

Body Mass Index (BMI)

Did you know...

Over 9 million kids in the U.S, ages 6-19, is overweight. An additional 16.5% ages 2-19, are at risk of being overweight.

Keeping track of your child's weight is important because...

Overweight children are more likely to grow up to be overweight adults. Children who are a healthy weight may have a lower risk of heart disease and other diseases.ⁱ

Keeping track of your own weight is important because...

Being a role-model is one of the best ways to teach your child about healthy living. On top of modeling healthy eating and a physically active lifestyle, it is important to have information about your own health and wellbeing.

What is Body Mass Index?

Your Body Mass Index, or BMI, estimates your weight status as under, normal or over weight. BMI assesses total weight relative to height. It is a useful, indirect measure of body composition because it correlates with body fat in most people.ⁱⁱ For more specific information on your health, it is important to talk to your doctor.ⁱⁱⁱ

How do you know if your child is at risk of being overweight?

The Center for Disease Control uses Body Mass Index (BMI) as one indicator of weight status in children. For children and teens, BMI is age- and sex- specific and is often referred to as BMI-for-age.^{iv} BMI-for-age is often presented as a percentile. BMI is not an appropriate measure for children under two years of age.^v

To calculate Body Mass Index...

Divide a person's weight by his/her height squared. (The units used must be metric.)

$$\text{BMI} = \text{Weight (kg)} \div \text{Height}^2 \text{ (m)}$$

Here is a step-by-step process for how to determine you or your child's BMI:

1. Convert weight in pounds to the metric system:

(weight in pounds divided by 2.2)

$$\underline{\hspace{2cm}} \div 2.2 = \underline{\hspace{2cm}} \text{ weight in kilograms}$$

2. Convert height in inches to the metric system:

(height in inches times .0254)

$$\underline{\hspace{2cm}} \times .0254 = \underline{\hspace{2cm}} \text{ height in meters}$$

3. Divide the weight (in kilograms) by the square of his/her height (in meters)

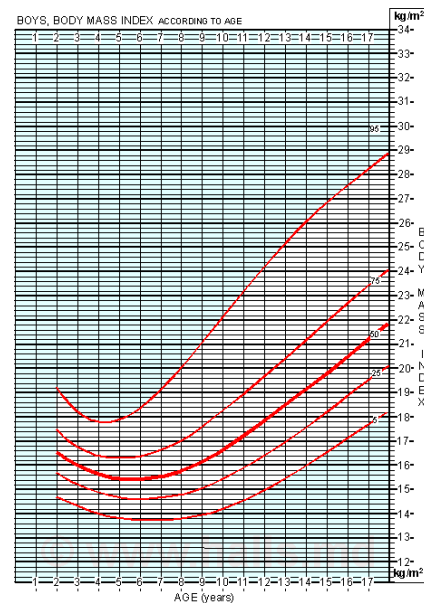
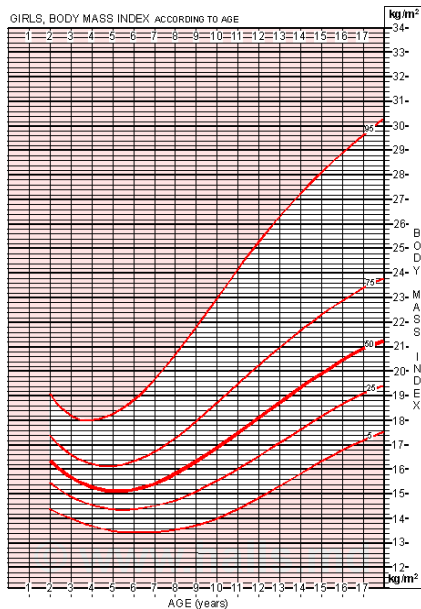
$$\underline{\hspace{2cm}} \div \underline{\hspace{2cm}}^2 = \underline{\hspace{2cm}} \text{ BMI}$$

Use this chart to interpret an adult BMI score:

BMI	Weight Status Category
<18.5	Underweight
18.5-24.9	Normal weight
25-29.9	Overweight
30 or greater	Obese

To determine a child's BMI-for-age percentile ranking...

