



Executive Summary

Rising obesity rates have become an increasingly critical public health issue that warrants immediate attention from a number of individuals and organizations. Currently, 65 percent of U.S. adults are overweight and 30 percent are obese¹; the percentage of young people who are overweight has more than doubled in the past 20 years.² Although there is no single proven remedy, it is known that a significant cause of this disease is energy imbalance, or too many calories and too little physical activity.³ While waiting for more experimental evidence to become available, there are several promising measures that can be taken to improve nutrition and physical activity, and ultimately reduce overweight and obesity in the interim.

State public health agencies play a key role in addressing the obesity epidemic. While it does not include every measure that has been taken, this paper outlines eight actions that states can consider taking to reduce overweight and obesity. This paper is intended only to share states' experiences and to offer policy options for states' consideration. It does not constitute ASTHO policy and inclusion of the following suggested actions does not necessarily reflect endorsement by ASTHO, affiliates, or its funders.

Following is a list of actions that states may consider taking to reduce overweight and obesity. Each of these actions is discussed in detail in the following section.

- Coordinate the efforts of the state health agency and other non-traditional partners.

- Increase knowledge about the benefits of healthy eating and physical activity among individuals and the medical community.
- Increase delivery of nutritious meals to students and encourage participation in recommended levels of physical activity.
- Advocate for obesity prevention and treatment coverage for state employees and Medicaid and State Children's (SCHIP) Health Insurance Program beneficiaries.
- Monitor and report on the economic impact of obesity on the state to help guide treatment and prevention decisions.
- Partner with employers to promote wellness and provide opportunities for employees to practice healthy behaviors.
- Encourage policymakers and food outlets to organize responses to the obesity epidemic.
- Provide opportunities for residents to be active and purchase healthy food in their communities.

State Policy Options to Reduce Overweight and Obesity

Overweight and obesity both have negative consequences. Being overweight increases the risk for diabetes and osteoarthritis. Obesity significantly increases the risk for diabetes, heart disease, and cancer. Both are associated with pain, disability and other quality of life issues. While the consequences of being overweight may not appear to be as severe as being obese, overweight individuals could potentially become obese if their health behaviors go unchanged. Obesity is also associated with increased health care costs. Health care spending may continue to rise at alarming rates if obesity and its associated health consequences continue to increase. Fortunately, opportunities exist to improve

health, quality of life, and the cost of care through behaviors like eating healthy and being physically active. Several suggestions are described below.

Coordinate the efforts of the state health agency with other non-traditional partners.

Obesity is a multifaceted disease whose primary risk factors - unhealthy eating and physical inactivity - lead to several opportunities for improvement. There are a number of key stakeholders that can help address this issue. With limited state resources, it makes sense to work across divisions to increase the effectiveness of obesity prevention. State health agencies can consider the following:

Develop an inter-agency working group to address nutrition and physical activity.

Examples of states that have done this include Arkansas, Maine, North Carolina, Pennsylvania, Texas, Virginia, and Washington. Physical inactivity and poor nutrition are risk factors for several chronic diseases including diabetes, heart disease and stroke, cancer, and osteoporosis. At least seven states currently combine the efforts of these disease specific programs within their agency to coordinate the development of policies and link programs around nutrition and physical activity. Other efforts involve working across agencies. Healthy Maine Partnerships was formed to coordinate state and local activities by linking aspects of the Bureau of Health's tobacco, cardiovascular, community health, and school health programs with the Department of Education's school health program. For more information, see www.healthymainepartnerships.org/.

Convene an obesity task force to create and implement a state obesity prevention plan.

Several states collaborate with outside organizations to address obesity prevention. Examples include Michigan, North Carolina, Pennsylvania, Rhode Island, Texas, and Washington. Some partners to consider working with include the state departments of education, transportation, agriculture, and tourism. Once a task force is formed, states can develop and

implement physical activity and nutrition plans to address policy and environmental options. State plans currently exist in Arizona, New Jersey, and Washington. In Washington state, a partnership has been formed representing education, transportation, planning, nutrition, physical activity, agriculture, parks and recreation, economic development, and health care to implement the objectives of the state's nutrition and physical activity plan. Arkansas, California, North Carolina, and Pennsylvania are also collaborating with non-profit organizations on obesity prevention efforts. The Arkansas Center for Health Improvement leads an initiative on behalf of the department of health to measure the body mass index (BMI) of all public school students in the state and send results and education information to parents. For more information, see www.achi.net/current_initiatives/obesity.asp.

Increase knowledge about the benefits of healthy eating and physical activity among individuals and the medical community.

