

FACTS

With a Very Heavy Heart

Obesity and Cardiovascular Disease (CVD)

OVERVIEW

Once primarily seen as a behavioral and environmental problem, obesity is now viewed as a complex disorder and a major health risk factor linked to increased cardiovascular disease (CVD), stroke, cancer, hypertension, diabetes, and early death.^{1,2}

More than just a contributing factor, obesity by itself increases the risk of heart disease. Framingham Heart Study researchers found that obese individuals had an incredible 104% increase in the risk of developing heart failure compared to non-overweight individuals.³ Those with abdominal obesity are at particularly high risk for CVD, diabetes, and all-cause mortality.⁴ An obese person who has a stroke has longer hospital stays and a lower chance of being discharged home.⁵

OBESITY AS AN EPIDEMIC

The U.S. is now in the grips of a full-blown obesity epidemic. More than 35% of U.S. adults are obese.⁶ In 2011, the adult obesity rate exceeded 30% in 12 states; 27 more states had adult obesity rates greater than 25%.⁷ On its current trajectory, it is estimated that obesity rates for adults could reach or exceed 44% in every state by 2030.⁷

These rates bode poorly for health outcomes. Persons with a body mass index (BMI) of >30 have a reduced life expectancy of 2–4 years less than compared with healthy weight adults; adults with severe obesity (BMI >40) lose 8-10 years of life expectancy, comparable to the effects of smoking.⁸ Of greatest concern, the obesity epidemic is spreading to our children at an alarming rate – 31.8% of children and adolescents ages 2-19 are considered overweight or obese.⁹ One study has shown that obese children's arteries resemble those of a middle-aged adult.¹⁰

These children are being sentenced to a future of CVD and disability, and premature morbidity. Obese adolescents have a 16-fold increased risk of becoming severely obese adults,¹¹ and researchers project the current adolescent obesity prevalence in the U.S. will result in 1.5 million life-years lost.¹²

THE COSTS OF OBESITY

Beyond the toll in human suffering and death, obesity and its associated diseases have a steep price tag. Obesity is a significant factor driving health care spending. One study estimates the medical costs attributable to obesity in the U.S. in 2008 reached \$147 billion per year – almost 10% of all medical spending.¹³ If current trends continue, the costs of obesity could reach 16% to 18% of US health expenditures by 2030.¹⁴ Among adolescents, the total excess cost related to the current prevalence of adolescent overweight and obesity is estimated to be \$254 billion – \$208 billion in lost productivity and \$46 billion in direct medical costs.¹⁵

Obesity imposes a significant economic burden on both public and private payers: the per capita percentage increase in annual costs attributable to obesity is estimated to be 36% for Medicare (\$1723 in additional spending per beneficiary); 47% for Medicaid (\$1021); and 58% for private payers (\$1140).¹³ A 2012 study estimates that obesity increases annual employer medical spending by 27.4%.¹⁶ The number of children who take medication for chronic diseases has jumped dramatically since 2002, which is another contributing factor to rising health care costs.^{17,18} Left alone, the situation will only worsen with America's public health, economy and productivity suffering.

WHY ARE AMERICANS OBESE?

AMERICANS OVEREAT AND ARE SEDENTARY

- Data from the U.S. Department of Agriculture (USDA) indicate that between 1970 and 2010, the amount of calories consumed per day increased from 2,169 to 2,614. Of the calorie increase, 42% were due to added fats and oils. Annual high fructose corn sweetener, one type of added sugar in the food supply, increased to 28.7 pounds per capita, up from .3 pounds per capita in 1970.¹⁹
- According to a 2012 analysis, sedentary behavior is associated with a 147% increase in the risk of CVD, 90% increase in the risk of CVD mortality, and a 49% increase in the risk of all-cause mortality.²⁰
- Experts estimate \$5.6 billion in heart disease costs could be saved if one-tenth of Americans began a regular walking program.²¹

CHILDREN ARE NOT LEARNING HOW TO MAKE HEALTHY CHOICES

- Only 6% of elementary schools, 21% of middle schools, and 36% of high schools require health education in 14 recommended health topics.²²
- Children are not eating enough fruits and vegetables. Only of 7-8% of children consume recommended daily servings of fruit, and less than 2% meet daily vegetable intake.⁹
- Children are replacing milk and 100% fruit juice with sugar-sweetened beverages (SSBs) that have poor nutritional value: a 2010 CDC survey found that most kids drank one or more SSBs each day: regular soda (25%), sports drink (16%) or other SSBs (17%).²³
- The U.S. Department of Health and Human Services recommends that young people ages 6–17 years participate in at least 60 minutes of physical activity daily, but in 2011, only 28.7% percent of high school students met this standard, and 14% had not participated in *any* physical activity during the seven days prior to the survey.²⁴ Only 36% of US children engage in physical activity considered ideal for cardiovascular health.⁹
- Physically active transport to and from school has declined: in 2009, 12.7% of K–8 students usually walked or biked to school, compared with 47.7% in 1969.²⁵
- Only 3.8% of elementary, 7.9% of middle, and 2.1% of high schools provide daily physical education or its equivalent for the entire school year; more than one-fifth of schools do not require any physical education at all.²⁶
- Simple, small changes in behavior such as walking an additional 2000 steps and eliminating 100 calories per day from the diet may lead to lower BMI.²⁷

WORKPLACE WELLNESS HELPS

Employer spending on health promotion and chronic disease prevention is a good investment. A recent study indicates that measured worksite wellness programs decreased total medical costs of workers by 18% over two years.^{28,29} In addition, the investment results in reduced sick leave, absenteeism, health care costs, and workers' compensation and disability management claims costs.

THE ASSOCIATION ADVOCATES

The American Heart Association has set an ambitious goal for 2020 we want to improve the overall cardiovascular health of the U.S. population and reduce death and disability from CVD and stroke by 20%.³⁰ To help achieve that goal, the American Heart Association advocates for policies that increases physical activity and improves the health status of all Americans, including:

- Work to pass Fitness Integrated with Teaching (FIT) Kids Act to increase quality and quantity physical and health education in schools.

- Protect the Prevention and Public Health Fund, maintaining the Fund at funding levels designated through the Affordable Care Act.
- Support and protect the Million Hearts Initiative, a program under the Fund to prevent one million heart attacks and stroke in five years.
- Implement robust nutrition standards for meals and other foods available in the school environment.
- Increase the implementation of comprehensive worksite wellness programs.
- Promote demonstration projects that test new strategies for reducing overweight and obesity among children and adults.
- Work to pass legislation that requires the Physical Activity Guidelines for Americans be regularly updated every ten years with a five year review.

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⁷ Trust for America's Health/Robert Wood Johnson Foundation. *F as in Fat: How Obesity Policies Are Failing in America*, 2012.

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