

PHOSPHORUS

What is Phosphorus?

Phosphorus is a mineral that helps to keep your bones healthy. It also plays a role in muscle function. Phosphorus is found naturally in protein such as meat, poultry, fish, nuts, beans and dairy products. Phosphorus is also added to many processed foods.

Why Is Phosphorus Important for People with CKD?

When you have CKD, phosphorus can build up in your blood. Elevated phosphorus levels contribute to weakening bones and joint pain. It can cause itchy skin. Elevated phosphorus levels also contribute to calcifying or stiffening of important blood vessels, which may contribute to cardiovascular disease including a heart attack. Most people with CKD need to lower their dietary intake of phosphorus. Your healthcare provider may talk to you about taking a medication with meals, a phosphate binder, to help lower the amount of phosphorus in your blood.

FOODS **LOWER** IN PHOSPHORUS:

- Fresh fruits and vegetables
- Corn and rice cereals
- Rice milk (not enriched)
- Light-colored sodas/pop
- Breads, pasta, rice
- Home-brewed iced tea

FOODS **HIGHER** IN PHOSPHORUS:

- Meat, poultry, fish
- Bran cereals and oatmeal
- Dairy foods
- Colas, especially dark colas
- Beans, lentils, nuts
- Beer
- Some bottled iced tea

How Do I Lower Phosphorus in My Diet?

1. Know what foods are lower in phosphorus.
2. Eat smaller portions of foods high in protein.
 - **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:** Keep your portions to 1/2 cup of milk or yogurt, or one slice of cheese.
 - **Beans and lentils:** Portions should be about 1/2 cup of cooked beans or lentils.
 - **Nuts:** Keep your portions to about 1/4 cup of nuts.
3. Eat fresh fruits and vegetables.
4. Avoid packaged and processed foods with added phosphorus, as phosphorus is frequently used as a preservative. Look for phosphorus, or for words with PHOS, on ingredient labels. (e.g. pyro **PHOS** phate).

Examples of foods that may have added Phosphorus:

- Fresh and frozen uncooked meats and poultry
- Frozen baked goods
- Chicken nuggets
- Cereals, cereal bars
- Baking mixes, instant puddings and sauces

For more information, go to these websites:

www.kidney.org/nutrition/Kidney-Disease-Stages-1-4 • www.davita.com/diethelper
www.usda.gov • ChooseMyPlate.gov

