

## Protein

Proteins are found in every organ, tissue, and cell of living organisms. The proteins that we get from foods are digested into amino acids which are used to replace proteins in our bodies.

There are 2 groups of protein sources:

1. **Complete Protein:** provides all of the essential amino acids  
(Examples: meat, poultry, fish, milk, eggs, cheese)
2. **Incomplete Protein:** is low in 1 or more of the essential amino acids. Usually incomplete proteins are paired to provide adequate amounts of essential amino acids. This pairing is known as **complementary proteins**. Complementary proteins do not always have to be eaten at the same time, just within the same day.  
(Examples: Rice and beans, tortillas and beans, tofu and rice, hummus and pita bread, macaroni and cheese, peanut butter sandwiches)

### Daily protein requirement based on age

|                          | Grams of protein needed each day |
|--------------------------|----------------------------------|
| 1 to 3 years old         | 13                               |
| 4 to 8 years old         | 19                               |
| 9 to 13 years old        | 34                               |
| Girls 14 to 18 years old | 46                               |
| Boys 14 to 18 years old  | 52                               |
| Women 19+ years old      | 46                               |
| Men 19+ years old        | 56                               |



### Protein Content

| FOOD                    | AMOUNT      | PROTEIN(gm) | FOOD                                     | AMOUNT      | PROTEIN(gm) |
|-------------------------|-------------|-------------|--|-------------|-------------|
| Tempeh                  | 1 cup       | 41          | Textured Vegetable Protein (TVP), cooked | 1/2 cup     | 8           |
| Seitan                  | 3 ounces    | 31          | Peanut butter                            | 2 Tbsp      | 8           |
| Soybeans, cooked        | 1 cup       | 29          | Veggie dog                               | 1 link      | 8           |
| Lentils, cooked         | 1 cup       | 18          | Spaghetti, cooked                        | 1 cup       | 8           |
| Black beans, cooked     | 1 cup       | 15          | Almonds                                  | 1/4 cup     | 8           |
| Kidney beans, cooked    | 1 cup       | 13          | Soy milk, plain                          | 1 cup       | 7           |
| Veggie burger           | 1 patty     | 13          | Soy yogurt, plain                        | 6 ounces    | 6           |
| Chickpeas, cooked       | 1 cup       | 12          | Sunflower seeds                          | 1/4 cup     | 6           |
| Veggie baked beans      | 1 cup       | 12          | Whole wheat bread                        | 2 slices    | 5           |
| Pinto beans, cooked     | 1 cup       | 12          | Cashews                                  | 1/4 cup     | 5           |
| Black-eyed peas, cooked | 1 cup       | 11          | Almond butter                            | 2 Tbsp      | 5           |
| Lima beans, cooked      | 1 cup       | 10          | Brown rice, cooked                       | 1 cup       | 5           |
| Quinoa, cooked          | 1 cup       | 9           | Spinach, cooked                          | 1 cup       | 5           |
| Peas, cooked            | 1 cup       | 9           | Broccoli, cooked                         | 1 cup       | 4           |
| Tofu, firm              | 4 ounces    | 11          | Potato                                   | 1 med -6 oz | 4           |
| Tofu, regular           | 4 ounces    | 9           | Milk                                     | 1 cup       | 8           |
| Bagel                   | 1 med -3 oz | 9           | Meat                                     | 3 ounces    | 21          |
|                         |             |             | Yogurt                                   | 8 ounces    | 11          |