments, policymakers, health care providers, before- and after-school programs, restaurants, and the media) were engaged in the intervention. The main outcome achieved was a decrease in BMI scores for children at high risk for obesity. Researchers concluded that the results were significant, given the environmental backdrop against which the intervention occurred, and that Somerville's community-wide wellness model demonstrates promise for communities throughout the country that are confronted with escalating childhood obesity rates.[40]

Action for Healthy Kids (AFHK), an advocacy group that is spearheading a school wellness policy campaign, reviewed a sample of school wellness policies that were in place by the July 1, 2006 deadline. In all, 112 policies representing urban, suburban and rural districts from 42 states were reviewed; district sizes ranged from 166 students in the smallest district to 345,978 students in the largest. The advocacy group's analysis concluded that, "compliance with the federal policy guidelines varies dramatically among school districts, with only 54 percent of the districts meeting all of the minimum requirements."

Other key findings about school wellness policies from the AFHK analysis were that:

- 40 percent of policies studied did not specify who was responsible for implementation,
- 19 percent did not address implementation or evaluation,
- 25 percent did not explicitly state goals on meeting federal standards for school meals,
- 18 percent did not include goals for both physical education and physical activity, and
- 4 percent did not specify goals for nutrition education.

Goals for nutrition standards for foods and beverages (available outside of the school meal program) varied; 42 percent of districts studied by AFHK used a very general statement about all foods and beverages available on campus, while other policies outlined standards for specific venues:

- 45 percent of policies included standards for a la carte items,
- 66 percent included standards for vending,
- 59 percent included standards for fundraising,
- 60 percent for not using food as a reward or punishment,
- 40 percent included standards for parties or celebrations, and
- 6 percent included standards for after-school programs."[41]

Task Forces, Commissions, Studies, Grants and Other Special Programs

In 2006, legislation or resolutions to create obesity-related task forces, commissions, studies or other special programs were introduced in at least 19 states. Enacted legislation or resolutions for 2006 are reported below, including actions by legislatures in California, Delaware, Florida, Illinois, Iowa, Kentucky, Mississippi, Oklahoma, Pennsylvania, South Carolina and Tennessee.

California

CA ACR 114 (2005-2006, adopted as Resolution Chapter 151) – Establishes a legislative task force on diabetes and obesity to study factors contributing to high rates of diabetes and obesity in Latinos, African-Americans, Asian Pacific Islanders, and Native Americans in this country. Declares that the task force shall produce a report with recommendations regarding ways to reduce the incidence of these debilitating conditions in these ethnic groups by Dec. 31, 2007.

Delaware

DE SB 289 (2006, enacted, Volume 75, Chapter 330) – Creates a statewide Health Advisory Council (as recommended by the Physical Education Task Force created by HCR 37 of the 143rd General Assembly in 2005) to provide advice and guidance to the Department of Education regarding current and future physical education and physical activity programs in Delaware schools. Requires publication of an annual strategic plan and report on fitness and childhood obesity in Delaware and creation of a clearinghouse for best practices for physical education and physical activity programs, as well as non-state funding sources for physical education and physical activity programs.

Florida

FL SB 1324 (2006, enacted, Chapter 2006-269) – Requires the Department of Health to collaborate with other state agencies in developing policies and strategies to prevent and treat obesity that shall be incorporated into agency programs; to advise health care practitioners regarding morbidity, mortality and costs associated with conditions of being overweight or obese; and to inform health care practitioners about clinical best practices for obesity prevention and treatment and to encourage practitioners to counsel their patients regarding the adoption of healthy lifestyles.

FL HB 7203 (2006, left in House, see similar Senate bill 1324 above, which was enacted) – Would have required the Department of Health to collaborate with other state agencies in developing policies and strategies to prevent and treat obesity to be incorporated into agency programs, to advise health care practitioners regarding morbidity, mortality, and costs associated with the condition of being overweight or obese and to inform them about clinical best practices for obesity prevention and treatment and encourage them to counsel their patients regarding the adoption of healthy lifestyles; required the Department of Health, in partnership with the Department of Education, to award grants to local school districts to implement pilot programs to promote healthy eating habits, increase physical activity, and improve fitness; and would have created the Florida State Employee Wellness Council within the Department of Management Services.

