

The Surgeon General's
Call To Action
To Prevent and Decrease
Overweight and Obesity
2001



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In Memory of

PAUL AMBROSE, M.D., M.P.H.

(December 26, 1968–September 11, 2001)

Office of Disease Prevention and Health Promotion,
U.S. Department of Health and Human Services

As senior editor of this *Call To Action*, Dr. Ambrose's
commitment to promoting public health and preventing
disease was a critical force in the development of
this document.

A Call To Action To Prevent and Decrease Overweight and Obesity

PRINCIPLES:

Overweight and obesity have reached nationwide epidemic proportions. Both the prevention and treatment of overweight and obesity and their associated health problems are important public health goals. To achieve these goals, *The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity* is committed to five overarching principles:

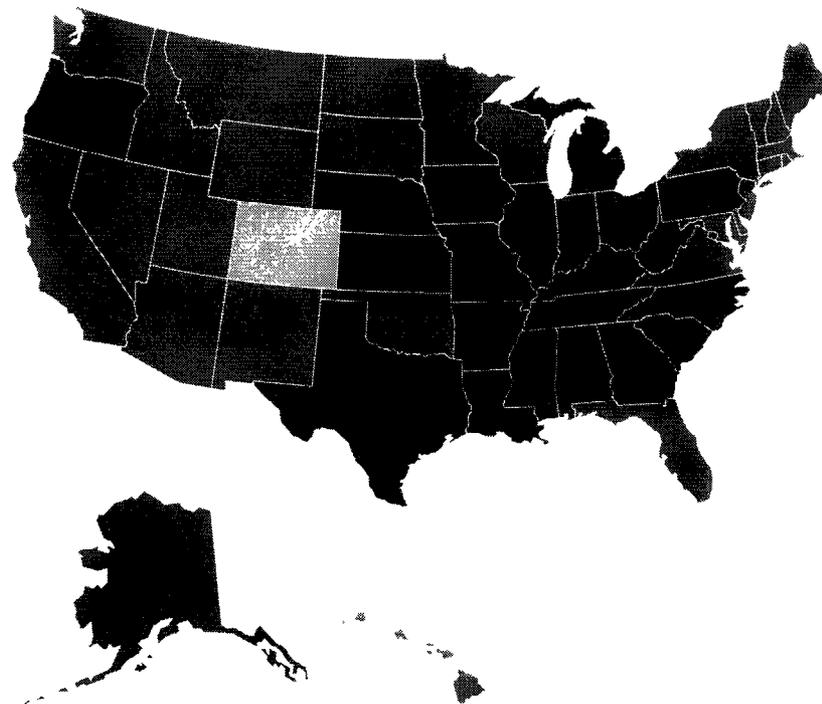
- Promote the recognition of overweight and obesity as major public health problems.
- Assist Americans in balancing healthful eating with regular physical activity to achieve and maintain a healthy or healthier body weight.
- Identify effective and culturally appropriate interventions to prevent and treat overweight and obesity.
- Encourage environmental changes that help prevent overweight and obesity.
- Develop and enhance public-private partnerships to help implement this vision.

THE SURFACING OF AN EPIDEMIC:

PREVALENCE OF OBESITY* AMONG U.S. ADULTS

1991

2000



No Data <10% 10%-14% 15%-19% ≥20%

No Data <10% 10%-14% 15%-19% ≥20%

These two figures demonstrate the increasing prevalence of obesity among U.S. adults*

**Approximately 30 pounds overweight*

Source: Behavioral Risk Factor Surveillance System (BRFSS)

Note: BRFSS uses self-reported height and weight to calculate obesity, self-reported data may underestimate obesity prevalence.

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Message From the Secretary

U.S. Department of Health and Human Services

The 20th century saw remarkable and unprecedented improvements in the lives of the people of our country. We saw the infant mortality rate plummet and life expectancy increase by 30 years. Deaths from infectious diseases dropped tremendously, and improvements in medical care allowed many individuals with chronic disease to lead longer, fuller lives. Yet despite these and other successes, complex new health challenges continue to confront us.

