

# Phosphorus



## What is phosphorus?

Phosphorus is an important mineral in the body that helps build bone and teeth. Phosphorus is needed for the body to create energy via adenosine triphosphate (ATP).

## How is phosphorus affected in dialysis patients?

The kidneys are responsible for excreting phosphorus. When the kidneys fail, phosphorus can build up in the blood and will cause calcium to leave the bone and enter the blood. Calcium leaving the bone can cause weak and painful bones. Excess phosphorus and calcium in the blood can build up in the soft tissues causing damage.

## Phosphorus Containing Foods:

| HIGH PHOSPHORUS<br>FOOD<br>>120mg |                 |            | MED. PHOSPHORUS<br>FOOD<br>70-120 mg |                 |             |
|-----------------------------------|-----------------|------------|--------------------------------------|-----------------|-------------|
|                                   | Serving<br>Size | Mg/Serving |                                      | Serving<br>Size | Mg/Serving  |
| Beans                             | ½ cup           | 210 mg     | Peas                                 | ½ cup           | 84 mg       |
| Chicken                           | 3 oz            | 155 mg     | Oysters                              | 3 oz            | 120 mg      |
| Turkey                            | 3 oz            | 173 mg     | Shrimp                               | 3 oz            | 120 mg      |
| Salmon                            | 3oz             | 252 mg     | Crab                                 | 3 oz            | 120 mg      |
| Ground Beef                       | 3 oz            | 161 mg     | Egg                                  | 1               | 99 mg       |
| Milk                              | 1 cup           | 127 mg     | Peanut Butter                        | 2 Tbs           | 92 mg       |
| Cheddar Cheese                    | 1 oz            | 146 mg     | Parmesan Cheese                      | 2 Tbs.          | 72 mg       |
| Yogurt                            | 1 cup           | 385 mg     | Blue Cheese                          | 1 oz            | 110 mg      |
| Baked Potato                      | 1               | 141 mg     | Cottage Cheese                       | ¼ cup           | 92 mg       |
| Pumpkin seeds                     | 1 oz            | 354 mg     | Granola Bar                          | 1               | 70 mg       |
| Soybeans                          | 1 oz            | 182 mg     | Corn Tortilla                        | 6-inch          | 75 mg       |
|                                   |                 |            | LOW PHORPHORUS<br>FOOD<br>< 70 mg    |                 |             |
|                                   |                 |            |                                      | Serving<br>Size | Mg/ Serving |
|                                   |                 |            | Apple                                | 1               | 10 mg       |
|                                   |                 |            | Blueberries                          | ½ cup           | 9 mg        |
|                                   |                 |            | Cherries                             | ½ cup           | 15 mg       |
|                                   |                 |            | Carrots                              | 9               | 25 mg       |
|                                   |                 |            | Almond Milk                          | ½ cup           | 50 mg       |
|                                   |                 |            | Egg whites                           | 1               | 15 mg       |
|                                   |                 |            | Couscous                             | ½ cup           | 20 mg       |
|                                   |                 |            | White rice                           | ½ cup           | 42 mg       |

# Potassium



## What is potassium?

Potassium is a mineral that is necessary for muscle contraction, nerve impulses, and maintains a regular heartbeat. Potassium can be found in a variety of foods.

## How is potassium affected in dialysis patients?

Normally, the kidneys regulate the amount of potassium in the blood. When the kidneys do not function properly, levels of potassium can build up in the blood. High blood levels of potassium can lead to weakness and the heart will begin to beat irregularly and slowly.