Illinois

IL SB 2483 (2006, enacted, Public Act 094-0788) – Establishes the Illinois State Diabetes Commission and its membership, including advocates and people with diabetes. Directs the commission to hold public hearings on issues pertaining to the prevention, treatment and control of diabetes; develop a strategy for the prevention, treatment and control of diabetes in the state; examine the needs of adults, children, racial and ethnic minorities, and medically underserved populations who have diabetes; and prepare an annual report on commission activities for legislative leaders and the state's secretary of human services, beginning June 30, 2007. Permits the department to accept federal funds and gifts on behalf of the commission.

Iowa

IA SB 2124 (2006, enacted, Chapter 135, §135.27) – Establishes a nutrition and physical activity community obesity prevention grant program, contingent upon the receipt of public health funding. Funding was allocated as of July 2006.

IA SB 2251 (2006, enacted, Chapter 1085) – Requires the Department of Education and the Department of Public Health to convene a multidisciplinary healthy children task force to assess current policies and statutes that affect the health of children, specifically physical activity, physical education, food and nutrition, and nutrition education for children ages 3 through 18. Directs the task force to develop recommendations for policy and statutory changes to enhance the health and well-being of children, including, but not limited to, physical activity, food and nutrition, and education related to these topics; and to submit its findings and recommendations to the governor and the General Assembly not later than Jan. 1, 2007.

Kentucky

KY SCR 98 (2006, enacted, Acts Chapter 91) – Instructs the Kentucky Legislative Research Council to study options for improving public health and increasing tourism through opportunities for bicycling and pedestrian activities.

Mississippi

MS HB 319 (2006, enacted, Chapter 401) – Recognizes the problem of childhood obesity and student physical inactivity in Mississippi. Directs local school boards to establish local school health councils for each school by Nov. 1, 2006. Provides that the council's duties may include developing coordinated school health programs, including health education, physical education, nutritional services, parental involvement, alcohol and tobacco use prevention education, health services, healthy environment, counseling and psychological services; and providing guidance on the development and implementation of a local school wellness plan that each local school board is required to adopt by the beginning of the 2006-2007 school year in conformity with federal law.

Oklahoma

OK HB 2149 (2006, enacted, OS 74-1382) – Recreates, until July 2012, the state's employee Wellness Council within the Oklahoma State Employee Benefits Council, composed of one representative from every state agency that has designated a person to serve on the council as the wellness coordinator for the respective state agency and one representative of the Oklahoma Governor's Council on Physical Fitness and Sports.

Pennsylvania

PA HB 185, (2006, enacted, Act No. 2006-114) – Among other provisions, provides for school health services and for advisory health councils. Provides for local wellness policies, and creates an interagency coordinating council for child health and nutrition, specifies duties of the Department of Education and for physical education.

South Carolina

SC SCR 1379 (2006) – This adopted resolution urges and requests the state's Department of Health and Human Services to study obesity treatments, including compilation of data on treatment through bariatric surgery at facilities certified as centers of excellence by the American Society for Bariatric Surgery compared to facilities not so certified.

Tennessee

TN SB 2038 (2006, enacted, Public Chapter 886) – Creates the "Child Nutrition and Wellness Act of 2006" to educate the public concerning child nutrition and wellness issues and advocate for initiatives to improve the nutrition and wellness of children. Directs the commissioner of health, subject to the appropriation of funds, to appoint an advisory council to advise him and the office regarding child nutrition and wellness issues, including development of nutrition and physical activity standards for children and of a comprehensive long-term strategy, including funding and evaluation mechanisms, to promote child nutrition and wellness in various settings, including, but not limited to, schools, child care centers, health care facilities, and community facilities.

Research on Task Forces, Commissions, Studies, Grants and Other Special Programs

State legislatures that are concerned with addressing childhood obesity and its potential long-term effects on health continue to enact a variety of task forces, commissions, studies, grants and other programs to encourage healthy lifestyles and prevent obesity and chronic disease. Because of differing approaches, goals, task force composition and program implementation,

these types of activities do not lend themselves to a uniform assessment of results and conclusions about effectiveness.

