



## Childhood Obesity The Preventable Threat to America's Youth

The majority of American youth are sedentary and do not eat well. The resulting poor nutrition and lack of physical activity has created an epidemic of childhood obesity that is preventable, yet shows no sign of decreasing. Action for Healthy Kids helps schools make changes that will make their students healthier, which in turn will improve their achievement.

### Prevalence and Trends

Overweight and obesity impairs or threatens the health of millions of American children.

- Thirty-two percent of American children and adolescents are overweight or obese, with a 16% of youth 2-19 falling into the obese category
- Rates of overweight and obesity remain high with 31.9% of children and adolescents aged 2-19 years at or above the 85<sup>th</sup> percentile of the 2000 BMI-for-age growth charts.<sup>1</sup>
- For children aged 2-19 11% are above the 97<sup>th</sup> percentile, 15% above the 95<sup>th</sup> percentile, and 30% above the 85<sup>th</sup> percentile. About 2/3 of those with BMIs above the 95<sup>th</sup> percentile have BMIs above the 97<sup>th</sup> percentile, indicating much severe obesity.<sup>1</sup>

### Racial/Ethnic Populations

Although overweight has increased for all children and adolescents over time, data indicate disparities among racial/ethnic groups.

- 28% of African-American girls aged 12 to 19 are obese, as are 20% of Mexican-American girls.<sup>1</sup>
- 18.5% of African-American and 22% of Mexican-American boys are overweight or obese.<sup>1</sup>
- Among 12-19 year olds, those above the 97<sup>th</sup> percentile BMI included 20% of non-Hispanic black girls, 18% of Mexican American boys, and 9% of white girls.<sup>1</sup>

### Contributing Factors

Poor eating habits and lack of physical activity are root causes of overweight and obesity.

- Only 2% of school-aged children consume the recommended daily number of servings from all five major food groups, and only 30% consume the suggested amount of milk.<sup>2</sup>
- Caloric contribution from sugar sweetened beverages increased significantly from 204 kcal/day in 1988–1994 to 224 kcal/day in 1999–2004.<sup>3</sup>
- 35% of students watch television 3 or more hours per average school day.<sup>4</sup>
- Only 35% of students are physically active for 60 minutes at least 5 days per week.<sup>4</sup>

### Health Consequences

Childhood obesity is a medical concern, not a cosmetic issue.

- An obese 4-year-old has a 20% chance of becoming an obese adult, and an obese teenager has up to an 80% chance of becoming an obese adult.<sup>5</sup>

- Overweight 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.<sup>6</sup>
- Among 5- to 17-year-olds, almost 60% of overweight children had at least one CVD risk factor while 25 percent of overweight children had two or more CVD risk factors.<sup>7</sup>
- Severely overweight and obese children often suffer from depression, anxiety disorders, isolation from their peers, low self-esteem, and eating disorders.<sup>8</sup>

### **Academic Consequences**

A growing body of evidence indicates that poor nutrition, physical inactivity and obesity are associated with lower student achievement.

- The psychological stress of social stigmatization can cause low self-esteem which, in turn, can hinder academic and social functioning, and persist into adulthood.<sup>9</sup>
- Hunger, physical and emotional abuse, and chronic illness can lead to poor school performance.<sup>10</sup>
- Overweight kindergartners had significantly lower math and reading test scores at the beginning of the year than did their non-overweight peers, and these lower scores continued into first grade.<sup>11,12</sup>

### **Economic Consequences**

- Childhood obesity is estimated to cost \$14 billion annually in health expenses.<sup>13,14</sup>
- Severely overweight children miss four times as much school as normal-weight kids.<sup>8</sup> If such health problems keep children out of school just one day per month, this could cost a large school district like Los Angeles about \$15 million each year. An average size school district could likely forfeit \$95,000 to \$160,000 annually.<sup>15</sup>
- Obesity-associated annual hospital costs for children increased more than threefold from \$35 million during 1979-1981 to \$127 million during 1997-1999.<sup>16</sup>

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### **References**

1. Ogden CL, Carroll MD, Flegal KM. High Body Mass Index for Age Among US Children and Adolescents, 2003—2006. *Journal of the American Medical Association*. 2008;299(20):2401—2405.
2. United States Department of Agriculture (USDA). 1994-1996 Continuing survey of food intakes for individuals (CSFII).
3. Wang YC, Bleich SN and Gortmaker SL Beverages and 100% Fruit Juices Among US Children and Adolescents, 1988-2004. *Pediatrics*. 121(6), pp.1604-1614.
4. Trends in the Prevalence of Physical Activity. National YRBS: 1991—2007.
5. *Prevention of Pediatric Overweight and Obesity*. American Academy of Pediatrics, Committee on Nutrition, Pediatrics, August 2003.
6. Dietz W. Health consequences of obesity in youth: Childhood predictors of adult disease. *Pediatrics*. 1998;101:518—525.
7. Freedman DS, Dietz WH, Srinivasan SR, Berenson GS. The relation of overweight to cardiovascular risk factors among children and adolescents: The Bogalusa Heart Study. *Pediatrics* 1999;103:1175—1182.
8. Schwimmer, JB, Burwinkle, TM, Varni, JW. Health-related quality of life of severely obese children and adolescents. *Journal of the American Medical Association* 2003. 289:1813.
9. Swartz MB and Puhl R. Childhood obesity: a societal problem to solve. *Obesity Reviews* 2003; 4(1):57—71.
10. Dunkle MC, Nash MA. *Beyond the Health Room*. Washington, D.C.: Council of Chief State School Officers, Resource Center on Educational Equity; 1991.
11. National Institute Health Care Management (NIHCM) Foundation. Obesity in young children: impact and intervention. Research brief. August 2004.
12. Data A, Sturm R, Magnabosco J. Childhood overweight and academic performance: national study of kindergartners and first-graders. *Obesity Research* 2004. 12:58-68.
13. Centers for Disease Control and Prevention. *Preventing Obesity and Chronic Diseases Through Good Nutrition and Physical Activity*.
14. Thomson Medstat. *Childhood Obesity: Costs, Treatment Patterns, Disparities in Care, and Prevalent Medical Conditions*. Research Brief 2006.
15. Action for Healthy Kids. The learning connection: the value of improving nutrition and physical activity in our schools 2004. Available at [www.actionforhealthykids.org](http://www.actionforhealthykids.org).
16. Wang G, Dietz W. Economic burden of obesity in youths aged 6 to 17 years: 1979-1999. *Pediatrics* 2002.109: 81-89.