

Answering Your Questions About Phosphate Binder Medication

Why is my medication so important?

Dialysis alone cannot remove all the extra phosphorus from your blood. That's why you need to take your phosphate binder as directed.

Do I have to take my medication with meals?

Yes, it's important to take your medication during your meal or immediately after eating. Before phosphorus from your food is absorbed by your digestive system, your medication binds to it like a magnet. If time passes between when you eat and when you take your medication, the medication won't work.

What happens if I miss a dose?

Your medication can only work on phosphorus *before* it's absorbed in your stomach. If you have any questions, please ask your doctor.

Will I feel differently after taking my medication?

You may not, but even if you cannot feel it working, you should still take your medication as directed. Over time, you'll start seeing that your medication is working when you have your scheduled labs drawn and your phosphorus levels improve. Your phosphorus goal should be within a target range of 3.5-5.5 mg/dL.

How can I remember to take my medication?

Try leaving yourself reminder notes. You can leave a note on your refrigerator, cabinet or in your lunch box — anywhere that will help you remember to take your medication with your meal or snack. You can also ask friends or family to remind you.

I don't like swallowing a lot of pills. Is there another way to take my medication?

There are several different types of phosphate binders. Some require you to take one tablet per meal while others may require four or five. You can also get binder medication that is chewable if you have difficulty swallowing pills or are worried about fluid restrictions. Talk to your doctor and renal health care team about which medication is best for you.



DPC
1155 15th Street, NW
Suite 1100
Washington, DC 20005

www.dialysispatients.org

*A supplement to DPC's
The Patient Citizen,
brought to you by Shire.*

Why You Should Care About Phosphorus



Your health care team has probably talked with you about hyperphosphatemia (hi-per-fos-fa-TEAM-e-uh), or too much phosphorus in your blood. You know that there are certain foods you are supposed to limit, medication you need to take, and dialysis appointments to attend. But if you can't feel hyperphosphatemia, why should you worry about it?

As you may remember, phosphorus is a mineral that is in many foods, like milk, eggs, and nuts. Some phosphorus is good for you. Your body uses what it needs, and then your kidneys clean the extra phosphorus out of your blood.

But when your kidneys don't work well, phosphorus can build up in your body. In fact, about 7 out of 10 people on dialysis have hyperphosphatemia. If it is not treated, it can be a serious problem.

When phosphorus builds up in your body, it can cause:

- bone disease
- heart disease
- death

How do I know if I have hyperphosphatemia?

Symptoms may include itchy skin, bone pain, or joint pain, but you may not have any symptoms at all. So even if you feel fine, you should have your labs drawn as directed. Your health care team will help you keep track of your phosphorus levels

so you can avoid serious, potentially life-threatening, health conditions associated with hyperphosphatemia, including heart disease and bone complications.

What can I do?

It takes the Power of 3 — diet, dialysis, and medication — to manage kidney disease and high phosphorus levels. Your phosphorus level should be within a target range of 3.5-5.5 mg/dL. Work with your dietitian to choose kidney-friendly meals, keep your dialysis appointments — and stay the entire time. Also, be sure to take your phosphate binder during or immediately after all your meals and snacks. *You can do it!*



For Your Health

The Power of 3

It takes the Power of 3 – diet, dialysis, and medication – to manage your hyperphosphatemia, or too much phosphorus in your blood. By staying on top of all three, you may be able to avoid serious health conditions associated with high phosphorus, including bone disease and heart problems.

Diet

Your renal dietitian has talked with you about kidney-friendly foods to include in your diet, as well as foods you should limit. Although you need some phosphorus in your diet, you may need to limit foods that are especially high in phosphorus.

Dialysis

Even when you follow your prescribed diet, there will still be some phosphorus that builds up in your body. If your kidneys aren't working well enough, you may need dialysis to remove the extra phosphorus. But dialysis alone can't do the job.

Medication

Most foods contain phosphorus, so it is also necessary to take a medication called a phosphate binder. When you take your binder during or immediately after meals and snacks, it attaches like a magnet to the phosphorus in the food you eat, keeping it from being absorbed into your body. It is important to remember to have your phosphate binder with you wherever you go, so you don't miss doses.