## Potassium Containing Foods:

| HIGH POTASSIUM FOOD<br>>300mg       | Serving Size | Mg/Serving | LOW POTASSIUM FOOD<br>< 150 mg | Serving Size | Mg/Serving |
|-------------------------------------|--------------|------------|--------------------------------|--------------|------------|
| Banana                              | 1 small      | 467 mg     | Grapes                         | 10           | 93 mg      |
| Orange juice                        | 8 fl oz      | 496 mg     | Lemon                          | ½            | 116 mg     |
| Potatoes                            | 1            | 422 mg     | Iceberg Lettuce                | 1 cup        | 80 mg      |
| Avocado                             | 1            | 450 mg     | Cucumber                       | ½ cup        | 88 mg      |
| Brussel sprouts                     | 1 cup        | 342 mg     | Green peppers                  | ½ cup        | 130 mg     |
| Tomato juice                        | 1 cup        | 535 mg     | Egg                            | 1            | 55 mg      |
| Cooked lentils                      | ½ cup        | 365 mg     | Strawberry ice cream           | ½ cup        | 124 mg     |
| Salmon                              | 3 oz         | 345 mg     | Cheddar cheese                 | 1 oz         | 27 mg      |
| 2% Milk                             | 1 cup        | 377 mg     | Oatmeal                        | 1 cup        | 130 mg     |
| Yogurt                              | 6 oz         | 398 mg     | Bagel                          | 1 small      | 67 mg      |
| Raisin Bran Cereal                  | 1 cup        | 362 mg     | Wheat bread                    | 1 slice      | 46 mg      |
| MEDIUM POTASSIUM FOOD<br>150-300 mg | Serving      | Mg/Serving |                                |              |            |
| Cherries                            | 10           | 151 mg     |                                |              |            |
| Apple                               | 1 small      | 195 mg     |                                |              |            |
| Broccoli                            | ½ cup        | 166 mg     |                                |              |            |
| Carrots                             | ½ cup        | 177 mg     |                                |              |            |
| Chicken                             | 3 oz         | 221 mg     |                                |              |            |
| Turkey                              | 3 oz         | 250 mg     |                                |              |            |
| Ricotta cheese                      | ½ cup        | 154 mg     |                                |              |            |
| Brown rice                          | 1 cup        | 154 mg     |                                |              |            |

# Sodium



## What is sodium?

Sodium is a mineral that helps maintain fluid balance in the body. Sodium helps regulate thirst and helps muscles and nerves function properly.

## How is sodium affected in dialysis patients?

The more sodium a patient consumes, the more fluid the patient retains. Excess fluid can lead to edema, high blood pressure, and more fluid must be removed during the dialysis process. It is important to control sodium level in order to maintain proper fluid balance.

## Sodium Containing Foods:

| HIGH SODIUM FOOD<br>>250mg | Serving Size | Mg/Serving | MEDIUM SODIUM FOOD<br>100 - 250 mg | Serving Size | Mg/Serving |
|----------------------------|--------------|------------|------------------------------------|--------------|------------|
| Tomato sauce               | 1 cup        | 1,284 mg   | Beans                              | ½ cup        | 175 mg     |
| Pickles                    | 1            | 569 mg     | Spinach                            | 1 cup        | 190 mg     |
| Canned corn                | 1 cup        | 571 mg     | Poached Egg                        | 1            | 150 mg     |
| Cured bacon                | 2 slices     | 293 mg     | Salmon                             | 3 oz         | 114 mg     |
| Ham                        | 2 slices     | 603 mg     | Sausage                            | 1 piece      | 103 mg     |
| Cottage cheese             | 1 cup        | 745 mg     | Milk                               | 1 cup        | 107 mg     |
| Ranch salad dressing       | 2 Tbs        | 260 mg     | Yogurt                             | 8 oz         | 175 mg     |
| Parmesan cheese            | 1 oz         | 433 mg     | Chocolate Pudding                  | ½ cup        | 139 mg     |
| Pretzels                   | 1 oz         | 359 mg     | Whole Wheat Bread                  | 1 slice      | 133 mg     |
| Tortillas                  | 1            | 950 mg     | Blueberry Muffin                   | 1 small      | 224 mg     |
| Bagel                      | 1            | 430 mg     | English Muffin                     | 1            | 245 mg     |



| LOW SODIUM FOOD   | Serving Size | Mg/ Serving |
|-------------------|--------------|-------------|
| Orange Juice      | 1 cup        | 2 mg        |
| Mandarin Oranges  | 1 cup        | 15 mg       |
| Corn              | 1 cup        | 1 mg        |
| Broccoli          | 1 cup        | 30 mg       |
| Ground Beef       | 3 oz         | 67 mg       |
| Vanilla Ice Cream | ½ cup        | 53 mg       |
| Spaghetti, cooked | 1 cup        | 1 mg        |
| Brownie           | 1 small      | 82 mg       |