Raising Awareness

Efforts to raise public awareness of childhood obesity and its effects and to respond to the problem with wellness, nutrition and physical activity initiatives include the enacted bills listed below for 2006 and others, both proposed and enacted, too numerous to list.

California

CA SCR 90 (2005-2006) – This adopted resolution expresses the Legislature's support for "10 Steps to a Healthy California," including promoting the importance of physical activity and healthy eating.

CA SCR 105 (2005-2006) – This adopted resolution proclaims the month of May 2006 as Fitness Month and encourages all Californians to enrich their lives through proper diet and exercise.

Florida

FL HB 9095 (2006, adopted by publication) – This legislative resolution designates the 2006-2007 school year as "Healthy School Lunch Year" in Florida.

Georgia

GA HB 710 (2006 enacted, Act 576) – Provides for special license plates identifying people with diabetes, to alert law enforcement officers and emergency personnel to the potential for special needs before they approach the driver of a vehicle, especially if the vehicle has been involved in an accident. The funds raised by the sale of this special license plate are to be deposited in the general fund.

Kentucky

KY HB 646 (2006, enacted, Acts Chapter 172) – Establishes and sets requirements for the Governor's Council on Wellness and Physical Activity and establishes the Governor's Wellness and Physical Activity Program Inc.

Washington

WA SB 6197 (2006, enacted, Chapter 239) – Finds that women and people of color experience significant disparities compared to men and the general population in education, employment, healthful living conditions, access to health care, and other social determinants of health. Creates the Governor's Interagency Council on Health Disparities and directs it to create an action plan and statewide policy to include health impact reviews that measure and address social determinants of health that lead to disparities as well as the contributing factors of health care that can have a broad effect on improving status, health literacy, physical activity and nutrition.

Research on Raising Awareness

Public education to raise awareness and encourage healthy lifestyles and behaviors is a continuing strategy used by public health officials to encourage citizens to adopt healthier behaviors.

Health officials frequently turn to media-based public education campaigns to address public health issues of all kinds, including childhood obesity. The Centers for Disease Control and Prevention's 2002-2006 VERB mass media and events campaign addressed childhood obesity through television advertising and community outreach promoting daily physical activity for children ages 9 to 13. It was found to be effective in achieving its goal. Physical activity messages reached the VERB campaign's target audience, and there was a definite association between the message and behavioral change in the form of increased physical activity. The Youth Media Campaign Longitudinal Survey, conducted by an independent research company to evaluate VERB, also showed that the VERB campaign was especially effective in shrinking the gap in physical activity levels between boys and girls. There was a 27 percent increase in free-time physical activity sessions among U.S. girls in the entire 9- to 13-year-old age range. Six million children from lower-middle income households showed a 25 percent increase in free-time physical activity sessions, despite barriers such as transportation issues, safety concerns and less access to physical activity resources.[42]

Mass media campaigns, combined with other educational efforts and interventions, are recommended on the basis of strong evidence for a number of public health measures, including increasing breast and cervical cancer screening and reducing initiation of tobacco use by youth in the *Guide to Community Preventive Services*, a federally sponsored initiative documenting the effectiveness of various population-based interventions. At present, however, the *Guide* states that the evidence for mass media campaigns to promote physical activity is insufficient to determine effectiveness.[43] This does not mean that such efforts should be regarded as ineffective but, rather, that additional research is needed to strengthen the evidence.

Taxes on Foods and Beverages with Minimal Nutritional Value

A number of states in 2006 considered taxing foods and beverages with minimal nutritional value and, in a few states, directing the revenues to fund obesity or health-related services or programs such as health care for children, fitness grants or dental care access and education. None of the proposed 2006 taxes were enacted, but summaries are below.

California

CA SB 1118 (2006, proposed) – Would have imposed a 2 percent tax on carbonated beverages, food products sold at drive-in restaurants and advertising space in excess of a specified quantity used for advertising foods of poor nutritional quality, with resulting revenues to be deposited into a children's health insurance fund to fund health care for children for obesity, diabetes and other conditions.

