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## Issue Brief

# The Obesity Epidemic in the United States: Causes and Extent, Risks and Solutions

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### Introduction

The health conditions of overweight and obesity are serious problems and rapidly increasing in both scope and severity. In 2000, about 56 percent of adults were overweight and nearly 20 percent were obese.<sup>1</sup> Rates of overweight and obesity had soared by 25 percent and 61 percent, respectively, since 1991. The prevalence of these conditions is also high and increasing rapidly among children and adolescents. Fifteen percent of both 6-to-11 and 12-to-19 year olds are overweight, rates that have doubled and tripled respectively in the past 20 years.<sup>2</sup> Because overweight children and adolescents are more likely to become overweight or obese adults, these rates foreshadow an even greater problem in the future.

Overweight and obesity are problems across all geographic regions and all segments of the population. In 1991, only four states had obesity rates of 15 percent or more. Less than 10 years later, 49 states had obesity rates of 15 percent or more and 22 had rates of 20 percent or greater.<sup>3</sup> Although some disparities exist by age, gender, socioeconomic status, and race/ethnicity, the prevalence of overweight and obesity has increased across all of these groups since 1980.

Among most individuals, overweight and obesity result from the consumption of excess calories, inadequate physical activity, or both. A combination of personal and societal factors influences this imbalance. Strategies to combat this epidemic involve both personal responsibility and action by individual communities and the private and public sectors.<sup>4</sup>

### Consequences and Impacts of Obesity

Overweight and obesity are major contributors to preventable morbidity and premature death. The levels of Body Mass Index (BMI) that distinguish healthy weight from overweight (BMI at or above 25kg/m<sup>2</sup>) and obesity (BMI at or above 30 kg/m<sup>2</sup>) are based on how much the risk of chronic disease and death increases for most populations as weight increases. The effects of dietary factors and sedentary activity patterns account for about 300,000 deaths each year and represent a leading contributor to death, second only to tobacco use.<sup>5</sup> Overweight and obesity are

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closely related to increased risk for coronary heart disease, stroke, hypertension, and type-2 diabetes—diseases that rank among the leading causes of death. Overweight and obesity are also associated with gallbladder disease, osteoarthritis, sleep apnea and respiratory problems, and some types of cancer. The risk of these diseases increases as BMI increases. Evidence has shown that weight loss may help control diseases worsened by obesity, such as diabetes, and decrease the likelihood of developing these diseases.<sup>6</sup> Overweight and obese individuals also often suffer social stigmatization, discrimination, and depression. Children are especially vulnerable.

Table 1  
**Sample Heights and Weights Indicating Overweight and Obesity for Adults**

Height in Feet and Inches	Weight in Pounds	
	Overweight	Obese
5'0"	130–159	160+
5'4"	150–179	180+
5'8"	170–199	200+
6'2"	200–229	230+

Note: Gender and age do not affect the calculation of BMI. Consequently, it does have some limitations as a measure of total body fat.

Source: U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Prevent and Decrease Overweight and Obesity* (Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, Office of the Surgeon General, 2001).

Overweight and obesity and their associated health problems have significant economic consequences for the health care system and the economy. In 1998, \$78 billion, or 9 percent, of total medical spending was attributable to overweight and obesity. The public sector financed nearly half of these expenditures through Medicare and Medicaid.<sup>7</sup> In 2000, the total cost associated with obesity was \$117 billion, of which about \$61 billion was for medical care expenditures and \$56 billion represented wages and earnings lost due to premature death.<sup>8</sup>

Employers also share the economic burden, through direct medical care costs, increased health insurance premiums, and indirect business costs. The health-related costs of overweight and obesity to employers totaled approximately \$13 billion in 1994, or 5 percent of employers' total medical care costs.<sup>9</sup> In addition, employers face obesity-attributable business expenses totaling \$5 billion for paid sick leave, life insurance and disability insurance as well as significant monetary and nonmonetary costs associated with absenteeism, low productivity, and high turnover. Employers have a two-fold interest in the rising rates of overweight and obesity among children and adolescents since young people are

dependants of members of the current workforce and future workers. The problem affects the nation's defense capabilities as well. A National Research Council committee created to examine factors that influence enlistment in the military cited the increasing rate of obesity among adolescents as an issue that could have a negative impact on future military recruiting and performance.<sup>10</sup>

### Policy Options

Strategies aimed at tackling overweight and obesity center on the goal of empowering all Americans to balance healthy diets with regular physical activity to achieve and maintain a healthier weight. The Healthy People 2010 initiative, spearheaded by HHS and coled by thirteen other federal agencies, highlights key areas for improvement in both nutrition and diet and physical activity and fitness, sets achievable targets on a number of measurable objectives, and reports on the nation's progress toward reaching those goals.<sup>11</sup> Since overweight and obesity are much easier to prevent than to treat, many policy options focus on prevention.

