Low Phosphorus Diet

What is phosphorus?
Phosphorus is a mineral found in many foods.

Why do I need to be aware of it in my 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.

You cannot totally eliminate phosphorus from your diet, but you can limit your intake of high phosphorus foods. 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.

These foods are rich in phosphorus.

Meats and Protein Foods
Organ meat such as liver, liver sausage, liverwurst, sardines, summer sausage, and bratwurst

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

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

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

Nuts and Seeds
Nuts (including soybean nuts), peanut butter, sunflower, pumpkin and sesame seeds
AVOID brown sodas (like colas), chocolate, caramel, molasses and beer.

Foods that are lower in phosphorus, and may be substituted in your diet include:

**Meats and Protein Foods**
Fresh beef, pork, veal, chicken, turkey, and fish

**Dairy Products**
Eggs (one per day), cottage, cream, Neufchatel, or Brie cheese

**Grains**
Pasta, crackers, buns and English muffin (made with white flour), rice cakes, white bread, white rice, white or yellow cakes, corn and rice cereals (Corn Chex®, Corn Flakes®, Corn Pops®, Crispix®, Rice Krispies®, Trix®, Puffed Wheat®, Apple Jacks®, Fruit Loops®), hominy and Cream of Rice®

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

Some signs of high blood phosphorus levels include:

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

**Phosphorus Additives**
Many food products now contain phosphorus additives. Phosphorus additives in food are absorbed nearly 100% into your blood, whereas the phosphorus in more natural foods like meats, beans, and nuts are only absorbed 20-50%. **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 most often contain phosphorus additives include:

- Processed meats such as hot dogs, 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

**Teach Back:**

What is the most important thing you learned from this handout?

What changes will you make in your diet/lifestyle, based on what you learned today?

If you are a UW Health patient and have more questions please contact UW Health at one of the phone numbers listed below. You can also visit our website at [www.uwhealth.org/nutrition](http://www.uwhealth.org/nutrition)

Nutrition clinics for UW Hospital and Clinics (UWHC) and American Family Children’s Hospital (AFCH) can be reached at: **(608) 890-5500.**

Nutrition clinics for UW Medical Foundation (UWMF) can be reached at: **(608) 287-2770**

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 © 2/2016 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Clinical Nutrition Services Department and the Department of Nursing. HF#156