Indiana

IN HB 1170 (2006, proposed) – Would have imposed an 11.5 percent tax, in addition to other applicable taxes, on the retail sale of minimally nutritious foods or beverages. Would also have established the physical fitness grant account (account), and deposited revenues from the tax in the account to establish a physical fitness grant program administered by the Department of Education that would have awarded grants to public high schools, including charter high schools,

for salaries and other costs related to physical activity and fitness education. Surplus revenues would have reverted to the state general fund to be used for Medicaid expenditures.

Kansas

KS HB 3016 (2006, proposed) – Would have imposed a tax upon every distributor, manufacturer or wholesale dealer, to be calculated as $.20 per gallon for each gallon of bottled soft drink sold or offered for sale in the state. Would have exempted soft drinks containing more than 10 percent natural fruit juice or natural vegetable juice.

Maryland

MD HB 640 (2006, proposed) – Would have allowed municipal corporations to impose an admissions and amusement tax, not exceeding 1 percent, on certain foods and beverages, including soft drinks and candies.

New Mexico

NM SB 228 (2006, proposed) – Would have enacted the "Soft Drink Tax Act," imposing a tax on ginger ale and colas or drinks commonly referred to as soft drinks; any fruit or vegetable drink containing less than 50 percent natural fruit or vegetable juice; and any package or container of powder, syrup, concentrate or other base product intended for mixing to produce a liquid soft drink; at a rate of 3 cents for each 12 fluid ounces of soft drink; $1.92 per gallon of soft drink syrup or concentrate; and 32 cents per gallon on the sale of a package or container of soft drink powder or other base product.

Wisconsin

WI HB 1168 (2006, proposed) – Would have imposed a tax on the wholesale sale of soft drinks and used the revenues to create a dental access trust fund to supplement reimbursement for dentists' services provided to recipients under the Medical Assistance Program and to fund grants from the Department of Health and Family Services for dental public health and dental education projects.

Research on Taxes on Foods and Beverages with Minimal Nutritional Value

Taxing foods or beverages of minimal nutritional value such as snacks that are high in sugar or fat has been proposed by some public health advocates as a means to address obesity by discouraging consumption of these foods. Advocates point to studies that indicate such a tax would generate considerable revenue that then could be used to fund public health programs.[44] Critics of proposed "snack taxes" are equally vocal in arguing that such a tax would disproportionately affect poor people and that it would be extremely difficult to administer such a tax and for vendors to determine which foods are subject to the tax.[45] A report prepared for the Grocery Manufacturers Association in 2006 observes that 13 states currently tax soft drinks under the general sales tax (California, Connecticut, Florida, Indiana, Iowa, Kentucky, Maryland, Maine, Minnesota, New Jersey, New York, North Dakota, and Texas) and seven states assess a special tax on soft drink manufacturing (Arkansas, Missouri, Rhode Island, Tennessee, Virginia, Washington, West Virginia). A number of states include a tax on snack foods such as candy in the general sales tax; however, the report notes, all states that have imposed broadly defined selective taxes on snack foods have repealed them.[46]

Conclusion

Legislators continue to consider and enact a wide range of policy options to address and prevent childhood obesity. Policies are aimed at enabling the younger generation to balance healthy eating and a physically active lifestyle. Ultimately, healthy habits built in childhood may prevent obesity-related chronic diseases such as cardiovascular disease, diabetes and some cancers. By tackling childhood obesity today, policymakers hope to prevent future pain and suffering and growing medical costs for chronic conditions that threaten to make health care unaffordable.

Other NCSL Resources

Other related NCSL resources on legislative and policy options to address obesity are available on the web at these locations:

- Overview of 2005 childhood obesity legislation and policy options: http://www.ncsl.org/programs/health/ChildhoodObesity-2005.htm
- Overview of childhood obesity policy options considered in 2003-2004: http://www.ncsl.org/programs/health/childhoodobesity.htm
- Information on access to healthy foods in communities: http://www.ncsl.org/programs/health/publichealth/foodaccess/index.htm
- Overview of healthy eating, physical activity and food systems to support healthy communities: http://www.ncsl.org/programs/health/KelloggHealthOverview.htm

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