### Healthy Diets

There are many ways to encourage Americans to eat more healthfully. Education is one approach, most effective among people who are already motivated to improve their diets. Tools such as the Food Pyramid and dietary guidelines developed by the USDA and HHS help consumers make educated decisions about their food choices. The USDA recently proposed new dietary guidelines that acknowledge the rising rates of overweight and obesity and that most of the population is sedentary. They include specific calorie recommendations based on age, gender, and activity levels.<sup>12</sup> Nutrition experts have criticized the Food Pyramid's emphasis on increasing carbohydrate and reducing fat consumption, arguing that some types of fat have health-promoting effects and that refined carbohydrates can in fact be harmful to one's health. They emphasize weight control through exercising daily and avoiding an excessive total intake of calories, not just fat.<sup>13</sup>

Standardized nutrition labels on packaged foods, created by Congress in 1990 and implemented by FDA and USDA regulations in 1993, also have been an important tool. Acknowledging the labels' success in educating consumers so they can make sound dietary choices, the FDA recently announced a plan to include information on trans fatty acids on nutrition labels by 2006.<sup>14</sup>

In 1995, Americans ate 27 percent of all meals and snacks away from home. These foods provided 34 percent of calories and 38 percent of fat consumed daily. Since the contribution of away-from-home foods to the

diet is increasing, and since their nutritional profile is generally worse than foods prepared at home (more fat and saturated fat, less calcium, fiber and iron), more information about the nutritional content of these foods is important if consumers are to make educated choices.<sup>15</sup> Four states have pending legislation that require fast food and restaurant chains to display nutritional information such as calorie and fat content more prominently.<sup>16</sup> The Healthy People 2010 initiative also suggests increasing nutritional information for food consumed away-from-home.<sup>17</sup>

Some experts propose revamping home economics courses as a way to teach children important nutrition tools such as reading health claims on food labels, understanding nutrition information and serving sizes, and learning how to feed a family on a limited budget while still providing a variety of wholesome foods.<sup>18</sup> The Healthy People 2010 report suggests that nutrition education be taught as part of a comprehensive school health education program, with essential nutrition topics integrated into science and other curricula.<sup>19</sup>

Other policy tools to help improve diets are often not as visible to consumers but can reach people who may not be educated or motivated to make healthier dietary choices themselves. One example is changing the food that is available for purchase and consumption. The USDA has a major impact on the diets of about 62.7 million beneficiaries via the federal food assistance programs, such as Food Stamps, National School Breakfast and Lunch (NSLP), and Women, Infant, and Children (WIC).<sup>20</sup> These programs provide a significant percentage of required calories and nutrients for beneficiaries (low-income children rely on the NSLP for one-third to one-half of their total daily nutrient intake).<sup>21</sup> In response to documented high levels of fat and sodium in school lunches, the USDA's School Meals Initiative for Healthy Children changed the program to bring meals in line with dietary guidelines recommendations in 1994. The USDA continues to cite improving the nutritional profile of foods provided by these programs as an important strategy to decrease rates of overweight and obesity, especially among children.<sup>22</sup>

Experts on nutrition and agricultural policy have recommended relaxing "standards of identity" for food products to allow food manufacturers to increase innovation in the development of low- and nonfat foods. Originally designed to prevent the adulteration of manufactured food products, standards of identity establish the name under which a food product can be marketed and specify the ingredients it must contain. Many of these ingredients are high in fat. The FDA has developed more flexible policies over the last 10 years, such as allowing manufacturers to reduce the fat content of

products and call them "low fat" or "light," as appropriate.<sup>23</sup> The FDA's Consumer Health Information for Better Nutrition Initiative takes a similar approach by encouraging food manufacturers to compete based on health and nutrition consequences of their products, in addition to such nonhealth-related product features as taste and ease of preparation.<sup>24</sup> For example, Kraft Foods recently announced its commitment to focus on product nutrition, marketing practices, consumer information, and advocacy and dialogue to encourage healthy lifestyles and assist consumers in their food choices.<sup>25</sup>

Although the federal government affects the foods available to the public through agricultural policies (price supports, income subsidy programs and restrictions on imports), the net impact of farm programs on fat in the diet has been relatively small and is shrinking as the dairy and beef industries move toward increased market orientation and face reduced government involvement.<sup>26</sup>

Nutrition advocates have suggested a range of policies designed to influence dietary choices, including setting nutritional standards for foods sold outside the official school meal program in vending machines or at school snack bars,<sup>27</sup> taxing high-fat foods, and placing additional restrictions on food advertisements, especially those aimed at children.<sup>28</sup> However, those with an eye towards market-oriented concerns question how decisions will be made about which foods to tax and the extent to which government should be involved in individuals' food choices.<sup>29</sup>

### **Regular Physical Activity**

The major barriers most people face when trying to increase physical activity are time, access to convenient facilities, and safe environments in which to be active.<sup>30</sup> The Healthy People 2010 initiative suggests worksite physical activity and fitness programs as a way to provide large numbers of adults with a safe, convenient place to exercise. There is a growing body of evidence that these programs are cost-effective, may decrease employer health-related costs, and have at least a short-term success in increasing the fitness of participants.<sup>31</sup>

