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National Effort Urgently Needed to Combat Childhood Obesity

Institute of Medicine

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WASHINGTON -- Reversing the rapid rise in obesity among American children and youth will require a multipronged approach by schools, families, communities, industry, and government that would be as comprehensive and ambitious as national anti-smoking efforts, according to a new report from the Institute of Medicine of the National Academies. While no single intervention or group acting alone can stop the epidemic of childhood obesity, the steps recommended by the committee that wrote the report all aim to increase and improve opportunities for children to engage in physical activity and eat a healthy diet.

"We must act now and we must do this as a nation," said Jeffrey Koplan, vice president for academic health affairs, Emory University, Atlanta, and former director of the Centers for Disease Control and Prevention. Koplan chaired the committee of 19 experts in child health, nutrition, fitness, and public health who developed the report in response to a request from Congress for an obesity prevention plan based on sound science and the most promising approaches. "Obesity may be a personal issue, but at the same time, families, communities, and corporations all are adversely affected by obesity and all bear responsibility for changing social norms to better promote healthier lifestyles," Koplan added. "We recognize that several of our recommendations challenge entrenched aspects of American life and business, but if we are not willing to make some fundamental shifts in our attitudes and actions, obesity's toll on our nation's health and well-being will only worsen."

Among specific steps recommended by the report is a call for schools to implement nutritional standards for all foods and beverages served on school grounds, including those from vending machines. The committee also recommended that schools expand opportunities for all students to engage in at least 30 minutes of moderate to vigorous physical activity each day.

The report also calls on the food, beverage, and entertainment industries to voluntarily develop and implement guidelines for advertising and marketing directed at children and youth. Congress should give the Federal Trade Commission the authority to monitor compliance with the guidelines and establish external review boards to prohibit ads that fail to comply. Restaurants should continue to expand their offerings of nutritious foods and beverages, and should provide calorie content and other nutrition information.

Parents must play their part as well, by providing healthy foods in the home and encouraging physical activity by limiting their children's recreational TV, videogame, and computer time to less than two hours a day, among other means.

Community organizations and state and local governments can make a difference by implementing programs that promote nutrition and regular physical activity and by supporting the establishment or revision of zoning ordinances and comprehensive plans to include or enhance sidewalks, bike paths, parks and playgrounds, and other recreational facilities.

The committee did not call for a "junk food tax" or the repeal of agricultural subsidies. However, it did recommend that federal programs such as the Food Stamp Program and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) support pilot programs to increase participants' access to nutritious foods including fruits and vegetables.

Schools' Influence on Healthy Eating, Exercise

New policies are urgently needed to ensure that all foods and beverages available at schools are consistent with nutrition guidelines, the report says. There has been a rapid increase in the availability and marketing of foods such as vending-machine sodas and snacks, and other high-calorie, low-nutrient foods and beverages that compete with those offered through federal school-meal programs, the report says. A 2000 report from the General Accounting Office found that competitive foods were sold in 98 percent of secondary schools, 74 percent of middle schools, and 43 percent of elementary schools. While the U.S. Department of Agriculture requires school meals to follow its Dietary Guidelines for Americans, federal restrictions on competitive foods and beverages are limited to prohibiting the sale of soft drinks and certain types of candy in cafeterias while meals are being served, although 21 states have imposed further restrictions.

Schools should implement new nutritional standards for all foods and beverages served or sold on their grounds. These standards should be developed by USDA in consultation with independent scientific advisers and should include standards for fat and sugar

content. The committee recognized that many schools rely on funds raised by the sale of competitive foods and beverages and the advertising that may accompany these sales. Schools should develop and enact policies to make themselves as free of advertising as possible, the report says. As alternatives, other fund-raising activities, such as walkathons, should be encouraged.

To counter trends of decreasing physical activity among school-age children, schools should provide opportunities for students to engage in at least 30 minutes of moderate to vigorous physical activity daily, the report says. Schools should provide physical education classes that last 30 to 60 minutes each day. But because children have a variety of abilities and interests, schools also should expand opportunities beyond traditional physical education classes to create or enhance intramural sports, activity clubs, walking and biking to school, and other venues and programs.

The committee called on school health services to play a more prominent role in addressing obesity by measuring each student's weight, height, and body mass index (BMI) annually and providing the results to the students and families. Given that many adolescents do not get annual checkups, this information would help families become aware of any weight concerns and track their children's progress.

Healthy Eating and Activity at Home

Although many societal factors affect children's eating and activity habits, parents can exert a profound influence on their children by promoting healthy foods and an active lifestyle from an early age and serving as role models, the report says. Parents can encourage their children to develop a healthy, varied diet by introducing new foods in a persistent but noncoercive fashion. Studies show that repeated exposure is most critical during the early years of life and that it can take five to 10 exposures to a new food before a child will accept it. In addition, parents should consider smaller portion sizes, encourage children to stop eating when they feel full, and avoid using food as a reward.

Parents also should stock their homes with healthy products, particularly fruits and vegetables, to encourage their kids to choose them as snacks. Many concerns have been raised about whether increased consumption of sweetened beverages, such as soft drinks and flavored drinks, is linked to the rise of childhood obesity. By the time they are 14 years old, 52 percent of boys and 32 percent of girls are drinking three or more eightounce servings of soda a day. The links between sweetened beverage consumption and BMI are not definitive, the report notes. However, the committee recommended that children be encouraged to avoid sodas and other high-calorie, low-nutrient beverages because of concerns about excessive consumption of "empty calories" and displacement of beverages containing fewer calories and more nutrients.

