

BMI for Children and Teens (Also referred to as BMI-for-age)

BMI is used differently with children than it is with adults.

In children and teens, **body mass index** is used to assess underweight, overweight, and risk for overweight. Children's body fatness changes over the years as they grow. Also, girls and boys differ in their body fatness as they mature. This is why BMI for children, also referred to as BMI-for-age, is gender and age specific. For the 2000 CDC Growth Charts and Additional Information visit CDC's National Center for Health Statistics, www.cdc.gov/growthcharts

Healthcare professionals use the following established percentile cutoff points to identify underweight and overweight in children.

Underweight

BMI-for-age < 5th percentile

At risk of overweight

BMI-for-age 85th percentile
to < 95th percentile

Overweight

BMI-for-age > 95th percentile

BMI decreases during the preschool years, then increases into adulthood.

What does it mean if my child is in the 60th percentile?

The 60th percentile means that compared to children of the same gender and age, 60% have a lower BMI.

Example:

Let's look at the BMI for a boy as he grows. While his BMI changes, he remains at the 95th percentile BMI-for-age.

<u>Age</u>	<u>BMI</u>	<u>Percentile</u>
2 years	19.3	95th
4 years	17.8	95th
9 years	21.0	95th
13 years	25.1	95th

We see how the boy's BMI declines during his preschool years and increases as he gets older.

Why is BMI-for-age a useful tool?

BMI-for-Age is used for children and teens because of their rate of growth and development. It is a useful tool because BMI-for-age provides a reference for adolescents that can be used beyond puberty.

BMI-for-age in children and adolescents compares well to laboratory measures of body fat.

BMI-for-age can be used to track body size throughout life.

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Specially challenged children, due to their dependency on adult leadership and guidance, require assistance and monitoring in the areas of diet and exercise to help promote a healthy lifestyle. Heart disease is a concern for children. Twenty two percent of all children age 6-17 are considered obese today. Approximately 300,000 Americans die of health problems related to obesity each year. The National Institutes of Health (NIH) cite obesity as second only to cigarettes as a leading lifestyle-related cause of death (Shape Up America, PR Newswire, Washington, DC, October 29, 1996). Excess body fat, especially around the waist, is a risk factor for heart disease. Being overweight makes the heart work harder, and raises blood pressure and cholesterol. For someone who is overweight, losing just 10 pounds will lower their risk for heart disease.

Because of poor diet and exercise habits, many children are overweight and some even have high blood pressure and blood cholesterol. They are more likely to develop the clogged arteries that lead to heart disease. It's never too early or too late to take steps to prevent heart disease.

Being sedentary doubles the risk for heart disease. Physical activity is important for everyone, from tots to seniors. Inactive children are more likely to have problems with weight, blood pressure, and blood cholesterol.

Regular exercise lowers blood pressure and increases "good" HDL cholesterol. It has mental benefits, too, such as reduced stress and depression, both linked to heart disease. As little as 30 minutes of activity on most days will reduce the risk not only for heart disease, but also for stroke, diabetes, and becoming overweight. Exercising will reduce fat, improve circulation, raise metabolism, encourage good posture, increase energy level, and improve appearance and one's self-esteem.

High blood pressure is a sign the heart is working too hard and the risk for kidney failure, stroke, and congestive heart failure rises. High blood pressure plus obesity, diabetes, high cholesterol or being around smokers multiplies the risk of a heart attack. To keep blood pressure healthy, children need to exercise regularly, eat a healthy diet, keep weight under control, and follow their doctor's advice regularly.

Related links: <http://www.realage.com/?memberid=&cbr=>, <http://www.fitness.gov/>, http://akak.essortment.com/childrenandfit_rbmi.htm

Body Mass Index (BMI) for teens & adults

Here's how to determine Body Mass Index without a calculator. Find your height in the left-handed column.

Scan across the row to the right until you find the number closest to your weight. Go straight up to the top of the column to find your BMI.

	19	20	21	22	23	24	25	26	27	28	29	30	35	40	
4'10"	91	96	100	105	110	115	119	124	129	134	138	143	167	191	
4'11"	94	99	104	109	114	119	124	128	133	138	143	148	173	198	
5'0"	97	102	107	112	118	123	128	133	138	143	148	153	179	204	
5'1"	100	106	111	116	122	127	132	137	143	148	153	158	185	211	
5'2"	104	109	115	120	126	131	136	142	147	153	158	164	191	218	
5'3"	107	113	118	124	130	135	141	146	152	158	163	169	197	225	
5'4"	110	116	122	128	134	140	145	151	157	163	169	174	204	232	
5'5"	114	120	126	132	138	144	150	156	162	168	174	180	210	240	
5'6"	118	124	130	136	142	148	155	161	167	173	179	186	216	247	
5'7"	121	127	134	140	146	153	159	166	172	178	185	191	223	255	
5'8"	125	131	138	144	151	158	164	171	177	184	190	197	230	262	
5'9"	128	135	142	149	155	162	169	176	182	189	196	203	236	270	
5'10"	132	139	146	153	160	167	174	181	188	195	202	207	243	278	
5'11"	136	143	150	157	165	172	179	186	193	200	208	215	250	286	
6'0"	140	147	154	162	169	177	184	191	199	206	213	221	258	294	
6'1"	144	151	159	166	174	182	189	197	204	212	219	227	265	302	
6'2"	148	155	163	171	179	186	194	202	210	218	225	233	272	311	
6'3"	152	160	168	176	184	192	200	208	216	224	232	240	279	319	
6'4"	156	164	172	180	189	197	205	213	221	230	238	246	287	328	
		HEALTHY WEIGHT					OVERWEIGHT					OBESE			

BMI

19 or less

20-24

25-29

30-35

36-40

40+

Risk of weight-related health problems

Underweight

Very low risk

Low risk

Moderate risk

High risk

Very high risk

Not on the table? Or do you want a more accurate BMI? Here's how:

Multiply your weight in pounds by 703. Divide the result by your height in inches, squared. For example, if you are 4'8" (56 inches) and weigh 102 pounds, your BMI is 22.8: $102 \times 703 = 71,706$ divided by $(56 \times 56) = 22.8$.

Not all BMI's are equal:

BMI is a guide to your healthy weight, but it's not the complete story.

You need to know your body composition - the ratio of lean muscle to fat.