

Understanding and Calculating Body Mass Index

BMI is a calculation of weight (in kilograms) over height squared (in centimeters). To calculate an individual who is 5'2" and weighs 136 pounds (lbs) perform the following:

Step 1. Multiply the weight in pounds by **0.45** (metric factor conversion)

$$136 \times 0.45 = 61.2 \text{ kg}$$

Step 2. Multiply the height (in inches) by **0.025** (metric conversion factor)

$$62'' \times 0.025 = 1.55 \text{ m}$$

Step 3. Square the answer from step 2

$$1.55 \text{ m}^2 = 2.48025$$

Step 4. Divide the answers from step 1 by the answer from step 3

$$61.2 / 2.48025 = 24.675$$

Result. The BMI for an individual who is 5'2" in height and weighs 136 lbs = 24.675, approximately 25.

Underweight	Below 18.5
Healthy weight	18.5 to 24.9 [normal]
Overweight	25 to 29.9
Obese	30 or higher
Obesity (Class I)	30 to < 35
Obesity (Class II)	35 to < 40
Obesity (Class III)	> 40 ("extreme" or "severe")