

# Preventing Chronic Diseases: Investing Wisely in Health

## Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

### The Reality

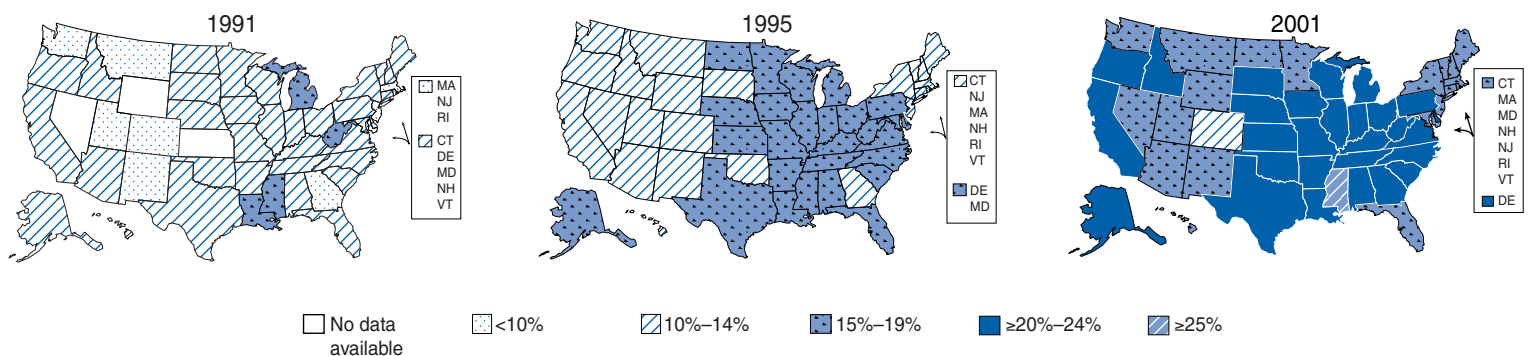
- Obesity in the United States is truly epidemic. In the last 10 years, obesity rates have increased by more than 60% among adults. Approximately 45 million adults, or 25% of the adult population, is obese.
- Since 1980, obesity rates have doubled among children and tripled among adolescents. Almost 15% of our children and adolescents—about 8 million young people—are overweight.
- Only about one-fourth of U.S. adults eat the recommended five or more servings of fruits and vegetables each day.
- More than 60% of young people eat too much fat, and less than 20% eat the recommended five or more servings of fruits and vegetables each day.
- Despite the proven benefits of physical activity, more than 60% of American adults do not get enough physical activity to provide health benefits.
- More than a third of young people in grades 9–12 do not regularly engage in vigorous physical activity.

- Unhealthy diet and physical inactivity play an important role in many chronic diseases and conditions, including type-2 diabetes, hypertension, heart disease, stroke, breast cancer, colon cancer, gallbladder disease, and arthritis.

### The Cost of Obesity and Chronic Diseases

- Among children and adolescents, annual hospital costs related to obesity were \$127 million during 1997–1999 (in 2001 constant U.S. dollars), up from \$35 million during 1979–1981.
- In 2000, the total cost of obesity in the United States was estimated to be \$117 billion, of which \$61 billion was for direct medical costs and \$56 billion was for indirect costs.
- Among U.S. adults in 1996, \$31 billion of treatment costs (in year 2000 dollars)—17% of direct medical costs—for cardiovascular disease was related to overweight and obesity.

Percentage of Adults Who Report Being Obese,\* by State



\*Body mass index  $\geq 30$  or about 30 pounds overweight for a 5'4" person.  
Source: CDC, Behavioral Risk Factor Surveillance System.



## State Programs in Action: Missouri

### Bootheel Heart Health Project



Five of six counties in the southeast corner—the “Bootheel”—of Missouri have rates of heart disease and stroke significantly higher than in the rest of the state. This region of the state has high poverty and low medical coverage and contains Missouri’s largest rural African American population. In 1998, no leisure-time physical activity was reported by 33% of Missouri blacks, 27% of whites, and 22% of Hispanics.

With CDC support, the St. Louis University Prevention Research Center worked with the Missouri Department of Health to develop and evaluate a physical activity program in rural communities in the Bootheel and Ozark areas of Missouri. Through this program, community coalitions formed walking clubs, built walking trails, started exercise classes in community churches, and organized special events to promote physical activity. The program evaluation found that 42% of community residents used walking trails established through the program and that almost 60% of trail users reported increasing their physical activity. The evaluation also found that women and people with lower educational levels—groups at high risk for physical inactivity—may be especially responsive to walking trails. This project has served as a living laboratory for demonstrating the effectiveness of community-based prevention efforts.

# How Good Nutrition, Physical Activity, and Weight Loss Save Money

## Nutrition

- Each year, over \$33 billion in medical costs and \$9 billion in lost productivity due to heart disease, cancer, stroke, and diabetes are attributed to diet.

## Physical activity

- In 2000, health care costs associated with physical inactivity were more than \$76 billion.
- If 10% of adults began a regular walking program, \$5.6 billion in heart disease costs could be saved.
- Every dollar spent on physical activity programs for older adults with hip fractures results in a \$4.50 return.

## Weight loss

- A 10% weight loss will reduce an overweight person’s lifetime medical costs by \$2,200–\$5,300.
- The lifetime medical costs of five diseases and conditions (hypertension, diabetes, heart disease, stroke, and high cholesterol) among moderately obese people are \$10,000 higher than among people at a healthy weight.

## Promising Approaches for Preventing Obesity

- Children who are ever breast-fed are 15%–25% less likely to become overweight, and those who are breast-fed for 6 months or more are 20%–40% less likely.
- Regular physical activity is a key part of any weight loss effort. Developing multiuse trails can directly affect the obesity epidemic by giving more people access to places for physical activity.
- Reducing the time spent watching television appears to be effective for treating and preventing obesity.
- Increased physical activity for overweight patients reduces many of the illnesses associated with obesity, helps maintain weight loss, and helps prevent weight gain.

## Hope for the Future

By improving eating habits and increasing physical activity, we can reduce obesity and other chronic diseases. Increasing opportunities for healthy eating, such as making fruits and vegetables more available, will enable people to eat better. Increasing opportunities for physical activity, including multiuse trails, will help more people be active.

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