## Physical Activity and the Health of Young People

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### Benefits of Regular Physical Activity

- Helps build and maintain healthy bones and muscles.<sup>1</sup>
- Helps reduce the risk of developing obesity and chronic diseases such as diabetes and cardiovascular disease.<sup>1</sup>
- Reduces feelings of depression and anxiety and promotes psychological well-being.

#### **Long-Term Consequences of Physical Inactivity**

- Overweight and obesity, influenced by physical inactivity and poor diet, are significantly associated with an increased risk of diabetes, high blood pressure, high cholesterol, asthma, arthritis, and poor health status.<sup>2</sup>
- Physical inactivity increases the risk of dying prematurely, dying of heart disease, and developing diabetes, colon cancer, and high blood pressure.<sup>1</sup>

#### **Obesity Among Youth**

- The prevalence of obesity among children aged 6-11 has more than doubled in the past 20 years, going from 6.5% in 1980 to 17.0% in 2006. The rate among adolescents aged 12-19 more than tripled, increasing from 5.0% to 17.6%.<sup>3</sup>
- Children and adolescents who are overweight are more likely to be overweight or obese as adults;<sup>4</sup> one study showed that children who became obese by age 8 were more severely obese as adults.<sup>5</sup>

#### **Participation in Physical Activity by Young People**

- During the 7 days preceding the survey, 77% of children aged 9-13 years reported participating in free-time physical activity.<sup>6</sup>
- Thirty-five percent of high school students had participated in at least 60 minutes per day of physical activity on 5 or more of the 7 days preceding the survey.
- Twenty-five percent of high school students did not participate in 60 or more minutes of any kind of physical activity that increased their heart rate or made them breathe hard some of the time on at least 1 day during the 7 days before the survey (i.e., did not participate in 60 or more minutes of physical activity on any day).<sup>7</sup>
- Participation in physical activity declines as children get older.

# Percentage of High School Students Participating in Physical Activity and Physical Education, by Sex, 2007<sup>7</sup>

	Girls	Boys
At least 60 minutes/day of physical activity°	25.6%	43.7%
Attended physical education class daily <sup>b</sup>	27.3%	33.2%

<sup>&</sup>lt;sup>o</sup>Any kind of physical activity that increased heart rate and made them breathe hard some of the time for at least 60 minutes per day on 5 or more of the 7 days preceding the survey

<sup>&</sup>lt;sup>b</sup>Attended physical education classes 5 days in an average week when they were in school



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#### **Participation in Physical Education Classes**

- Over half (54%) of high school students (67% of 9<sup>th</sup> grade students but only 41% of 12<sup>th</sup> grade students) attended physical education classes in 2007.<sup>7</sup>
- The percentage of high school students who attended physical education classes daily decreased from 42% in 1991 to 25% in 1995, and has remained stable at that level until 2007 (30%). In 2007, 40% of 9<sup>th</sup> grade students but only 24% of 12<sup>th</sup> grade students attended physical education class daily.<sup>7</sup>
- Among the 54% of students who attended physical education classes, 84% actually exercised or played sports for 20 minutes or longer during an average class.<sup>7</sup>

#### References

- 1. U.S. Department of Health and Human Services. *Physical activity guidelines advisory committee report*. Washington, DC: U.S. Department of Health and Human Services, 2008.
- 2. Mokdad AH, Ford ES, Bowman BA, et al. Prevalence of obesity, diabetes, and obesity-related health risk factors, 2001. *Journal of the American Medical Association* 2003;289(1):76-79.
- 3. Ogden CL, Carroll MD, Flegal KM. High Body Mass Index for Age Among US Children and Adolescents, 2003-2006. JAMA. 2008;299(20):2401-2405.
- 4. Ferraro KF, Thorpe RJ Jr, Wilkinson JA. The life course of severe obesity: Does childhood overweight matter? *Journal of Gerontology* 2003;58B(2):S110-S119.
- 5. Freedman DS, Khan LK, Dietz WH, Srinivasan SR, Berenson GS. Relationship of childhood obesity to coronary heart disease risk factors in adulthood: the Bogalusa Study. *Pediatrics* 2001;108(3):712-718.
- 6. CDC. Physical activity levels among children aged 9–13 years—United States, 2002. *Morbidity and Mortality Weekly Report* August 22, 2003; 52 (SS-33): 785-788.
- 7. CDC. Youth Risk Behavior Surveillance—United States, 2007. Morbidity and Mortality Weekly Report 2008;57(No.SS-4):1-131.