According to the Centers for Disease Control and Prevention (CDC), only about one-quarter of adults and one-fifth of children eat the recommended daily amounts of fruits and vegetables. In addition, more than half of adults and more than a third of students do not participate in the recommended amount of physical activity.^{4,5} While it takes more than education, raising awareness is an important component of getting individuals to realize the importance of healthy eating and physical activity. State health agencies can consider the following:

Develop a public education campaign.

Campaigns can reach large audiences through various forms of media, such as radio, television, newspapers, mailings, and billboards. Following a thorough review of research, The Task Force on Community Preventive Services strongly recommends community-wide campaigns that promote physical activity. In several of the studies reviewed, researchers found that successful campaigns included

support groups, physical activity counseling, screening and education, and environmental or policy changes, such as creating walking trails. Evidence showed that community-wide campaigns can result in a five percent increase in the number of people who are physically active and a 16 percent increase in energy expenditure among the targeted population. The campaigns also proved to be effective among rural and urban communities, and different ethnic and socioeconomic groups.⁶ For more information, see www.thecommunityguide.org.

Target high-risk populations. Overweight and obesity are more common among minority groups and low-income families. In 2002, 72.4 percent Hispanic adults reported being overweight or obese compared to nearly 70 percent of black adults and 63.8 percent of white adults. Similar patterns exist for adolescents. In 2003, 22.3 Hispanic students reported being overweight, compared to 21 percent of black students, and 13.6 percent of white students. In addition, physical activity rates are lowest among black and Hispanic adults and adolescents. Meeting the recommended fruit and vegetable consumption show similar patterns for adults; however, fewer white students reported eating the recommended amounts of fruits and vegetables compared to black and Hispanic students.^{5, 7}

Raise medical community awareness about obesity screening and the need for improved nutrition and physical activity counseling during routine visits. The U.S. Preventive Services Task Force recommends that clinicians screen all adult patients for obesity and offer intensive counseling and behavioral interventions to promote sustained weight loss for obese adults.⁷ For various reasons, many physicians may not provide obesity screening nor counsel their patients about eating healthy and being physically active. In 2002, less than one-third of physician office visits provided or ordered counseling or education services for nutrition, physical activity, or weight reduction.⁸ Yet 65 percent of the U.S. population is overweight or obese.¹ State health agencies can provide useful tools to the medical community to help them counsel their patients on this issue.

For example, North Carolina provides materials to local members of the North Carolina Academy of Family Physicians to assist providers in counseling patients. Rhode Island funded a project to develop an obesity curriculum for pediatric practices to raise issues and incorporate prevention messages during well visits.

Increase delivery of nutritious meals to students and encourage participation in recommended levels of physical activity.

Every school day, more than 53 million students attend 119,000 schools across the U.S. Schools are an effective way of reaching many young people to instill positive behaviors like eating healthy and being physically active. Behaviors learned early in life have the potential of being carried on to adulthood. Likewise, overweight children have the potential to become overweight adults.⁹ In at least 23 states, the state education department works with the state health agency to help schools improve health behaviors, including those related to obesity. State legislators, school districts, and local school boards have also been instrumental in addressing these issues. State health agencies can assist state and local education agencies to:

Ensure that healthy food and beverage choices are available in school vending machines. Schools have taken various approaches with vending machines such as prohibiting them in middle and elementary schools, restricting access to them during mealtimes, placing nutritional standards on foods sold in them, and requiring that they include healthy choices. In 2003, 23 states considered legislation regarding vending machines in schools, and two states passed laws.¹⁰ Some schools have replaced soda with healthy drinks like water, 100 percent fruit juice, and milk. In Philadelphia, New York City, and Los Angeles, schools cannot sell sodas in vending machines and lunchrooms. An increasing number of schools are also including healthier foods in vending machines like baked crackers, yogurt, and low fat cookies as alternatives to foods higher in fat, calories, sugar, and salt. In Chicago, schools are

prohibited from selling soda, gum, candy, and products that have more than 30 percent of calories from fat or more than 40 percent from sugar.

Set nutrition standards for school lunches and any competitive foods^a provided at schools. Schools can set nutrition standards similar to those mentioned for vending machine items. In 2004, the Texas Department of Agriculture established the Public School Nutrition Policy which restricts the availability of items with minimum nutritional value, sets portion size restrictions, restricts the availability of sugar and carbonated drinks in middle schools, and reduces the availability of sugar and carbonated drinks in high schools. In addition, Connecticut requires school boards to make low-fat, nutritious foods and beverages available in schools.