Walking and biking are very popular forms of physical activity. Healthy People 2010 notes that sidewalks and bike lanes, off-road pedestrian or bike routes, and bicycle and pedestrian plans and programs would make these activities safer and more accessible.<sup>32</sup> Adequate funding to maintain, improve and provide adequate security in parks will also assist people looking for safe, clean places to exercise outdoors. Public education and motivation campaigns also play an important role in assisting Americans who are already motivated to increase their physical activity. One example of these

types of programs is the 10,000 Steps a Day program created by Shape Up America, a non-profit organization founded by C. Everett Koop, M.D., Sc.D. and sponsored by a broad-based coalition of industry, health, nutrition, and physical fitness organizations and experts.<sup>33</sup>

For those who aren't motivated, several policy tools are available to provide incentives as well as education. For children, participation in school physical education ensures some amount of physical activity and teaches physical activity strategies and activities that can be continued into adulthood. Illinois is the only state that mandates daily physical education classes in grades K through 12.<sup>34</sup> In 1999, only 29 percent of senior high school students participated daily in school physical education nationally and participation rates were lower at higher grade levels.<sup>35</sup> The goals set by Healthy People 2010 aim to increase these rates substantially.

As purchasers of group health insurance, employers can design benefits packages that include fitness club membership fees and community-based fitness classes. Even as health care costs have risen rapidly, employers are increasingly offering wellness programs, fitness center subsidies, and weight loss programs as part of their health care benefits packages.<sup>36</sup> Employers also are offering financial incentives to encourage employees to modify health behaviors, such as participation in weight control or fitness programs. About 80 percent of companies offer initiatives designed to heighten employee awareness of health behaviors or provide an opportunity or incentive to become involved in a healthy activity.<sup>37</sup> Health plans themselves also can reward members who exercise, lose weight, or quit smoking.

### **Additional Strategies**

The Surgeon General noted that the health care system plays a critical role in preventing and treating overweight and obesity.<sup>38</sup> Counseling by physicians and other health care providers regarding diet, nutrition, weight loss, and regular physical activity can influence patients' dietary choices and physical activity patterns. Clinical guidelines published by the National Institutes of Health's National Heart, Lung, and Blood Institute provide techniques to identify, evaluate, and treat overweight and obesity in adults, but note that health care providers need additional support to identify effective communication strategies and prevention and treatment techniques for adults and children.<sup>39</sup>

Continued research into medical and pharmaceutical treatments for overweight and obesity are important to decrease prevalence rates and increase options available to individuals seeking to lose weight. NIH's clinical guidelines emphasize that there is no easy cure and a combination of healthy eating habits and regular exercise

is currently the most effective way to prevent and treat overweight and obesity among the majority of the American population.

### **State and Local Action**

State and local strategies to address rising rates of overweight and obesity focus on food sold in schools and the levying of additional taxes on some foods and drinks. Illinois, New York, Mississippi, and Texas have moved obesity council/task force legislation through at least one chamber, nine states have introduced legislation to examine the nutritional content of school meals, 23 states are considering legislation on foods sold in schools that compete with school lunch, and several states are considering implementing sales taxes on junk food and soft drinks.<sup>40</sup>

### **Congressional Action**

Federal legislators have demonstrated their interest by introducing over 40 bills and resolutions related to obesity in the 108th Congress. They reflect a wide range of approaches, focusing on such topics as specific related diseases like diabetes, federal agencies responsible for the nation's food supply, public insurance programs such as Medicaid, obesity prevention programs, and specific sub-populations such as Hispanics and Native Americans, who suffer particularly high rates of overweight and obesity.

In November 2003, the Senate Health, Education, Labor, and Pensions Committee unanimously reported out The Improved Nutrition and Physical Activity Act (S. 1172), without a written report. Major provisions of the bill would:

- Provide grants to train health professionals and health profession students how to identify, treat and prevent obesity and how to aid individuals who are overweight or obese
- Provide grants to states, cities, schools, health providers, and community organizations to plan and implement programs to increase physical activity and improve nutrition
- Authorize the National Center for Health Statistics to collect data and report on health disparities, prevention programs, and current research on overweight and obesity, as well as evaluate progress on changing children's behaviors and reducing obesity<sup>41</sup>

No action has been taken on H.R. 716, a companion bill introduced in the House.

In October 2003, The Senate Judiciary Subcommittee on Administrative Oversight and the

Courts held hearings on the Commonsense Consumption Act (S. 1428). The bill would prohibit lawsuits in state or federal court alleging that food manufacturers' products are responsible for obesity or weight gain.

## Conclusion

Overweight and obesity are health problems with significant health and cost consequences. There are a wide variety of policy alternatives to combat the epidemic of overweight and obesity, with roles to be played by individuals, businesses, community groups, nonprofit organizations and federal and state governments. A successful approach is likely to focus on both healthy diets and regular physical activity for all Americans.

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