

How to prevent high phosphorus with kidney disease



What is phosphorus and how is it related to kidney disease?

Phosphorus is a mineral that is found in many foods and drinks. Phosphorus in your body comes from foods you eat and liquids you drink.

Healthy kidneys keep the right amount of phosphorus in your body. When you have kidney disease, your kidneys cannot do this job as well, which means that phosphorus can build up to high levels in your blood.

Why is it important to keep phosphorus levels in a normal range?

High phosphorus can cause serious bone problems

Phosphorus, calcium and vitamin D work together to help keep your bones strong and healthy, which means they all need to be in balance.

When you have too much phosphorus in your blood, your body will pull calcium out of your bones to help balance out the phosphorus. This can cause your bones to be soft, weak and brittle. Your bones will be more likely to break and have other problems.

High phosphorus can cause calcium to build up in your blood vessels and organs

High levels of phosphorus or calcium in your blood will cause calcium deposits in your blood vessels and other organs, such as your heart, lungs and joints. **Calcium deposits** are buildups of calcium that can cause symptoms such as itchy skin, joint pain and red eyes. Over time, calcium deposits in blood vessels can make them hard and lead to serious health problems, such as heart attacks, strokes and painful open skin sores.

How can I manage my phosphorus levels?

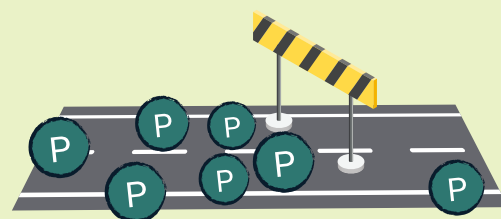
Food

Follow a low phosphorus eating plan as prescribed by your dietitian. The less phosphorus you take in, the lower the phosphorus levels in your blood will be.

Medicine

You may be prescribed different medicines to help lower your phosphorus levels:

- A phosphate binder soaks up phosphorus in your stomach or intestines before your body has a chance to absorb it. Because binders are soaking up phosphorus from the food you eat, they must be in your stomach with the food, and so must be taken every time you eat.
- A phosphate blocker acts as a roadblock to block phosphorus from getting into your bloodstream. If you are on dialysis, your doctor may recommend this as an additional medicine. It's typically taken twice a day.











Talk to your doctor to see what is right for you.

Dialysis

Go to and complete all your dialysis treatments.

What are the types of phosphorus?

There are two main types of phosphorus: **natural** and **added** phosphorus. **Natural phosphorus** is found naturally in foods. **Added phosphorus** is added to preserve packaged or processed foods. Your body absorbs phosphorus differently depending on the type of food:


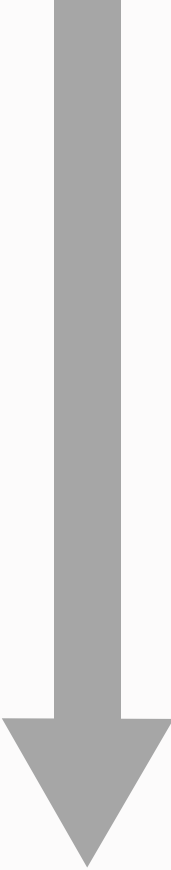



Type of food	How much (percent) of the phosphorus your body absorbs
 Grains	 40%
 Meat, beans and nuts	 60%
 Dairy	 80%
 Added phosphorus	 100%

Tips for a low-phosphorus eating plan


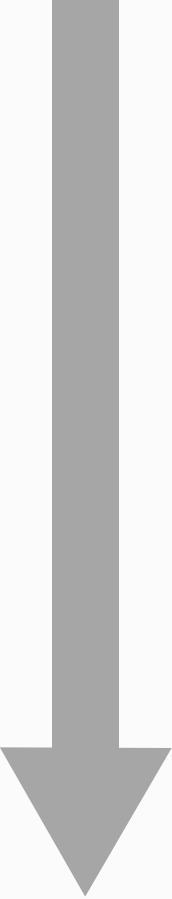



Almost all foods have phosphorus. Here are tips to choose natural and low-phosphorus foods:

- Choose foods that **do not have added phosphorus**. Check food labels and **avoid foods that have “phos” in the ingredient list**, such as phosphoric acid and aluminum phosphate. Even plant-based products, such as “plant-based burgers” may have extra phosphorus.
- **Focus on buying whole foods** instead of prepackaged foods and meals. Whole foods are mostly on the outside aisles of the grocery store and include fruits and vegetables.
- **Replace high-phosphorus foods with low-phosphorus alternatives**—see the table below.

