

## PROTEIN

### What Is Protein?

Protein is found in food from animals and plants. Protein provides the building blocks that help maintain and repair muscles, organs and other parts of the body.

### Why Is Protein Important for People with CKD?

When your body uses protein, it produces waste. This waste is removed by the kidneys. When kidney function declines, this waste may accumulate in the blood causing such symptoms as poor concentration, fatigue, poor appetite, nausea, sleep problems and dry or itchy skin.

#### ANIMAL-PROTEIN FOODS:

- Meat, such as pork, beef, chicken, turkey, duck
- Eggs
- Dairy products, such as milk, yogurt, cheese
- Fish

#### PLANT-PROTEIN FOODS:

High Protein:

- Beans, peas, lentils
- Soy foods, such as soy milk, tofu
- Nuts and nut spreads, such as almond butter, peanut butter, soy nut butter
- Sunflower seeds

Low Protein:

- Bread, tortillas
- Oatmeal, grits, cereals
- Pasta, noodles, rice
- Rice milk (not enriched)

### How Do I Eat the Right Amount of Protein?

Protein needs vary based on your age, sex and overall general health. Your provider can tell you what amount and types of protein are right for you. Here is some general information about protein types and serving sizes:

1. Eat smaller portions of meat and dairy. This will also help you lower the amount of phosphorus in your diet, because phosphorus is also found in meat and dairy foods.
  - Meat, poultry and fish: A cooked portion should be about 2 to 3 ounces or about the size of a deck of cards.
  - Dairy foods: A portion is ½ cup of milk or yogurt, or one slice of cheese.
2. Plant proteins should make up the rest of the protein that you eat. A serving is:
  - ½ cup of cooked beans
  - ¼ cup of nuts
  - a slice of bread
  - ½ cup of cooked rice or noodles

For more information, go to these websites:

[www.kidney.org/nutrition/Kidney-Disease-Stages-1-4](http://www.kidney.org/nutrition/Kidney-Disease-Stages-1-4) • [www.davita.com/diethelper](http://www.davita.com/diethelper)  
[www.usda.gov](http://www.usda.gov) • [ChooseMyPlate.gov](http://ChooseMyPlate.gov)

Sources: NKDEP, Protein: Tips for People with Chronic Kidney Disease, Sept 2011; PhosLo, Protein Finder, March 2007

