

## Body Mass Index Overview

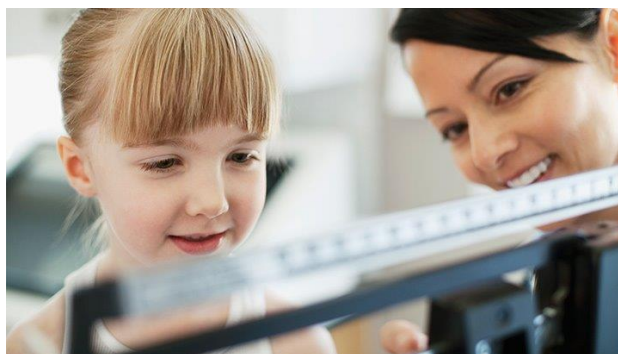
Body composition, a measurement of an individual's percentage of body fat, can be influenced by many factors including age, sex, genetics, environment, and lifestyle habits related to nutrition and physical activity. While some body fat is necessary for good health, too much can lead to health problems such as hypertension, high cholesterol, heart disease, stroke, diabetes and even some types of cancer. Conversely, very low amounts of body fat may be indicative of malnutrition which may result in a weakened immune system, cardiovascular abnormalities, brittle bones, hormonal imbalances, and compromised brain function. An overwhelming amount of research has shown that overweight youth are at a far greater risk of becoming overweight adults and as such, early identification is important.

Although body mass index (BMI) is not a true measurement of body composition, it provides an indication of the appropriateness of a child's weight relative to height and if the child is at increased risk for obesity. The CDC standards have been adopted as the BMI standards within FitnessGram so that youth across the nation can receive consistent information. The FitnessGram standards allow classification into four zones that correspond to the CDC categories of normal weight, overweight, obese or underweight.

### *Safeguards for Measurement of BMI in Schools*

To help ensure child privacy, confidentiality, protect students from potential harm, and increase the likelihood that the process will have a positive impact on promoting a healthy weight, the CDC put forth the following safeguards when measuring BMI in schools:

1. Introduce the assessment to parents, guardians, and school staff.
2. Ensure appropriate practices are followed such as obtaining parental consent.
3. Ensure the staff members who measure height and weight of youth have the appropriate expertise and training.
4. Ensure a private setting for measurement.
5. Utilize accurate and reliable equipment.
6. Coordinate with staff members to minimize disruptions to class time by developing efficient procedures of obtaining measurements.
7. Refrain from utilizing the BMI results to evaluate teachers or students on their performance.
8. Utilize the BMI results to evaluate the process and expected or desired progress towards outcomes.
9. Provide all parents with a clear and respectful explanation of the BMI results.



### Sources:

Center for Disease Control and Prevention, (2021).

[https://www.cdc.gov/healthyschools/obesity/bmi/bmi\\_measurement\\_schools.htm](https://www.cdc.gov/healthyschools/obesity/bmi/bmi_measurement_schools.htm). Accessed on March 28, 2021.

Nihiser AJ, Lee SM, Wechsler H, McKenna M, Odom E, Reinold C, Thompson D, Grummer-Strawn L. Body mass index measurement in schools. *Journal of School Health*. 2007;77:651–671.