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Underlying health conditions can result in children and adolescents being underweight. In addition, underweight can indicate malnutrition. Results from the 2015–2016 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate that an estimated 3.0% of children and adolescents aged 2–19 years are underweight.

Body mass index (BMI), expressed as weight in kilograms divided by height in meters squared (kg/m²), is commonly used to classify weight status among children and adolescents. Cutoff criteria are based on the sex-specific BMI-for-age 2000 CDC Growth Charts for the United States (available from: https://www.cdc.gov/growthcharts/cdc_charts.htm). Based on current recommendations from expert committees, children and adolescents with BMI values below the sex- and age-specific 5th percentile of the growth charts are categorized as underweight.

The Table shows the prevalence of underweight among children and adolescents aged 2–19 years by age and sex, from 1963–1965 through 2015–2016.

NHANES, conducted by the National Center for Health Statistics, is a stratified, multistage probability sample of the civilian noninstitutionalized population of the United States. A household interview and a physical examination are conducted for each survey participant. During the physical examination, conducted in a mobile examination center, height and weight are measured as part of a more comprehensive set of body measurements. These measurements are taken by trained health technicians, using standardized measuring procedures and equipment. Observations for persons missing a valid height or weight measurement and for pregnant females are not included in the data analysis.

For additional information on NHANES methods, visit: https://wwwn.cdc.gov/nchs/nhanes/analyticguidelines.aspx.


<table>
<thead>
<tr>
<th>Survey period</th>
<th>Sample size (n)</th>
<th>Total</th>
<th>Age group (years)</th>
<th>Sex</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>2–5</td>
<td>6–11</td>
<td>12–19</td>
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<tr>
<td>1963–1965</td>
<td>7,047</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>5.8 (0.6)</td>
<td>---</td>
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<tr>
<td>1966–1970¹</td>
<td>6,768</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>4.6 (0.3)</td>
<td>---</td>
</tr>
<tr>
<td>1971–1974</td>
<td>7,041</td>
<td>5.1 (0.3)</td>
<td>5.8 (0.5)</td>
<td>5.3 (0.5)</td>
<td>4.7 (0.5)</td>
<td>5.0 (0.3)</td>
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<tr>
<td>1976–1980</td>
<td>7,351</td>
<td>4.5 (0.3)</td>
<td>5.3 (0.4)</td>
<td>4.2 (0.4)</td>
<td>4.4 (0.4)</td>
<td>5.0 (0.4)</td>
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<td>1988–1994</td>
<td>10,777</td>
<td>4.0 (0.3)</td>
<td>4.3 (0.4)</td>
<td>3.9 (0.6)</td>
<td>3.9 (0.6)</td>
<td>4.2 (0.5)</td>
</tr>
<tr>
<td>1999–2000</td>
<td>4,039</td>
<td>4.2 (0.4)</td>
<td>5.1 (1.3)</td>
<td>4.3 (0.9)</td>
<td>3.7 (0.6)</td>
<td>4.9 (0.9)</td>
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<td>2001–2002</td>
<td>4,261</td>
<td>3.4 (0.3)</td>
<td>2.8 (0.8)</td>
<td>3.4 (0.3)</td>
<td>3.7 (0.6)</td>
<td>3.7 (0.5)</td>
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<td>2003–2004</td>
<td>3,861</td>
<td>3.2 (0.3)</td>
<td>3.7 (1.0)</td>
<td>3.0 (0.7)</td>
<td>3.2 (0.7)</td>
<td>3.6 (0.4)</td>
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<td>2005–2006</td>
<td>4,207</td>
<td>3.2 (0.4)</td>
<td>1.9 (0.4)</td>
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<td>3.7 (0.7)</td>
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<td>2007–2008</td>
<td>3,249</td>
<td>3.7 (0.4)</td>
<td>3.8 (0.9)</td>
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<td>2009–2010</td>
<td>3,408</td>
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<td>3.1 (0.5)</td>
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<td>3.3 (0.5)</td>
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<td>2011–2012</td>
<td>3,355</td>
<td>3.5 (0.5)</td>
<td>3.2 (0.7)</td>
<td>3.6 (0.8)</td>
<td>3.6 (0.7)</td>
<td>4.2 (1.1)</td>
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<td>2013–2014</td>
<td>3,523</td>
<td>3.8 (0.4)</td>
<td>3.4 (0.8)</td>
<td>4.8 (1.1)</td>
<td>3.2 (0.8)</td>
<td>3.6 (0.6)</td>
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<td>2015–2016</td>
<td>3,340</td>
<td>3.0 (0.6)</td>
<td>2.3 (0.9)</td>
<td>2.5 (0.6)</td>
<td>3.7 (1.0)</td>
<td>3.6 (1.0)</td>
</tr>
</tbody>
</table>


¹Data for 1966–1970 are for adolescents aged 12–17, not 12–19.
