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## **Prevalence of Underweight Among Adults: United States, 2003-2006**

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Poor nutrition or underlying health conditions can result in underweight. Results from the 2003-2006 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate that an estimated 1.8% of U.S. adults are underweight, as shown in [Table 1](#). A statistically significant decrease in the prevalence of underweight between 1988-1994 and 2003-2006 was found only among persons who were aged 60 years and over. The prevalence in this age group was 2.3% in 1988-1994 and 1.2% in 2003-2006.

Surveys before 1988 did not include individuals over 74 years of age, and consequently, [Table 2](#) contains age-adjusted prevalence estimates for adults aged 20-74 years for all survey periods back to 1960. The prevalence of persons who were underweight over the last 45 years has significantly decreased. Underweight prevalence went from an estimated 4% in the early 60s to approximately 2% in 2003-2006. This decrease in prevalence of underweight was found among all age groups.

Body mass index (BMI), expressed as weight/height<sup>2</sup> (BMI; kg/m<sup>2</sup>) is commonly used to classify underweight (BMI less than 18.5) among adults (aged 20 years and over). NHANES used a stratified multistage probability sample of the U.S. civilian noninstitutionalized 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 pregnant women and for persons missing a valid height or weight measurement were not included in the data analysis.

**Table 1. Prevalence of underweight among adults aged 20 years and over: United States, 1988-1994, 1999-2002, and 2003-2006**

Age (in years)	NHANES III (1988-1994)	NHANES (1999-2002)	NHANES (2003-2006)
Total <sup>1</sup>	2.4	1.9	1.8
20-39	3.0	2.8	2.6
40-59	1.7	1.1	1.2
60 or over	2.3	1.6	1.2

<sup>1</sup>Age adjusted by the direct method to the year 2000 U.S. Census Bureau estimates using the age groups 20-39, 40-59, and 60 years and over.

NOTE: NHANES is National Health and Nutrition Examination Survey.

**Table 2. Prevalence of underweight among adults aged 20-74 years: United States, selected years 1960-1962 through 2003-2006**

Age (in years)	NHES I (1960-1962)	NHANES I (1971-1974)	NHANES II (1976-1980)	NHANES III (1988-1994)	NHANES (1999- 2002)	NHANES (2003-2006)
Total <sup>1</sup>	4.0	3.6	3.0	2.3	1.9	1.8
20-39	5.7	4.9	4.2	3.0	2.8	2.6
40-59	2.3	2.2	1.9	1.7	1.1	1.2
60-74	3.7	3.8	2.7	1.9	1.3	0.9

<sup>1</sup>Age adjusted by the direct method to the year 2000 U.S. Census Bureau estimates using the age groups 20-39, 40-59, and 60-74 years.

NOTE: The National Health Examination Survey (NHES) I and the National Health and Nutrition Examination Survey (NHANES) I and II did not include individuals over 74 years of age, thus trend estimates are based on age 20-74 years.