Low Phosphorus Diet

Phosphorus is a mineral found in many foods.

Phosphorus in Your Diet
Your kidneys have the job of flushing out any of the phosphorus that your body does not need. When kidneys are not working as they should, phosphorus will build up in your blood. When this happens, it can lead to an imbalance between calcium and phosphorus levels. This imbalance can cause weakening of the bones. For good bone health, it is important to keep phosphorus blood levels within the normal range.

Medicines called "Phosphorus Binders" can be prescribed to help keep the phosphorus levels in your blood within normal range. To make these binders work they need to be taken with meals.

Examples of binder medicines include: Renagel®, Renvela®, Sevelamer Phoslo®, Calcium acetate, Tums®, Auryxia®, Velphoro®, Lanthanum or Fosrenol®.

You cannot eliminate phosphorus from your diet. You can limit your intake of foods that contain phosphorus additives or are high in phosphorus. Your dietitian will recommend the amount of phosphorus you can safely eat throughout the day.

The foods you eat are very important in controlling your blood phosphorus levels.

Removing Foods Rich in Phosphorus from Your Diet

Foods with Phosphorus Additives
Many food products now contain phosphorus additives. Phosphorus additives in food are absorbed nearly 100% into your blood. Phosphorus in more natural foods like animal meats, beans, and nuts are absorbed in much lower amounts. **Because of this, foods with phosphorus additives should be avoided if you are trying to limit phosphorus.**

Phosphorus additives can be found on the food label in the ingredients list as words that contain "phos", such as phosphoric acid, hexametaphosphate, or tricalcium phosphate. Always read the ingredients list of packaged foods for "phos" foods.

Foods that contain phosphorus additives include:

- Processed meats such as hot dogs, bacon, ham, chicken nuggets and other frozen meat products, lunch meat (bologna, salami, etc.), and sausage.
- Meats labeled "Enhanced" or "injected" – which can apply to any type of meat including chicken, beef, turkey, etc.
- Many bottled beverages, such as:
    - Colas (Coke®, Pepsi®, Dr. Pepper®)
    - Some brands of iced tea
    - Juices, including Minute Maid®, Tropicana®, and Hawaiian Punch®
    - Flavored waters, including Propel® or Aquafina Flavorsplash®

    - Beer
    - Chocolate or Cocoa drinks
    - Energy Drinks
- Convenience baked goods such as baking mixes (cookies, cakes, pancakes, waffles), refrigerated biscuit dough, frozen waffles or pancakes, and instant or quick-cooking cereals.
- Fast food and other restaurant foods. Nearly all fast food contains phosphorus additives.

Animal Products (Meat and Dairy)
If you removed all phosphorus additives and still have a high phosphorus, limiting meats and dairy products can be helpful. You absorb about 60-70% of the natural phosphorus from animal sources compared to 100% from phosphorus additives. Keep animal proteins to 3 ounces or slightly less at a meal. Half of your weekly meals should be plant-based (no animal protein). When you do have animal protein, choose lean sources of meat such as chicken, turkey, and fish.

Meats and Protein Foods
- Meats such as beef, pork, chicken, sausage, turkey, fish, organ meats, and seafood.

Milk and Dairy Products
- White and chocolate milk, cheese, yogurt, ice cream, custard, pudding, cream soup, cheese and milk casseroles, some brands of soy milk and eggnog.

Plant-based foods (Fruits, Veggies, Grains, Beans, Nuts, Seeds)
Many nutritious foods like beans, nuts and grains have natural occurring phosphorus. We absorb the least amount of phosphorus from these foods. About 20-50% is absorbed compared to 60-70% from animal products and 100% from phosphorus additives. These foods also have many health benefits. Most people do not need to restrict these foods. Ask your renal dietitian if they recommend any restrictions.

Beans
- Navy, kidney, pinto, lima, soybeans, lentils and black-eyed peas and hummus

Grains
- Bran, bran products, and wheat germ

Nuts and Seeds
- Nuts (including soybean nuts), peanut butter, sunflower, pumpkin and sesame seeds

Substituting Foods Lower in Phosphorus in Your Diet

Meats and Protein Foods
- Lean sources of protein, like chicken, turkey, fish. Try to keep these to 3 ounces or less at a meal and for half of weekly meals or less to contain animal proteins.

Dairy Products
- Milk and yogurt alternatives made from soy, oat, almond or coconut that do not contain any phosphorus additives.

Grain Products
- White products without phosphorus additives.

*Whole grain products will have a little more phosphorus than white or refined grain products. However, whole grains provide many additional health benefits.

Miscellaneous

- Vanilla cookies, animal crackers, jellybeans, popcorn, fruit roll-ups, hard candy, mints, licorice, sherbet, popsicles, Italian ice.
- Root beer, ginger ale, Sprite®, Slice®, 7-Up®, club soda
- Most fruits and vegetables are low in phosphorus
- Non-dairy Frozen Dessert topping

Signs of High Blood Phosphorus Levels

- Itching or damaged skin
- Bone pain
- Red eyes
- Fractures
- Joint Pain

Who to Call

If you have questions, please contact your provider through MyChart or call your provider listed in your After Visit Summary or After Hospital Care Plan. For a list of UW Health Clinics, visit www.uwhealth.org/.

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 1/2026 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#156