Overweight and obesity are among the most important of these new health challenges. Our modern environment has allowed these conditions to increase at alarming rates and become highly pressing health problems for our Nation. At the same time, by confronting these conditions, we have tremendous opportunities to prevent the unnecessary disease and disability that they portend for our future.

As we move to acknowledge and understand these conditions, it is important to remember that they are as sensitive for each of us as they are challenging and important for our country's health. This is truly the time for a *Call To Action*, because each one of us as an individual must understand that we are called upon to act, just as our institutions are called upon to consider how they can help confront this new epidemic.

This Surgeon General's *Call To Action* represents an opportunity for individuals to make healthy lifestyle choices for themselves and their families. It encourages health care providers to help individuals prevent and treat these conditions. At a broader level, it prompts all communities to make changes that promote healthful eating and adequate physical activity. It calls for scientists to pursue new research. Above all, it calls upon individuals, families, communities, schools, workplaces, organizations, and the media to work together to build solutions that will bring better health to everyone in this country.

I wholeheartedly support *The Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity*; and I urge all of us to work together to achieve its ambitious and essential vision.

Foreword From the Surgeon General U.S. Department of Health and Human Services

Like many across the Nation, the Department of Health and Human Services was reminded how small the world is when, on September 11, we lost one of our own, Paul Ambrose, M.D., M.P.H. He had just finished the final edits on the *Call To Action* and was on his way to a conference in California on childhood obesity when tragedy struck. Paul was a man of great compassion and heart, committed to helping people in rural America obtain better health care and improving prevention measures for all Americans. He cared deeply for the issues he worked on but even more for the people affected. While we will miss Paul's energy and dedication, we will miss his humanity even more.



Tommy G. Thompson

Overweight and obesity may not be infectious diseases, but they have reached epidemic proportions in the United States. Overweight and obesity are increasing in both genders and among all population groups. In 1999, an estimated 61 percent of U.S. adults were overweight or obese, and 13 percent of children and adolescents were overweight. Today there are nearly twice as many overweight children and almost three times as many overweight adolescents as there were in 1980. We already are seeing tragic results from these trends. Approximately 300,000 deaths a year in this country are currently associated with overweight and obesity. Left unabated, overweight and obesity may soon cause as much preventable disease and death as cigarette smoking.

Overweight and obesity have been grouped as one of the Leading Health Indicators in *Healthy People 2010*, the Nation's health objectives for the first decade of the 21st century. The Leading Health Indicators reflect the major public health concerns and opportunities in the United States. While we have made dramatic progress over the last few decades in achieving so many of our health goals, the statistics on overweight and obesity have steadily headed in the wrong direction. If this situation is not reversed, it could wipe out the gains we have made in areas such as heart disease, diabetes, several forms of cancer, and other chronic health problems. Unfortunately, excessive weight for height is a risk factor for all of these conditions.

Many people believe that dealing with overweight and obesity is a personal responsibility. To some degree they are right, but it is also a community responsibility. When there are no safe, accessible places for children to play or adults to walk, jog, or ride a bike, that is a community responsibility. When school lunchrooms or office cafeterias do not provide healthy and appealing food choices, that is a community responsibility. When new or expectant mothers are not educated

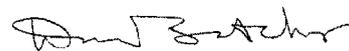
about the benefits of breastfeeding, that is a community responsibility. When we do not require daily physical education in our schools, that is also a community responsibility. There is much that we can and should do together.

Taking action to address overweight and obesity will have profound effects on increasing the quality and years of healthy life and on eliminating health disparities in the United States. With this outcome in mind, I asked the Office of Disease Prevention and Health Promotion, along with other agencies in the Department of Health and Human Services, to assist me in developing this *Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity*. Our ultimate goal is to set priorities and establish strategies and actions to reduce overweight and obesity. This process begins with our attitudes about overweight and obesity. Recognition of the epidemic of overweight and obesity is relatively recent, and there remain enormous challenges and opportunities in finding solutions to this public health crisis. Overweight and obesity must be approached as preventable and treatable problems with realistic and exciting opportunities to improve health and save lives. The challenge is to create a multifaceted public health approach capable of delivering long-term reductions in the prevalence of overweight and obesity. This approach should focus on health rather than appearance and empower both individuals and communities to address barriers, reduce stigmatization, and move forward in addressing overweight and obesity in a positive and proactive fashion.