Replace high-phosphorus foods with low-phosphorus alternatives

Food types	Low and natural phosphorus foods to eat	High and added phosphorus foods to avoid	How much phosphorus your body absorbs
Grains 	<ul style="list-style-type: none"> • Whole grains • Bran • White breads • Rice • Pasta • Cooked oats • Dry corn and rice cereals (with or without almond milk or unflavored rice milk) 	<ul style="list-style-type: none"> • Bisquick® • Flour Tortillas 	<p style="text-align: center;">Lowest Absorbed</p>  <p style="text-align: center;">Highest Absorbed</p>
Meats 	<ul style="list-style-type: none"> • Fresh meats such as beef, chicken, fish, pork and turkey • Deli meat without added phosphorus such as “Hormel® Natural choices” 	<ul style="list-style-type: none"> • Organ meat and game meats • Processed meats, such as: <ul style="list-style-type: none"> ◦ Bacon ◦ Sausage ◦ Deli meats 	
Beans and nuts 	<ul style="list-style-type: none"> • Beans—rinse canned beans with water • Nuts—stick to 1/4 cup per day 	<ul style="list-style-type: none"> • Chocolate-covered nuts 	
Dairy 	<ul style="list-style-type: none"> • Almond milk • Unflavored rice milk • Greek yogurt • Sherbet • Low-sodium, broth-based soups • Ricotta, brie and low-salt cottage cheese 	<ul style="list-style-type: none"> • Cow’s milk • Non-Greek yogurt • Ice cream • Cream-based soups • Coffee creamer • American cheese 	

Replace high-phosphorus foods with low-phosphorus alternatives, continued

Food types	Low and natural phosphorus foods to eat	High and added phosphorus foods to avoid	How much phosphorus your body absorbs
Drinks 	<ul style="list-style-type: none"> • Mug® Root Beer • Cream soda • Light colored soda, such as Sprite® • Orange soda • Hint® flavored water • Brewed iced tea or Pure Leaf Iced Tea® 	<ul style="list-style-type: none"> • Dark colas, such as Coke® • Flavored water such as Fruit20®, Hi-C® and Propel® • Powdered drink mixes • Most premade (bottled) iced tea 	<p style="text-align: center;">Lowest Absorbed</p>  <p style="text-align: center;">Highest Absorbed</p>
Candy items 	<ul style="list-style-type: none"> • Jellybeans • Fruit snacks • Sugar-free hard candies • York Peppermint Patties • Three Musketeers Minis 	<ul style="list-style-type: none"> • Chocolate • Chocolate with nuts, caramel or coconut • Chocolate with peanut butter 	
 <p>If you are diabetic, try sugar-free hard candies and make a plan to include any candy items in your meal plan.</p>			
Packaged foods and meals 	<ul style="list-style-type: none"> • Peanut butter on low sodium crackers • Kellogg's® meal bars • Homemade pancakes • Flavored rice cakes • Microwavable meals: Lean Cuisine® and Amy Cuisine®(ask your dietitian for more options) • ReddiWhip® • Pre-made and ready-to-eat Jello® 	<ul style="list-style-type: none"> • Lance Crackers® • Poptarts® • Bisquick® • Little Debbie snacks® • Tasty Cake® • Microwavable meals: Banquet® and Marie Callendar's® • Fast food • Prepacked meals • Cool Whip® • Jello® powder 	

Talk with your doctor and dietitian to learn your specific needs and to create an eating plan that's right for you.

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