Increase opportunities for fruit and vegetable consumption. In California, the State Superintendent of Public Instruction implemented the School Garden Project Grant Program to help schools create gardens on campus. Students are responsible for planting and maintaining the gardens of fruits and vegetables, from which they can enjoy the produce. States can also consider applying for the USDA's Fruit and Vegetable Program. Through this program schools are provided funding to increase fruit and vegetable consumption in schools by offering them as free snacks to students. During the 2004-2005 school year, eight states and three Indian Reservations participated in this program serving 225 schools. For more information on this program, see www.uffva.org.

Provide training and professional development opportunities for food service workers. Ensuring that food service workers are aware of nutritious and safe food preparation will improve the chances that students will receive healthier meals at school.

^a Foods sold through school stores, as fundraisers, or provided as rewards.

Assist more students in meeting recommended levels of physical activity. The national recommendation for physical activity for children and adolescents calls for 60 minutes of moderate intensity physical activity most days of the week.¹¹ The Task Force on Community Preventive Services recommends implementing programs that increase the length of or activity levels in school based physical education classes.⁶ Louisiana requires 30 minutes of daily activity for students in grades K through six. Connecticut also requires schools to offer daily physical activity to students in grades K through five. Illinois is the only state that requires daily physical education for students in grades K through 12

Make safe routes available for children to walk or bike to school. This includes improving sidewalks, creating crosswalks, and making sure bike lanes and trails are available. The CDC developed a guide entitled "Kids Walk-to-School" to help communities promote walking. In addition to increasing physical activity, these programs offer other community benefits such as decreasing traffic congestion and air pollution. To access this guide, see www.cdc.gov/nccdphp/dnpa/kidswalk/index.htm.

Convene a physical activity and nutrition advisory council. As part of the Child Nutrition and Women, Infants, and Children Reauthorization Act of 2004, all schools who participate in federally funded school meal programs will be required to implement advisory councils by 2006 to guide schools in their nutrition and physical activity standards. Four states (Florida, Mississippi, North Carolina, and Texas) currently require schools to have such councils.

Publicly recognize or reward schools for increasing student physical activity and improving nutrition. The Ohio Department of Health has done this through their Healthy Ohioans Program as has the Utah Department of Health through their Gold Medal Initiative. For more information see www.healthyohioans.org/ and www.hearthighway.org/gms/index.html. In addition, the state of Washington created a program for local boards of education to reward

and recognize school districts that implement policies and procedures to promote proper nutrition and regular physical activity.

Advocate for obesity prevention and treatment coverage for state employees and Medicaid and SCHIP beneficiaries.

The latest data from the National Health and Nutrition Examination Survey shows that 30 percent of adults 20 years and older are obese.¹ This figure has continually increased for more than 25 years. Recently, a study published in the Journal of the American Medical Association found that adults who are overweight or obese in young and middle adulthood have higher medical costs in older age.¹² To help reduce costs and complications associated with obesity late in life, state health agencies can consider the following:

Work with third party payers to add coverage for obesity prevention and treatment. This could include nutrition and physical activity counseling for obese individuals as well as coverage for surgical treatment like Bariatric surgery. Bariatric surgery helps with weight loss by restricting food intake. Medicare has recently decided to pay for this surgery. This will most likely go beyond Medicare as other private insurers will follow Medicare's lead.

Provide lower insurance premiums for healthier individuals. Lower premiums can be considered for beneficiaries who practice healthy behaviors known to reduce the risk of overweight and obesity, including maintaining a healthy weight, healthy blood pressure and blood sugar rates, or who participate in health appraisals. Arkansas recently approved a plan to reduce monthly health insurance premiums for state employees who participate in a health risk appraisal.

Monitor and report the economic impact of obesity on the state to help guide treatment and prevention decisions.

Knowing where the burden lies and what the trend is will help states target the appropriate

populations and determine the efficacy of programs. State health agencies can consider:

Monitor and report state medical spending attributable to obesity. Between 1996 and 1998, medical spending attributable to obesity increased 26 percent for out of pocket payers, 37 percent for private insurance, 39 percent for Medicaid, and 36 percent for Medicare.¹³ Total medical costs associated with obesity were estimated at \$75 billion in 2003. Obese individuals incur higher medical costs than people with a healthy weight. Obese adults 18 to 65 years of age spend 36 percent more in annual medical costs than normal weight adults, half of which is financed through Medicare and Medicaid. At the state level, obesity costs among Medicare recipients ranged from \$15 million to \$1.7 billion, and Medicaid costs ranged from \$23 million to \$3.5 billion.¹⁴ A recent study published in the Journal of the American Medical Association raises concern about middle aged obese adults. Researchers found that Medicare costs for older adults who were severely obese in middle age were nearly double those of people who were not overweight when younger.¹³ Measuring these costs can help formulate better policy decisions.

