



National Center for Health Statistics

Prevalence of Overweight Among Children and Adolescents: United States, 1999-2002

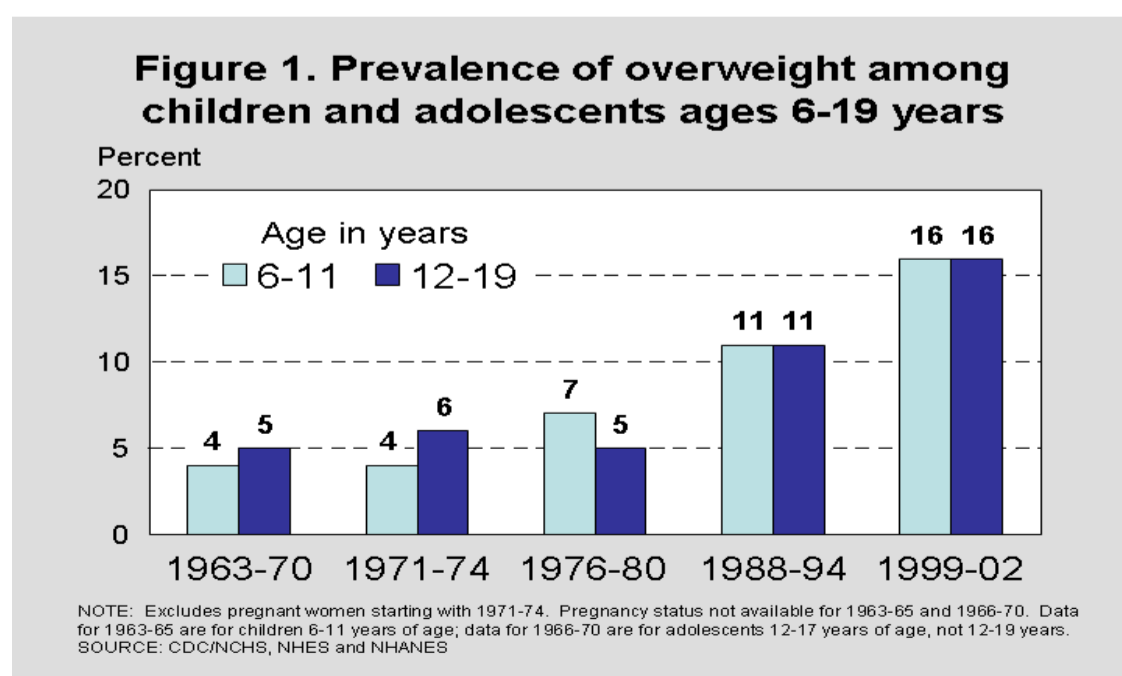
Results from the 1999-2002 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate that an estimated 16 percent of children and adolescents ages 6-19 years are overweight. As shown in [Table 1](#), this represents a 45 percent increase from the overweight estimates of 11 percent obtained from NHANES III (1988-94).

Body mass index, expressed as weight/height² (BMI;kg/m²) is commonly used to classify overweight and obesity among adults, and is also recommended to identify children who are overweight or at risk of becoming overweight. Cutoff criteria are based on the 2000 CDC BMI-for-age-growth charts for the United States. Based on current recommendations of expert committees, children with BMI values at or above the 95th percentile of the sex-specific BMI growth charts are categorized as overweight.

To assess changes in overweight that have occurred, prevalence estimates for participants in the 1999-2002 NHANES were compared with estimates for those who participated in earlier surveys. The NHANES 1999-2002 and earlier surveys used a stratified, multistage, probability sample of the civilian noninstitutionalized U.S. population. A household interview and a physical examination were conducted for each survey participant. During the physical examination, conducted in mobile examination centers, height and weight were measured as part of a more comprehensive set of body measurements. These measurements were taken by trained health technicians, using standardized measuring procedures and equipment. Observations for persons missing a valid height or weight measurement were not included in the data analysis.

When the overweight definition (greater than or equal to 95th percentile of the age- and sex-specific BMI) is applied to data from earlier national health examination surveys, it is apparent that overweight in children and adolescents was relatively stable from the 1960s to 1980 ([table 1](#)). However, from NHANES II (1976-80) to NHANES III, the prevalence of overweight nearly doubled among children and adolescents. In the time interval between NHANES II and III, the prevalence of overweight among children ages 6-11 years increased from an estimated 7 percent to 11 percent ([figure 1](#)), and among adolescents ages 12-19 years, increased from 5 percent to 11 percent. One of the national health objectives for 2010 is to reduce the prevalence of overweight from the NHANES III baseline of 11 percent. However, the NHANES 1999-2002 overweight estimates suggest that since 1994, overweight in youths has not leveled off or decreased, and is increasing to even higher levels. The data for adolescents are of notable concern because overweight adolescents are at increased risk to become overweight adults. The 1999-2002 findings for children and adolescents suggest the likelihood of another generation of overweight adults who may be at risk for subsequent overweight and obesity related health conditions.

Figure



Table

Table 1. Prevalence of overweight among children and adolescents ages 6-19 years, for selected years 1963-65 through 1999-2002

Age (years) ¹	NHANES 1963-65 1966-70 ²	NHANES 1971-74	NHANES 1976-80	NHANES 1988-94	NHANES 1999-2002
6-11	4	4	7	11	16
12-19	5	6	5	11	16

¹Excludes pregnant women starting with 1971-74. Pregnancy status not available for 1963-65 and 1966-70.

²Data for 1963-65 are for children 6-11 years of age; data for 1966-70 are for adolescents 12-17 years of age, not 12-19 years.

Related Resources:

- [Fact Sheet](#)

For more detailed estimates see:

- Hedley, AA, Ogden, CL, Johnson, CL, Carroll, MD, Curtin, LR, Flegal, KM. Overweight and obesity among US children, adolescents, and adults, 1999-2002. JAMA 291:2847-50. 2004.
- Ogden CL, Flegal KM, Carroll MD, Johnson CL. Prevalence and trends in overweight among US children and adolescents, 1999-2000. JAMA 288:1728-32. 2002.

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