Several events have drawn attention to overweight and obesity as public health problems. In 1998, the National Heart, Lung, and Blood Institute in cooperation with the National Institute of Diabetes and Digestive and Kidney Diseases of the National Institutes of Health released the *Clinical Guidelines on the Identification, Evaluation, and Treatment of Obesity in Adults: Evidence Report*. This report was the result of a thorough scientific review of the evidence related to the risks and treatment of overweight and obesity, and it provided evidence-based treatment guidelines for health care providers. In early 2000, the release of *Healthy People 2010* identified overweight and obesity as major public health problems and set national objectives for reduction in their prevalence. The National Nutrition Summit in May 2000 illuminated the impact of dietary and physical activity habits on

achieving a healthy body weight and began a national dialogue on strategies for the prevention of overweight and obesity. Finally, a Surgeon General's Listening Session, held in late 2000, and a related public comment period, generated many useful ideas for prevention and treatment strategies and helped forge and reinforce an important coalition of stakeholders. Participants in these events considered many prevention and treatment strategies, including such national priorities as ensuring daily physical education in schools, increasing research on the behavioral and environmental causes of obesity, and promoting breastfeeding.

These activities are just a beginning, however. Effective action requires the close cooperation and collaboration of a variety of organizations and individuals. This *Call To Action* serves to recruit your talent and inspiration in developing national actions to promote healthy eating habits and adequate physical activity, beginning in childhood and continuing across the lifespan. I applaud your interest in this important public health challenge.



David Satcher, M.D., Ph.D.

SECTION I: Overweight and Obesity as Public Health Problems in America

This Surgeon General's Call To Action To Prevent and Decrease Overweight and Obesity seeks to engage leaders from diverse groups in addressing a public health issue that is among the most burdensome faced by the Nation: the health consequences of overweight and obesity. This burden manifests itself in premature death and disability, in health care costs, in lost productivity, and in social stigmatization. The burden is not trivial. Studies show that the risk of death rises with increasing weight. Even moderate weight excess (10 to 20 pounds for a person of average height) increases the risk of death, particularly among adults aged 30 to 64 years.¹

Overweight and obesity are caused by many factors. For each individual, body weight is determined by a combination of genetic, metabolic, behavioral, environmental, cultural, and socioeconomic influences. Behavioral and environmental factors are large contributors to overweight and obesity and provide the greatest opportunity for actions and interventions designed for prevention and treatment.

For the vast majority of individuals, overweight and obesity result from excess calorie consumption and/or inadequate physical activity. Unhealthy dietary habits and sedentary behavior together account for approximately 300,000 deaths every year.^{2,3} Thus, a healthy diet and regular physical activity, consistent with the *Dietary Guidelines for Americans*, should be promoted as the cornerstone of any prevention or treatment effort.^{4,5} According to the U.S. Department of Agriculture's 1994-1996 Continuing Survey of Food Intakes by Individuals, very few Americans meet the majority of the Food Guide Pyramid recommendations. Only 3 percent of all individuals meet four of the five recommendations for the intake of grains, fruits, vegetables, dairy products, and meats.⁶ Much work needs to be done to ensure the nutrient adequacy of our diets while at the same time avoiding excess calories. Dietary adequacy and moderation in energy consumption are both important for maintaining or achieving a healthy weight and for overall health.

Many adult Americans have not been meeting Federal physical activity recommendations to accumulate at least 30 minutes of moderate physical activity most days of the week.⁴⁷ In 1997, less than one-third of adults engaged in the recommended amount of physical activity, and 40 percent of adults engaged in no leisure-time physical activity.⁴⁸ Although nearly 65 percent of adolescents reported participating in vigorous activity for 20 minutes or more on 3 or more out of 7 days, national data are not available to assess whether children and adolescents meet the Federal recommendations to accumulate at least 60 minutes of moderate physical activity most days of the week.⁴⁸ Many experts also believe that physical inactivity is an important part of the energy imbalance responsible for the increasing prevalence of overweight and obesity. Our society has become very sedentary; for example, in 1999, 43 percent of students in grades 9 through 12 viewed television more than 2 hours per day.⁴⁸

