

CHILDHOOD OBESITY IN THE UNITED STATES

Background

Childhood obesity is a serious U.S. public health problem. Today, nearly a third of youths are overweight or obese. That's more than 23 million children and teenagers.^{1, 2}

The term "obese" describes children and adolescents who have a body mass index (BMI) at or above the 95th percentile for their gender and age, while "overweight" describes those with a BMI at or above the 85th but below the 95th percentile.

Childhood obesity trends

Healthy People 2010 called for a reduction in the proportion of overweight and obese children and adolescents to 5%, but has failed to move toward this goal.³ Since 1980, the obesity rate has more than doubled (from 5.0% to 12.4%) among children aged 2-5 years, almost tripled (6.5% to 17%) among children aged 6-11, and more than tripled (from 5.0% to 17.6%) in adolescents aged 12-19 years.⁴

Health consequences

Preventing obesity during childhood is critical, because habits formed during youth frequently carry into adulthood; an obese 4-year-old has a 20% chance of becoming obese as an adult, and an obese teenager has up to an 80% chance of becoming an obese adult.⁵ If this epidemic is not reversed, we are in danger of raising the first generation of American children who will live sicker and die younger than the generations before them.⁶

- Overweight and obesity are associated with a 52% and 60% increased risk, respectively, for new diagnoses of asthma among children and adolescents.⁷
- Obese children are at a higher risk for psychosocial problems, fatty liver, orthopedic-related problems and sleep apnea.⁸
- Although traditionally viewed as an "adult" illness, the rise in childhood overweight and obesity has corresponded to an increasing proportion of youths with type 2 diabetes, particularly among adolescent minority populations.^{9, 10}
- Obese children and teens have been found to have risk factors for cardiovascular disease (CVD), including high cholesterol levels, high blood pressure and abnormal glucose tolerance.¹¹ In a population-based sample of 5- to 17-year-olds, 7% of obese children had at least one CVD risk factor while 39% had two or more CVD risk factors.¹²

Causes

Too many children have an "energy imbalance." They're taking in more calories than they burn.¹³ Myriad factors may fuel this imbalance, such as:

- Overweight adolescents aged 12-17 years consume between 700 to 1,000 more calories per day than what's needed for the growth, physical activity and body function of a healthy weight teen. Over the course of 10 years, this excess can pack on 57 unnecessary pounds.¹³
- Children and adolescents aged 8-18 years spend, on average, more than six hours per day watching television, playing video games and using other types of media.¹⁴
- In 2001, 16% of school-aged children walked or biked to school as compared to 42% in 1969. Distance, weather, fear of crimes against children and inadequate walking paths all contribute to this difference.¹⁵
- Only 2.1% of high schools, 7.9% of middle schools and 3.8% of elementary schools provide daily physical education or its equivalent (225 minutes per week for middle and high schools and 150 minutes per week for elementary school).¹⁶

Racial/Ethnic disparities

The prevalence of obesity is rising faster among blacks and Hispanic children, according to an analysis of data from the National Longitudinal Survey of Youth. Over 10 years, obesity increased more than 120% among blacks and Hispanics while increasing by more than 50% in whites.¹⁷

Data taken from NHANES 2003-2006 showed that:

- Non-Hispanic black and Mexican American girls were more likely to have a high BMI for age than non-Hispanic white girls.² Almost 28% of non-Hispanic black teenage girls aged 12-19 and almost 20% of Mexican American teenage girls were at or above the 95th percentile of the 2000 BMI-for-age growth charts compared with 14.5% of non-Hispanic white girls.²

- Among boys, Mexican Americans were significantly more likely to have high BMI for age than non-Hispanic white boys. Non-Hispanic black boys, however, were only more likely than non-Hispanic white boys to have high BMI for age at the highest BMI-for-age level (BMI for age \geq 97th percentile).²

Black and Hispanic children are significantly less likely than white children to get involved in organized physical activity outside of school. Among children aged 9-13 years, 24.1% of blacks and 25.9% of Hispanics are involved in organized physical activity outside of school compared with 46.6% of whites.¹⁸

Economic toll

Childhood obesity alone is estimated to cost \$14 billion annually in direct health expenses, and children covered by Medicaid are nearly six times more likely to be treated for a diagnosis of obesity than children covered by private insurance.¹⁹

While there are many causes of school absenteeism, a study analyzing the attendance patterns of fourth-, fifth- and sixth-graders in Philadelphia found obese children are absent significantly more than average-weight children.²⁰ Such absenteeism hurts students' learning, causes parents or guardians to miss work, and is costly to school systems. Among the study population, obese children missed an average of 12.2 days of school per year, while average-weight children missed 10.1 days, on average.²⁰

References

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