



[About BMI for Children and Teens](#)

What is BMI?

Body Mass Index (BMI) is a number calculated from a child's weight and height. BMI is a reliable indicator of body fatness for most children and teens. BMI does not measure body fat directly, but research has shown that BMI correlates to direct measures of body fat, such as underwater weighing and dual energy x-ray absorptiometry (DXA).¹ BMI can be considered an alternative for direct measures of body fat. Additionally, BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems.

For children and teens, BMI is age- and sex-specific and is often referred to as BMI-for-age.

What is a BMI percentile?

After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. Percentiles are the most commonly used indicator to assess the size and growth patterns of individual children in the United States. The percentile indicates the relative position of the child's BMI number among children of the same sex and age. The growth charts show the weight status categories used with children and teens (underweight, healthy weight, overweight, and obese).

BMI-for-age weight status categories and the corresponding percentiles are shown in the following table.

Weight Status Category	Percentile Range
Underweight	Less than the 5th percentile
Healthy weight	5th percentile to less than the 85th percentile
Overweight	85th to less than the 95th percentile
Obese	Equal to or greater than the 95th percentile

How is BMI used with children and teens?

BMI is used as a screening tool to identify possible weight problems for children. CDC and the American Academy of Pediatrics (AAP) recommend the use of BMI to screen for overweight and obesity in children beginning at 2 years old.

For children, BMI is used to screen for obesity, overweight, healthy weight, or underweight. However, BMI is not a diagnostic tool. For example, a child may have a high BMI for age and sex, but to determine if excess fat is a problem, a health care provider would need to perform further assessments. These assessments might include skinfold thickness measurements, evaluations of diet, physical activity, family history, and other appropriate health screenings.



How is BMI calculated and interpreted for children and teens?

Calculating and interpreting BMI using the BMI Percentile Calculator involves the following steps:

1. Before calculating BMI, obtain accurate height and weight measurements. See [Measuring Children's Height and Weight Accurately At Home](#).
2. Calculate the BMI and percentile using the [Child and Teen BMI Calculator](#). The BMI number is calculated using [standard formulas](#).
3. Review the calculated BMI-for-age percentile and results. The BMI-for-age percentile is used to interpret the BMI number because BMI is both age- and sex-specific for children and teens. These criteria are different from those used to interpret BMI for adults — which do not take into account age or sex. Age and sex are considered for children and teens for two reasons:
 - The amount of body fat changes with age. (BMI for children and teens is often referred to as *BMI-for-age*.)
 - The amount of body fat differs between girls and boys.

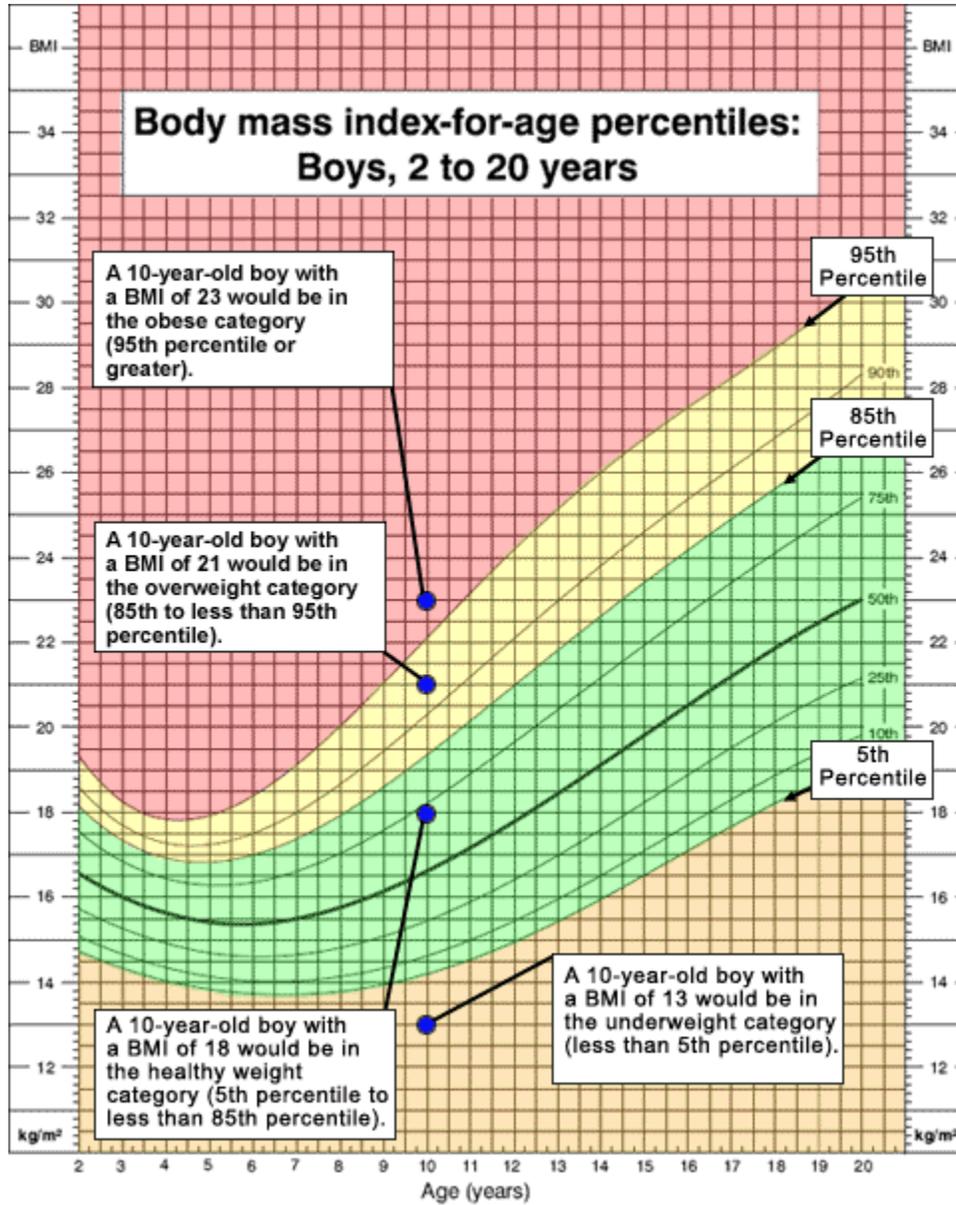
The [CDC BMI-for-age growth charts for girls and boys](#) take into account these differences and allow translation of a BMI number into a percentile for a child's or teen's sex and age.

4. Find the weight status category for the calculated BMI-for-age percentile as shown in the following table. These categories are based on expert committee recommendations.

Weight Status Category	Percentile Range
Underweight	Less than the 5th percentile
Healthy weight	5th percentile to less than the 85th percentile
Overweight	85th to less than the 95th percentile
Obese	Equal to or greater than the 95th percentile



See the following example of how some sample BMI numbers would be interpreted for a 10-year-old boy.



The CDC BMI-for-age growth charts are available at: [CDC Growth Charts: United States](https://www.cdc.gov/growthcharts).