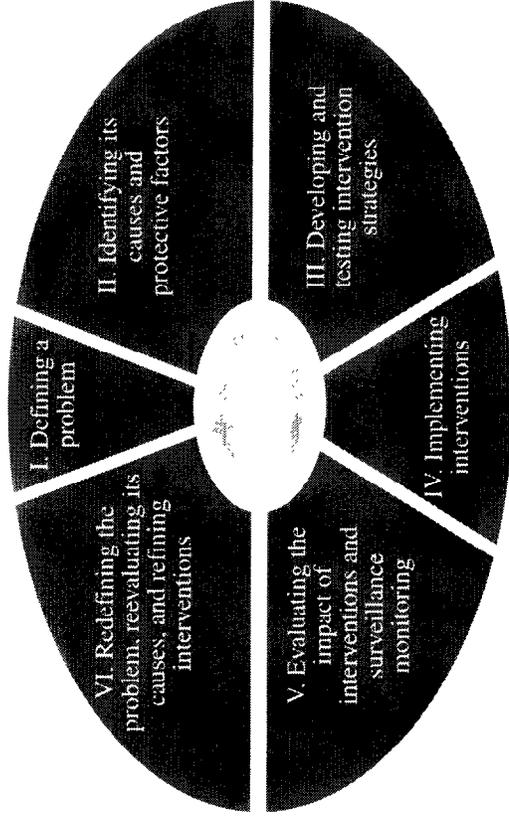
Both dietary intake and physical activity are difficult to measure on either an individual or a population level. More research is clearly necessary to fully understand the specific etiology of this crisis. However, these statistics and the increasing prevalence of overweight and obesity highlight the need to engage all Americans as we move forward to ensure the quality and accessibility of prevention and treatment programs.

PUBLIC HEALTH AND THE SURGEON GENERAL

Through cooperative action, public health programs have successfully prevented the spread of infectious disease, protected against environmental hazards, reduced accidents and injuries, responded to disasters, worked toward ensuring the quality and accessibility of health services, and promoted healthy behaviors.⁹ Over the past 100 years, thanks largely to public health efforts, the life expectancy of Americans has increased by approximately 50 percent.¹⁰

Public health success has traditionally come from the reduction in the incidence of infectious diseases through improved sanitation and nutrition, cleaner air and water, and national vaccination programs. As the threats to America's health have shifted, so too have public health efforts. In recent years, public health efforts have successfully navigated new frontiers such as violence prevention, tobacco cessation, and mental health. Public health officials remain poised to address new health challenges through the collaborative processes of scientific research, policy development, and community mobilization.

The public health approach involves a circle of activities:



MEASURING OVERWEIGHT AND OBESITY

The first challenge in addressing overweight and obesity lies in adopting a common public health measure of these conditions. An expert panel, convened by the National Institutes of Health (NIH) in 1998, has utilized Body Mass Index (BMI) for defining overweight and obesity.¹¹ BMI is a practical measure that requires only two things: accurate measures of an individual's weight and height (figure 1). BMI is a measure of weight in relation to height. BMI is calculated as weight in pounds divided by the square of the height in inches, multiplied by 703. Alternatively, BMI can be calculated as weight in kilograms divided by the square of the height in meters.

Studies have shown that BMI is significantly correlated with total body fat content for the majority of individuals.¹¹ BMI has some limitations, in that it can overestimate body fat in persons who are very muscular, and it can underestimate body fat in persons who have lost muscle mass, such as many elderly. Many organizations, including over 50 scientific and medical organizations that have endorsed the NIH *Clinical Guidelines*, support the use of a BMI of 30 kg/m² or greater to identify obesity in adults and a BMI between 25 kg/m² and 29.9 kg/m² to identify overweight in adults.^{11,13} These definitions are based on evidence that suggests health risks are greater at or above a BMI of 25 kg/m² compared to those at a BMI below that level.¹² The risk of death, although modest, until a BMI of 30 kg/m² is reached, increases with an increasing Body Mass Index.¹

FIGURE 1: ADULT BODY MASS INDEX

$$BMI = \left\{ \frac{\text{WEIGHT (pounds)}}{\text{HEIGHT (inches)}^2} \right\} \times 703$$