# PROTEIN

	Low Protein	Higher Protein	High Protein
	All values are in grams (g)	All values are in grams (g)	All values are in grams (g)
<b>Meat, Poultry &amp; Eggs</b> Portions are 3 oz. fresh and cooked unless otherwise stated	Beef, ground, 20% fat, pan-broiled, 20.4 Duck, roasted, w/o skin, 20.0 Egg substitute, ¼ cup, 6.0 Egg white, 1 large, 3.5 Egg whole, 1 large, 6.2 Egg yolk, 1 large, 2.8 Veal, rib, lean, fat roasted, 20.4	Beef, ground, 5% fat, pan-broiled, 21.9 Beef, rib, lean, roasted, 23.4 Beef, round, eye, lean, roasted, 24.6 Pork leg, lean, roasted, 25.0 Pork sirloin, lean, roasted, 24.5 Pork, spareribs, lean, fat, braised, 24.7 Turkey, dark meat, w/ skin, roasted, 23.5 Turkey, light meat, w/ skin, roasted, 24.5	Beef, round, bottom, lean, braised, 26.9 Beef, top sirloin, lean, broiled, 25.8 Chicken, white meat, w/o skin, fried, 27.9 Lamb, loin, lean, broiled, 25.5 Lamb, shoulder, lean, braised, 30.2 Pork chops, lean, broiled, 25.7
<b>Seafood</b> Portions are 3 oz. fresh and cooked unless otherwise stated	Clams, mixed species, raw, 10.9 Crab, Alaska King, moist heat, 16.4 Oyster, moist heat, 6 medium, 5.9 Oyster, eastern, raw, 6 medium, 5.9 Scallop, 6 large, 14.3 Tuna salad, 13.6	Cod, Pacific, 19.5 Flounder, 20.5 Haddock, 20.6 Lobster, northern, 17.4 Pollock, 20.0 Shrimp, moist heat, 17.8	Halibut, Atlantic, 22.7 Salmon, Atlantic, wild, 21.6 Swordfish, 21.6 Tuna, light, cnd. in oil, 24.8 Tuna, yellowfin, 25.5
<b>Dairy</b> Portions as stated	Buttermilk, ½ cup, 4.1 Cheese, blue, 1 oz., 6.1 Cheese, cheddar, 1 oz., 7.1 Cheese, cream, 1 T, 1.1 Cheese, mozzarella, part skim, 1 oz., 7.8 Cheese, parmesan, grated, 1 T, 2.1 Cheese, provolone, 1 oz., 7.3 Ice cream, vanilla, ½ cup, 2.8 Sherbert, orange, 1 cup, 1.6 Soy milk, (dairy alternative), 4 oz., 3.4 Yogurt, plain, whole, 1 cup, 7.9	Cheese, swiss, 1 oz., 8.1 Milk, 1%, 1 cup, 8.0 Milk 2%, 1 cup, 8.1 Milk, condensed, sweetened, ½ cup, 12.0 Milk, evaporated, nonfat, ½ cup, 9.6 Milk, nonfat, 1 cup, 8.4 Milk, whole, 1 cup, 8.0 Yogurt, plain low fat, 1 cup, 11.9 Yogurt, plain, skim, 8 oz., 11.9	Cheese, cottage, creamed, large curd, 1 cup, 26.2 Cheese, cottage, (2% fat), 1 cup, 31.1 Cheese, cottage, (1% fat), 1 cup, 28.0 Cheese, ricotta, part skim milk, 1 cup, 28.2 Milk, dry, nonfat, ½ cup, 21.6
<b>Legumes &amp; Nuts</b> Portions= ½ cup unless otherwise stated	Beans, black, boiled, 7.6 Beans, kidney, boiled, 7.7 Beans, lima, 7.3 Beans, pinto, 7.0 Beans, refried, 6.9 Chestnuts, European, boiled, 2 oz., 1.2 Chickpeas, boiled, 7.2 Peanut butter, creamy, 2 T, 7.0	Almonds, 2 oz., 12.0 Beans, white, mature, boiled, 8.7 Cashews, dry roasted, 2 oz., 8.6 Hazelnuts, 2 oz., 8.4 Lentils, ckd., 9.0 Peas, split, 8.2 Pistachios, dry roasted, 2 oz., 11.6 Walnuts, English, 2 oz., 8.6	Peanuts, dry roasted, 2 oz., 13.4 Peanuts, oil roasted, 19.0 Pine nuts, dried, 2 oz., 13.6 Soybeans, boiled, 14.3
<b>Grains &amp; Cereals</b> Portions are 1 cup or 1 slice unless otherwise stated	Bread, Italian, 1 oz. slice, 2.6 Bread, oatmeal, .95 oz., 2.3 Bread, wheat, .88 oz., 2.3 Bread, white, .88 oz. slice, 2.1 Cereal, crispy rice, 2.0 Cereal, corn flakes, 1.8 Cereal, rice squares, 1 ¼ cup, 1.9 Doughnut, plain, 3 ¼", 2.4 Rolls, dinner, 1 roll, 2.4	Biscuits, plain, 2 ½", 4.2 Bread, French, 2.2 oz., 5.0 Bread, pita, white, 6 ½", 5.5 Bread stuffing, from mix, ½ cup, 3.2 Cereal, cream of wheat, regular, 3.8 Croissants, 1 medium, 4.7 Croutons, seasoned, 4.3 English Muffin, 1 whole, 4.4 Muffin, blueberry, 1 muffin, 3.7 Oatmeal, plain instant, 5.9 Rice, brown, ckd., 5.0 Rice, white, ckd., 3.5 Rolls, hot dog or hamburger, 1 roll, 3.7 Rolls, Kaiser, 1 roll, 5.6	Bagel, 4", 11.0 Bread crumbs, seasoned, 17.0 Rice, wild, ckd., 6.5 Spaghetti, enr., ckd., 6.5 Wheat flour, white, 12.9 Wheat flour, whole grain, 16.4