Caregivers can encourage children to make physical activity a regular part of their lives by engaging in active play or sports with them, providing equipment and opportunities, and by cheering on children's active pursuits. In addition, parents should decrease their children's inactivity by limiting recreational TV viewing as well as video and computer game playing to less than two hours a day. Studies have shown that the prevalence of obesity is highest among kids who watch several hours of television each day or who have TV sets in their bedrooms. The committee noted that the limit applies only to recreational screen time and does not preclude the use of computers and other media for educational purposes.

Industry Contributions to Addressing Obesity

The food and beverage industries spend \$10 billion to \$12 billion annually marketing directly to children and youth, the committee found. The average child views more than 40,000 TV commercials each year and more than half of TV ads directed at kids promote high-calorie foods and beverages such as candy, snack foods, fast foods, soft drinks, and sweetened breakfast cereals. In addition, the entertainment industry promotes many products that encourage sedentary behaviors.

While research suggests that the cumulative impact of long-term exposure to such advertisements may adversely affect kids' eating habits and activity levels, there is insufficient causal evidence that directly links advertising to childhood obesity and that would support calling for a ban on all food and beverage advertising to children. Instead, the committee recommended an approach to the marketing of foods, beverages, and sedentary leisure pursuits to kids that would be similar to that recommended for controlling alcohol advertising.

The U.S. Department of Health and Human Services should convene a national conference of industry, business, and public health representatives as well as other stakeholders to establish standards for marketing foods, beverages, and sedentary entertainment, and guidelines for evaluating the effectiveness of the standards. The industries would be responsible for implementing the standards and guidelines. Monitoring mechanisms and advertising codes should be used by the industries and external review groups, such as the Children's Advertising Review Unit of the Better Business Bureau, to enforce the guidelines. Furthermore, Congress should empower the Federal Trade Commission with the regulatory authority to monitor compliance, scrutinize marketing practices, and establish external review boards to investigate complaints and to prohibit ads that may be deceptive or that have "particular appeal" and conflict with principles of healthful eating and physical activity.

Given Americans' increasing reliance on prepared foods and restaurants for meals and snacks, food packages and restaurant menus or displays should enhance the nutrition information they provide, to help consumers make informed choices, the report says. The Nutrition Facts panels on food and beverage packages should prominently state the total calorie content for items typically consumed all at once, to dispel confusion created when a package contains more than one serving. The Food and Drug Administration should examine ways to give the food and beverage industry greater flexibility in making truthful, non-misleading nutrient or health claims about their products, such as characterizations of products as high or low in certain nutrients. More restaurants should

expand their offerings to include healthier meal options and provide nutrition information on menus or at the point of sale.

Impact of Communities on Obesity

State and local governments need to work with developers and community groups to find ways to increase opportunities for physical activity in communities and neighborhoods. In many areas, children do not have safe places to bike, walk, play games, and otherwise be physically active because of traffic, lack of land, or high crime rates. Also, local communities should encourage access to healthful foods. These issues are often of particular concern for subgroups of the population at high risk for obesity, such as low-income families who live in areas without recreational facilities or ready access to grocery stores that stock affordable fresh fruits and vegetables.

Community groups should advocate for changes to zoning and capital improvement policies to give higher priority to sidewalks, bike paths, parks and playgrounds, recreational centers, and other venues and opportunities for physical activities. Local governments should revise comprehensive plans and zoning ordinances to increase access to venues for activity and develop programs to encourage walking and bicycling to school.

Involvement of Health Professionals

Health insurers and health plans should designate childhood obesity prevention as a priority health issue and should include screening and obesity prevention services in routine clinical practice, the report says. While insurers have largely focused on the treatment of obesity, the high cost of this treatment provides insurers with an incentive to prevent the condition.

Pediatricians, family physicians, nurses, and other health care providers should actively discuss their patients' weight and BMI with parents and with the children themselves in a sensitive and age-appropriate manner. The report also recommends that parents seek information about their children's weight status from their health care providers. However, conversations about weight at the doctor's office can be difficult because of concerns about stigmatization and reluctance to recognize a challenging problem. Health professionals' training programs and professional organizations should require that knowledge and skills related to obesity prevention be incorporated into their curricula and examinations so that health professionals have the awareness and skills to tackle these issues.

The study was sponsored by the U.S. Department of Health and Human Services' Office of Disease Prevention and Health Promotion; Centers for Disease Control and Prevention; National Institute of Diabetes and Digestive and Kidney Diseases; National Institute of Child Health and Human Development; National Heart, Lung, and Blood Institute; the National Institutes of Health's Division of Nutrition Research Coordination; and the Robert Wood Johnson Foundation. The Institute of Medicine is a private,

nonprofit institution that provides health policy advice under a congressional charter granted to the National Academy of Sciences. A committee roster follows.

Pre-publication copies of **Preventing Childhood Obesity: Health in the Balance** are available from the National Academies Press; tel. 202-334-3313 or 1-800-624-6242 or on the Internet at http://www.nap.edu. The cost of the report is \$52.00 (prepaid) plus shipping charges of \$4.50 for the first copy and \$.95 for each additional copy. Reporters may obtain a copy from the Office of News and Public Information (contacts listed above).

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