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

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	Low Phosphorus	Higher Phosphorus	High Phosphorus
	All servings are in milligrams (mg)	All servings are in milligrams (mg)	All servings are in milligrams (mg)
Meat & Poultry 3 oz. dry, cooked, or as stated	Chicken, thigh, w/o skin, roasted, 1/8oz., 95 Duck, w/skin, roasted, 133 Pork, loin chop w/bone, lean, fat, braised, 138	Beef, ground, 5% fat, pan-broiled, 189 Beef, ground, 20% fat, panbroiled, 174 Beef, chuck pot roast, 184 Beef, eye round select, roasted, 178 Beef, top sirloin choice, broiled, 187 Chicken, ½ breast w/o skin, roasted, 196 Turkey, breast w/skin, 184 Turkey, dark meat w/skin, 162	Beef, bottom round, lean, roasted, 203 Beefalo, roasted, 213 Pork, spare ribs, lean, fat, broiled, 222 Pork, leg, lean, roasted, 239 Pork, top loin chop, lean, fat, broiled, 202 Veal, leg & shoulder, lean, braised, 203
Seafood 3 oz. dry, cooked, or as stated	Cod, Atlantic, 117 Grouper, 122 Oysters, Eastern, raw, cnd., 118 Oysters, Pacific, raw, 138 Pork, loin chop w/ bone, lean, fat, braised, 138	Catfish, breaded, fried, 184 Cod, Pacific, 190 Crab, blue, moist heat, 175 Lobster, northern, moist heat, 157 Mussels, blue, raw, 167 Shrimp, breaded, fried, 185 Shrimp, cnd., 198 Snapper, 171	Calamari, fried, 213 Clams, moist heat, 287 Crab, Alaskan, moist heat, 238 Flounder, 246 Haddock, 205 Halibut, 242 Mussels, blue, moist heat, 242 Salmon, Atlantic wild, ckd., 218 Sole, 246 Swordfish, 286 Tuna, light, cnd. in oil, 264
Dairy & Eggs Portions as stated	Butter, 1 T, 3 Cream cheese, 1 T, 15 Cream, Half & Half, 1 T, 14 Egg white, 1 large, 4 Egg yolk, 1 large, 83 Ice cream, low/ red. calorie, vanilla, ½ cup, 72 Sherbet, orange, ½ cup, 30 Sour cream, fat free, 2 T, 37 Soy milk, (dairy alternative), 4 oz., 60	Cheese, blue, 1 oz., 110 Cheese, cheddar, 1 oz., 145 Cheese, mozzarella, whole milk, 1 oz., 105 Cheese, parmesan, hard, 1 oz., 197 Cheese, provolone, 1 oz., 141 Cheese, Swiss, 1 oz., 172 Cottage cheese, 1% fat, ½ cup, 152 Ice milk, soft serve, vanilla, 1 cone, 139	Buttermilk, 1 cup, 218 Cheese, ricotta, part skim, ½ cup, 227 Milk, nonfat, 1 cup, 247 Milk, 1 % lowfat, 1 cup, 234 Processed American Cheese, 1 oz., 211 Yogurt, low fat, plain, 1 cup, 327 Yogurt, non-fat, plain, 1 cup, 356 Yogurt, whole milk, plain, 1 cup, 216
Legumes 1/2 cup cooked or as stated	Peanuts, boiled, 55 Peas, split, mature, boiled, 97	Beans, black, mature, boiled, 121 Beans, fava, cnd., 101 Beans, kidney, mature, boiled, 126 Beans, lima, thin, immature, boiled, 111 Beans, pinto, boiled, 137 Beans, white, mature, cnd., 119 Black-eyed peas, mature, boiled, 134 Chickpeas, boiled, 138 Peanut butter, creamy, smooth, 2 T, 118	Lentils, mature, boiled, 178 Peanuts, dry roasted, 2 oz., 202 Peanuts, oil roasted, 372 Soybeans, boiled, 211
Grains & Cereals Portions as stated	Bread, pita, 6 ½" diameter, one, 58 Bread, pumpernickel, 1 slice, 46 Bread, white, 1 slice, 64 Corn flakes, 1 cup, 20 Crispy rice cereal, 1 cup, 31 Hominy grits, white, 1 oz., quick dry, 46	Bagel, plain, 3.7 oz., (4" diam.), 101 English muffin, plain, one, 2oz., 76 Spaghetti, enr., ckd., 1 cup, 76 Raisin Bran, ½ cup, 125 Rice, white, long grain, enr., ckd., 1 cup, 68 Shredded wheat, 1 rectangular biscuit, 103 Wheat flour, white, enr., 1 cup, 135	Bran Cereal, 100%, 1/3 cup, 236 Corn flour, whole grain, 1 cup, 318 Cornmeal, whole grain, 1 cup, 294 Oatmeal, inst. Prep., 1 cup, 176 Rice, brown, ckd., 1 cup, 162 Wheat bran flakes, ¾ cup, 157 Wheat flour, whole wheat, 1 cup, 415
Snacks & Sweets Portions as stated	Angel food cake, 1 oz., 9 Chestnuts, Chinese, boiled, 1 oz., 19 Cookies, shortbread, 4 (1 5/8" sq.), 36 Gelatin, dry mix, unsweetened, 1 oz., pkg., 11 Rice cake (brown rice), .32oz. cake, 32 Whipped topping, 1 T, <1	Cocoa, dry, prep. w/ water, 1 pkt., 89 Macadamia nuts, dry roasted, 2 oz., 112 Popcorn, air popped, 3.5 cups, 85	Almonds, dry roasted, 2 oz., 278 Cashews, dry roasted, 2 oz., 278 Pecans, dry roasted, 2 oz., 166 Walnuts, black, dried, 2 oz., 290 Walnuts, English, 2 oz., 196