Plot the BMI number on the BMI-for-age growth charts—for either girls or boys—to obtain a percentile ranking. (The BMI-for-age growth charts are provided below.) The percentile indicates the relative position of a child's BMI number among children of the same sex and age.^{vi} A body mass index over the 95th percentile is an indication that a child is at risk for obesity, but the trend of what is happening to their BMI for age over time is also an important indicator of risk. If your child's BMI is changing percentiles, meaning jumping from one curve to another over time, then his or her weight gain may be out of sync with his or her growth and may require follow up with a physician.



Once you have determined a percentile, use this chart to determine your child's weight status category...

Percentile range	Weight Status Category
Less than the 5 th percentile	Underweight
5 th percentile to less than the 85 th percentile	Healthy weight
85 th to less than the 95 th percentile	At risk of overweight
Equal to or greater than the 95 th percentile	Overweight

If you or your child are overweight, or at-risk of becoming overweight...

Talk to your doctor. He or she can suggest helpful ways to improve you or your child's health. You can take steps yourself such as:

- Helping your child eat a healthy, calorie-appropriate diet:
For creative ways to help your child eat a well-balanced diet, go to www.HealthierGeneration.org

Click on "for parents," and read the Alliance's tips for healthy eating.
- Helping your child be more active:
Create an environment that fosters physical activity.^{viii} Start a family activity plan and encourage your child to join the *Let's Just Play Go Healthy Challenge* by visiting <http://www.nick.com/letsjustplay/>. You can also visit the Alliance website to read tips on how to make being active fun and sustainable.

1. Try roasting vegetables like cauliflower, broccoli, Brussel sprouts, onions, carrots, tomatoes, or eggplant. Long exposure to high heat will cause the vegetables to caramelize, which both enhances their natural sweetness and reduces bitterness.

2. Track it

Try the Alliance's "Stick with it Chart" that can be downloaded at www.HealthierGeneration.org (in the 'For Parents' section) to track the fruits and veggies your child eats. Kids' love to set a goal that they can strive for and the sticker chart is a fun way to track progress.

3. Take the family fruit & veggie challenge!

Use this alphabetical list of fruits and vegetables to see how many different types you can try! Kids can check items off the list as you've tried them.

Fruit: Apples, Apricots, Avocados, Bananas, Blackberries, Blueberries, Cherries, Cranberries, Figs, Grapefruit, Grapes, Kiwifruit, Lemons, Limes, Melons (Cantaloupe, Casaba, Crenshaw, Honey Ball, Honey Dew, Persian), Pineapple, Nectarines, Oranges, Passion Fruit, Peaches, Pears, Pineapples, Plums and Prunes, Raspberries, Strawberries, Tangerines, Tomatoes, Watermelon...

Vegetables: Alfalfa sprouts, Asparagus, Arugula, Artichoke, Peas, Bamboo Shoots, Beets, Bok Choy, Broccoli, Brussels Sprouts, Cabbage, Carrots, Cauliflower, Celery, Celeriac, Chard, Chicory (Endives), Cauliflower, Collards, Corn, Cucumbers, Eggplants, Kale, Lettuce, Iceberg lettuce, Butter-head lettuce, Romaine lettuce, Leaf lettuce, Mushrooms, Mustard Greens, Okra, Onions, Leeks, Parsnips, Peppers (green, red, and yellow), Potatoes, Radishes, Rhubarb, Rutabagas, Spinach, Squash (Acorn, Butternut, Spaghetti), Sweet Corn, Sweet Potatoes, Turnips, Watercress, Yams, Zucchini...

ⁱ <http://www.americanheart.org/presenter.jhtml?identifier=4670>

ⁱⁱ <http://www.americanheart.org/presenter.jhtml?identifier=4489>

ⁱⁱⁱ CDC, <http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

^{iv} CDC, <http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

^v CDC, <http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

^{vi} CDC, <http://www.cdc.gov/nccdphp/dnpa/bmi/index.htm>

^{vii} CDC, http://www.cdc.gov/nccdphp/dnpa/bmi/childrens_BMI/about_childrens_BMI.htm#What%20is%20BMI

^{viii} <http://www.americanheart.org/presenter.jhtml?identifier=4670>