As you can see, it all adds up. Diet, dialysis, and medication are all important on their own, but it takes a combination – the Power of 3 – to manage your high phosphorus and kidney disease.

Please talk with your doctor or renal dietitian before making any changes to your diet.



Does portion size matter?

When you're on a low-phosphorus diet, it is important to watch what you eat. But you should also remember that *how much* you eat is just as important. When you read a food's nutrition label, that information is based on an exact serving size. If you eat more than that, the nutritional value can change considerably.

For example, a 1-ounce serving of cream cheese contains ~30 mg of phosphorus. That's generally considered to be a good, low phosphorus food choice. But if you eat 4 or 5 ounces, you're eating 120-150 mg of phosphorus. That's a big difference!

So how much is a serving size? It is different for each food, but the chart at right will help you get started.

Food Serving:	About the Size of a:
2-3 oz fresh fish	deck of cards
1 cup of dry corn cereal	baseball
½ cup of sliced fruit	small computer mouse
½ cup green beans or other cooked vegetable	light bulb
1 cup pasta	tennis ball

If you don't know the correct serving size for one of your favorite foods, don't forget to check the label on the packaging. But if you're still unsure, talk with your renal dietitian.

Finding Hidden Phosphorus

Kidney disease can cause a buildup of phosphorus in your body, which is not healthy. Eating a low-phosphorus diet can help. That means choosing foods low in phosphorus when you shop for groceries.

Phosphorus is found in almost all foods. One way to plan a low-phosphorus menu is to limit foods your renal dietitian has told you are high in phosphorus, such as milk and nuts. Other types of foods that are high in phosphorus include cola soft drinks, foods labeled “calcium-fortified,” cocoa, and dried beans and peas.

Many processed foods also contain phosphorus as a preservative (to improve shelf life). You may not even know a food has been processed or enhanced unless you read the label carefully – including the small print.

Check the Nutrition Facts label (example below) when you shop. Some foods, but not all, list the amount of phosphorus they contain. If phosphorus isn't listed in the Nutrition Facts, the food may still have phosphorus.

To find phosphorus “hidden” in foods, look for words such as the ones below in the list of ingredients.

- Sodium polyphosphate
- Sodium tripolyphosphate
- Phosphoric acid
- Disodium phosphate
- Monosodium phosphate
- Potassium tripolyphosphate
- Sodium acid pyrophosphate
- Sodium hexametaphosphate
- Tetrasodium pyrophosphate
- Trisodium triphosphate

These are just a few of the words that may mean there is “hidden” phosphorus. Please talk with your doctor or renal dietitian before making any changes to your diet.

Example:

Nutrition Facts	
Per Serving - 1/6 of recipe	
Calories:	285 kcal
Protein:	22 g
Carbohydrates:	28 g
Sugars:	4 g
Fiber:	2 g
Total Fat:	9 g
Sat Fat:	3 g
Trans Fat:	0.02 g
Cholesterol:	65 mg
Phosphorus:	236 mg
Sodium:	129 mg
Calcium:	82 mg
Potassium:	369 mg/9.4 mEq
mEq = milliequivalent	

Cooking Up Kidney-Friendly Foods When You Have Diabetes

Looking for ways to make your meals tasty and healthy? That can be hard when you have both kidney disease and diabetes. Sometimes the list of what you can't eat can seem longer than the list of foods you can.



But healthy doesn't have to mean bland and tasteless. Now there's a cookbook just for you. To help you make mealtime more manageable, Shire has developed Kidney Friendly Comfort Foods, Volume II, a cookbook of low-phosphorus recipes.

From Dutch Apple Pancake Puffs to Three Berry Cheesecake, you'll get recipes for appetizers and entrees for breakfast, lunch, and dinner, as well as desserts. Plus, each recipe includes the nutrition information you need to help you manage your diet.

Best of all, it's **FREE**. Just call (866) 896-6152 or visit www.hyperphosphatemia.com to order your copy today.

Please talk with your doctor or renal dietitian before making any changes to your diet.