Enhance data collection and surveillance. State surveys like the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Risk Behavior Surveillance System (YRBSS) can help monitor weight as well as risk factors for obesity. The Maine Bureau of Health uses YRBSS data for the Maine Child and Youth Weight Status Report. They have also included questions about soda consumption and TV viewing in the Youth Tobacco Survey and the Maine Child Health Survey. The Massachusetts Department of Public Health has added nutrition, physical activity, height and weight questions to their YRBSS survey and physical activity and nutrition questions to their Youth Health Survey. North Carolina's Department of Health and Human Services uses a state data system as a basis for its Nutrition and Physical Activity Surveillance System to monitor body mass index (BMI) trends in children ages 2 to 18. This system generates statewide and county-specific prevalence rates. Some states are also

collecting BMI for students. The Tennessee Coordinated School Health Pilot Projects assesses BMI for all K, 2, 4, 6, 8, and 10th graders. The Illinois Department of Public Health collects data related to obesity during mandatory health exams for entrance to public schools. In Arkansas, BMI data is collected for every student enrolled in a public school. The information is sent to parents with an explanation of BMI and if necessary, suggestions for improving BMI through changes in diet and activity.

Partner with employers to promote wellness and provide opportunities for employees to practice healthy behaviors.

According to the Partnership for Prevention, healthier employees translate into company savings through decreases in health costs and reductions in absenteeism.¹⁵ Obese employees have been found to take more sick leave than non-obese employees and are twice as likely to have high-level absenteeism.¹⁶ Furthermore, employees are likely to be more productive if they feel healthy. State health agencies can help businesses and other state agencies (including their own) to:

Offer healthy choices in cafeterias and vending machines. Like schools, businesses can also provide nutritious foods and beverages for employees. Using the U.S. Recommended Dietary Guidelines and the help of state health agency nutritionists, employers can set nutrition standards for foods sold in their establishments.

Provide health education seminars and chronic disease screenings. Examples of these include seminars on healthy eating, or blood pressure and cholesterol screenings. This can be done on site or by providing insurance coverage for these services through healthcare visits. In 2003, 75 percent of large companies provided or were planning to provide disease management programs for their employees, and 76 percent offered health screenings.¹⁸

Offer incentives to be healthy. A survey done by Hewitt Associates of 960 large U.S. employers found that from 1992 to 2002, the use

of employee incentives or disincentives increased from 14 percent to 40 percent.¹⁷ Ideas to consider include reimbursement for nutrition or weight management programs, and discounts to local fitness facilities. Employers can also allow employees opportunities for physical activity during the workday. Thirty-six percent of large companies have fitness facilities on site.¹⁸ When on site facilities are not possible, encourage use of stairs instead of elevators, or map out walking routes near the worksite.

Encourage policymakers and food outlets to organize responses to the obesity epidemic.

Raise awareness and get the support of the governor and other key state policymakers. State health agencies can inform policymakers of the burden of chronic diseases within the state and the need for funding for prevention programs to improve health and reduce medical costs. In some states, governors have been instrumental in moving towards healthier states. Several governors are implementing statewide programs to get residents active and eating healthy and bringing together their cabinet officials to coordinate state strategies. Examples include Arkansas, Colorado, Maine, Michigan, Texas, and Virginia. In May 2004, Arkansas Governor Mike Huckabee launched “Healthy Arkansas” to reduce obesity, tobacco use, and physical inactivity. Motivated by Governor Huckabee’s efforts, Governor Mark Warner initiated “Healthy Virginians” to prevent and reduce obesity and other chronic conditions among state employees, school children, and Medicaid-eligible families. For more information on these programs, see www.arkansas.gov/ha/home.html and www.healthyvirginians.virginia.gov/.

Work with restaurants and grocery stores to provide nutrition information and/or label healthy food choices. The Puerto Rico Department of Health has been successful in getting several fast food restaurants, grocery stores, and hospitals to provide labeling for healthy foods. The North Carolina Department of Health and Human Services trains local organizations to recruit restaurants, worksite

cafeterias, and vending machine suppliers to analyze their menus and label healthy foods. Additionally, in 2003, four states considered legislation that would require fast food and restaurant chains to post nutritional information for consumers.¹⁸

Provide opportunities for residents to be active and purchase healthy food in their communities.

