About the Nutrition Calculator

This nutrition calculator does two things:

- it estimates your daily caloric needs based on your age, weight, height, gender, and activity level, and
- it evaluates how well your diet serves your caloric and nutrient needs.

These estimates are for an average-type middle-school aged person. But everybody is different, and you might not be average at all. So while these numbers might be close to your numbers, you should talk to a doctor or a nutritionist if you really want to pay more attention to your diet.

Calorie use

To maintain a healthy body weight, you need to balance what you eat each day with the energy you use.

This nutrition calculator estimates your daily energy use (in calories) based on the following formula:

For Males:
Basic energy requirement = 66.47 + 13.75 (weight in kilograms) + 5 (height in centimeters) – 6.76 (age in years)

For Females:
Basic energy requirement = 655.1 + 9.65 (weight in kilograms) + 1.84 (height in centimeters) – 4.68 (age in years)

Your basic energy requirement is multiplied by a multiplier that is high if you are very active and low if you are not very active:

<table>
<thead>
<tr>
<th>Multiplier</th>
<th>Activity level</th>
<th>For example…</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.20</td>
<td>Sedentary</td>
<td>Most of the day spent sitting, little or no exercise</td>
</tr>
<tr>
<td>1.35</td>
<td>Light activity</td>
<td>Light exercise or sports 1–3 days/week</td>
</tr>
<tr>
<td>1.50</td>
<td>Active</td>
<td>Moderate exercise or sports 3–5 days/week</td>
</tr>
<tr>
<td>1.75</td>
<td>Very active</td>
<td>Intense exercise or sports 6–7 days/week</td>
</tr>
</tbody>
</table>

Basic energy requirement multiplied by the activity level multiplier estimates the number of calories you use in a day, or

\[ \text{Calories used in a day} = \text{Basic energy requirement} \times \text{activity level multiplier} \]

The number of calories you eat in a day is calculated from the food you chose for your meals and snacks. The total is added up and subtracted from the number of calories you use in a day.
For example, if you are a 120 pound 15-year old girl who is 64 inches tall and engages in light activity, you need about 1904 calories each day. If you eat only 1671 calories a day, the food calculator will tell you that over the course of a month you will lose about 2 pounds (3500 calories in a pound). If, on the other hand, you eat 2137 calories in a day, you will gain about 2 pounds in a month.

**Macronutrients**

Calories only tell part of the story about nutrition. A person who eats 2000 calories a day of food rich in nutrients will probably be healthier than a person who eats 2000 calories a day of candy, soda, and fast food. One way to evaluate the overall quality of your diet is by evaluating the macronutrients, such as carbohydrates, fats, and proteins.

In a healthy diet, about 50% of the calories should come from carbohydrates, 30% from fats, and 20% from protein (see Nutrition slide show for an explanation of what these things are and why they are important). In addition, girls should have about 26 grams of fiber in their diet each day and boys should have about 31 grams. Fiber affects how your body digests food and helps your heart stay healthy.