Protein has in some ways been the least controversial nutrient and yet there are many misconceptions surrounding it. Often, it is believed, especially by athletes and body builders, that eating more protein bulks you up. While it is true that in order to build new muscle, you need more protein, you also need to increase resistance such as using heavier weights in weight lifting, and this requires carbohydrates for energy. So, in addition to perhaps some extra protein, ensure that your diet is also adequate in energy providing foods such as whole grain breads, brown rice, beans, fruits and vegetables – the carbohydrates that will provide the extra energy.

How much protein?
- Many factors determine protein needs: activity level, type of activity, health goals and current health status and age, just to name a few.
- The protein RDA (Recommended Dietary Allowance) for normal adults is 0.8 g/kg body weight, daily, but can range from 1.2-1.6 (or greater) grams/kg of body weight for athletes.

### Body Weight

<table>
<thead>
<tr>
<th>Pounds</th>
<th>Kilograms</th>
<th>Normal RDA(.8 g/kg)</th>
<th>Athlete RDA(1.6 g/kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>50</td>
<td>40g</td>
<td>80g</td>
</tr>
<tr>
<td>130</td>
<td>60</td>
<td>48g</td>
<td>96g</td>
</tr>
<tr>
<td>155</td>
<td>70</td>
<td>56g</td>
<td>112g</td>
</tr>
<tr>
<td>175</td>
<td>80</td>
<td>72g</td>
<td>144g</td>
</tr>
<tr>
<td>200</td>
<td>90</td>
<td>80g</td>
<td>160g</td>
</tr>
</tbody>
</table>

### Common Protein Values
Here is a table providing general guidelines that can be used to determine protein value of foods. Notice that a combination of low, medium, and high protein foods can easily allow you to meet your daily needs. It is a diet made up of only low protein foods that would risk falling short of minimum daily requirements.

- **Low Density Protein Foods** (0.1-3 grams/serving)
  - Fruits, Sweets
- **Medium Density Protein Foods** (3-7 grams/serving)
  - Vegetables, Bread, Rice, Cereal
- **High Density Protein Foods** (.8-30 grams/serving)
  - Meat, Poultry, Fish, Soy Food, Eggs, Nuts, Milk, Yogurt, Cheese, Peanut Butter
What about protein supplements?
When possible we should strive to get the protein we need from the diet. Although we can go and buy amino acids (protein building blocks) at the local store, protein from food provides us with many other nutrients versus just supplementing protein alone. The sample meals below show that one can easily reach higher levels of protein through diet.

Breakfast:
- 2 hardboiled eggs (12g)
- 2 slice whole wheat toast (6g)
- orange juice
- yogurt (6-10g) and fruit

Lunch:
- 6 oz tuna sandwich (48g)
- fruit
- 1 pint of skim milk (16g)

Dinner:
- 7 oz roasted chicken (49g)
- 2/3 cup rice (6g)
- 1 cup cooked vegetables (2g)
- 1 cup skim milk (12g)

Add a 1/2 cup snack of nuts (12g) and a soy protein bar (10g), and you have a total of 183 grams of protein. The RDA for an athlete weighing 200 pounds is only 160 grams. As you can see, a balanced diet will give you all the protein you need even if you are a world-class athlete.

More recent research has shown the benefits of having milk or chocolate milk post workout due to it’s unique combination of whey and casein (whey works quickly and casein is a bit more slow acting) to help with cellular repair. Both of these types of protein are found in dairy products.

Athlete’s appetites may be impacted by intensity and/or duration of their workouts thereby impacting their desire to eat. Drinking nutrients/calories is sometimes easier than eating, so protein shakes may be considered a good alternative in these types of circumstances.