The Task Force on Community Preventive Services found that people become more physically active in response to the creation of or improved access to places for physical activity, combined with distribution of information.⁶ Healthy foods are not always easily accessible or affordable for my residents in urban or rural areas. To address these issues, state health agencies can:

Work with transportation departments and land developers to create environments that encourage physical activity. Ensure that neighborhoods include shopping, restaurants, and parks or other recreational facilities nearby and provide safe trails or sidewalks to reach such places. To determine effectiveness, work with builders to assess the impact that the new environments have on physical activity. For more information on this option, see www.activelivingbydesign.org/ and www.smartgrowth.org.

Provide or seek funding for communities to develop opportunities for residents to be physically active or purchase healthy foods. State health agencies can consider providing funding to be allocated for bike paths, sidewalks, greenways, swimming pools, and parks. Texas has provided funding to communities to develop and improve trails and promote and evaluate their use. Given that supermarkets and fresh fruits and vegetables can be limited in urban and rural areas, states can also consider providing funding to increase venues that provide healthy foods in these communities. Pennsylvania recently authorized funding for the establishment of supermarkets in low income areas, and the city of Oakland has provided

funding for a fresh produce market in a low income community.

Conclusion

As shown throughout this issue brief, many states have taken steps to promote and implement policies to improve physical activity and nutrition and reduce obesity. These actions can serve as examples and resources to other states interested in adopting similar policies. While the action steps described throughout this paper range in size and scope, they all represent concrete steps that states can pursue to reduce obesity. ASTHO can help facilitate connections to assist states to learn more about these practices and approaches.

References

- ¹ Centers for Disease Control and Prevention. "Prevalence of Overweight and Obesity Among Adults: United States, 1999-2002." 2003. Atlanta, GA.
- ² Centers for Disease Control and Prevention. "Prevalence of Overweight Among Children and Adolescents: United States, 1999-2002." 2003. Atlanta, GA.
- ³ Centers for Disease Control and Prevention. "Overweight and Obesity. Factors Contributing to Obesity". Atlanta, GA.
- ⁴ Centers for Disease Control and Prevention. "At A Glance 2004 — Physical Activity and Good Nutrition: Essential Elements to Prevent Chronic Diseases and Obesity." 2004. Atlanta, GA.
- ⁵ Centers for Disease Control and Prevention. "Surveillance Summaries," May 21, 2004. *MMWR* 2004;53 (No. SS-2).
- ⁶ Centers for Disease Control and Prevention. "Increasing Physical Activity: A Report On Recommendations of the Task Force on Community Preventive Services." *MMWR* 2001;50(No. RR-18).
- ⁷ U.S. Preventive Services Task Force. *Screening for Obesity in Adults: Recommendations and Rationale*. November 2003. Agency for Healthcare Research and Quality, Rockville, MD.

⁸ Woodwell DA and Cherry DK. National Ambulatory Medical Care Survey: 2002 Summary. Advance data from vital and health statistics, no. 346. 2004. Hyattsville, Maryland: National Center for Health Statistics.

⁹ Centers for Disease Control and Prevention. "Healthy Youth: An Investment in Our Nation's Future At A Glance." 2004. Atlanta, GA

¹⁰ National Conference of State Legislatures. *Vending Machines in Schools*. Available at www.ncsl.org/programs/health/vending.htm.

¹¹ Centers for Disease Control and Prevention. *Are There Special Recommendations For Young People?* Available at www.cdc.gov/nccdphp/dnpa/physical/recommendations/young.htm.

¹² Daviglius ML et al. "Relation of body mass index in young adulthood and middle age to Medicare expenditures in older age." *JAMA*. 2004;292:2743-2749.

¹³ Finkelstein EA, Fiebelkorn IA, Wang G. "National Medical Spending Attributable To Overweight And Obesity: How Much, And Who's Paying?" *Health Affairs* (web exclusive). May 14, 2003.

¹⁴ Finkelstein EA, Fiebelkorn IC, Wang G. "State-Level Estimates Of Annual Medical Expenditures Attributable To Obesity." *Obesity Research*. 2004;12:18-24.

¹⁵ *Healthy Workforce 2010. An Essential Health Promotion Sourcebook For Employers, Large And Small*. Partnership for Prevention. 2001. Washington, DC.

¹⁶ U.S. Department of Health and Human Services. *Prevention Makes Common "Cents"*. September 2003. Washington, DC.

¹⁷ Hewitt Associates. "Most employers favor health promotion programs to contain health care costs." Press release July 31, 2003.

¹⁸ National Conference of State Legislatures. "Nutrition and Obesity (excerpt from issue brief)." October 2003. Available at www.ncsl.org/programs/health/nutrition.htm.

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