



# Managing your Phosphorus levels



**Children's Hospital**  
New Orleans  
LCMC Health

# Overview, diagnosis, and management

## What is Phosphorus?

Phosphorus is a mineral that is important in helping your body work and grow. Phosphorus is involved in building healthy bones and teeth. It is found in a lot of foods and drinks.

## What is the relationship between the kidneys and Phosphorus?

When the kidneys are no longer working as normal or stops working, phosphorus builds up in the body. Too much phosphorus in the body can be dangerous.

## What are the dangers of high phosphorus levels?

If left untreated or steps are not taken to lower phosphorus in your diet, serious health problems can occur. High phosphorus leads to low calcium levels. When calcium levels are low your muscles may cramp, bones become weak, itching may start and/or seizures may occur. More serious problems include increased risk of heart disease, hardening of organs and blood vessels, and death.

## How is high phosphorus treated?

Treating high phosphorus levels include diet restrictions, binders, and adherence to dialysis plan of care. With the help of your dialysis team and following your plan of care, you can lower high phosphorus levels.

## What foods should I limit or avoid?

Foods to limit and/or avoid are dairy products (cheese, milk, ice cream, yogurt), most dark appearing sodas because phosphorus is found more in these products compared to sodas that are clear in appearance; oats, brown rice, and nuts are a few of the foods to limit. A list of foods to limit and/or avoid is located at the end of this brochure.

## What are food alternatives low in phosphorus?

Some foods to include are almond milk, sherbet, egg whites, chicken, turkey, and beef. A list of foods to include or substitutions is at the end of this brochure. It is very important to take phosphorus binders when eating to better help control high phosphorus levels.

## What are phosphorus binders?

Binders are prescribed to help lower phosphorus levels in your blood. The medication works by binding the phosphorus found in the foods and/or drinks and preventing it from being absorbed into the blood.

A few common binders ordered by your kidney doctors are:

- Tums (Calcium Carbonate)
- PhosLo (Calcium Acetate)
- Renagel (Sevelamer HCl)
- Renvela (Sevelamer Carbonate)

In the back of this brochure, you can find helpful tips on phosphorus binders.

## Nephrology/Dialysis Team

Avoiding or limiting foods with phosphorus can be challenging but with the right planning, education, and following recommendations by your dialysis team, it is possible to have phosphorus levels in normal ranges.

We are here to help our patients and caregivers achieve the best quality of life through continued teamwork.



# High phosphorus foods to limit and better choices

## Higher Phosphorus protein

- Processed meats like bacon, ham, hotdogs, chicken nuggets or strips, bologna, salami, or sausage.
- Breaded or fried meats, chicken, fish, or seafood

## Higher Phosphorus dairy

- Non-dairy creamers, enriched almond or rice milk
- Processed cheese, such as American
- Processed cheese spreads and dips, such as Velveeta, CheezWhiz, fat-free cream cheese or sour cream
- Ice cream, pudding, yogurt, or frozen yogurt

## Higher Phosphorus fast food

- Grilled or fried chicken, including nuggets, sandwiches, strips, or wings
- Pizza, tacos or hot dogs
- Any sandwiches with ham, American cheese, or bacon
- French fries, other fried potatoes, biscuits, or macaroni and cheese

## Higher Phosphorus baked goods

- Biscuits, brownies, cakes, muffins, pancakes, pastries, or waffles that are ready-to-eat, or made from a dry mix
- Refrigerated or frozen dough for biscuits, cookies, pastries, or sweet rolls

## Higher Phosphorus drinks

- Any drink that has "phos" listed in the ingredients:
- Coke, Pepsi, Dr. Pepper, energy or sports drinks, most bottled or canned coffees, teas and flavored waters, Crystal Light grape, fruit punch, orange or raspberry flavors

## Better choices

- All-natural chicken, turkey, fish, or seafood
- Lean and fresh beef, lamb, pork, veal, or wild game
- Cottage cheese with no "phos" ingredients

## Better choices

- Unenriched almond or rice milk
- A small amount of natural cheese, such as Brie, Feta, Swiss, cheddar or mozzarella
- Regular or low-fat cream cheese, Neufchatel, or sour cream
- Sherbet, sorbet, fruit ice or Popsicles

## Better choices

- Fish filet sandwich (no cheese)
- Hamburger (no cheese)
- Tuna or egg salad sandwich (no cheese)
- Side salad without cheese
- Coleslaw, apple slices, applesauce, grapes or carrots

## Better choices

- Fresh loaf bread, buns, dinner rolls, bagels, English muffins, pitas, or small croissants without "phos" ingredients
- Reduced-salt popcorn, pretzels, or tortilla chips

## Better choices

- Water
- Drinks without "phos" ingredients:
- 7-Up, Sprite, Sierra Mist, root beer, orange soda, fresh squeezed lemonade, fresh-brewed coffee, or tea (made from coffee beans, coffee powder or ta bags)
- AriZona teas, Pure Leaf teas, Snapple teas, Crystal Light (lemonades, tea and green teas, and all "pure" flavors")

# Reading food labels for Phosphorus

**Serving Size** tells you what a single portion is

**Servings Per Container** lists how many portions per container

**% Daily Value** is based on a 2,000-calorie daily diet. This number helps you know if a food is high or low in a nutrient, even if you eat more than 2,000 calories.

Phosphorus is not required to be listed by law. It is listed in this example but may not be listed even if the product contains phosphorus. In this example, the daily value of phosphorus is 35% so it may not be a good choice for you.

**Ingredients** are listed in order of weight, with the item of the most weight listed first.

In general, % daily value phosphorus is

- Low: less than 5% or under 50mg
- Medium: 5-10% or 51-100mg
- High: Over 10% or over 100mg

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Nutrition Facts	
Serving Size 1 cups (240g)	
Servings Per Container 8	
Amount Per Serving	
<b>Calories</b> 110	Calories from Fat 20
% Daily Values*	
<b>Total Fat</b> 2.5g	<b>4%</b>
Saturated Fat 1.5g	<b>8%</b>
Trans Fat 0g	
<b>Cholesterol</b> 15mg	<b>5%</b>
<b>Potassium</b> 410mg	<b>12%</b>
<b>Sodium</b> 130mg	<b>5%</b>
<b>Total Carbohydrate</b> 13g	<b>4%</b>
Dietary Fiber 0g	<b>0%</b>
Sugars 12g	
<b>Protein</b> 8g	<b>16%</b>
Vitamin A 10%	• Calcium 50%
Vitamin D 25%	• Vitamin B12 15%
★ Phosphorus 35%	
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.	
	Calories 2,000 2,500
Total Fat	Less than 65g 80g
Sat Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2400mg 2400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g

★

1% Low Fat Milk  
Calcium Enriched

★  
**INGREDIENTS:**  
Low Fat Milk, Tribasic Calcium Phosphate (Calcium ingredient not in regular milk) Carrageenan, Guar Gum, Lactase Enzyme, Vitamin A Palmitate and Vitamin D<sub>3</sub>

**Take action!**

Read the ingredients to find out if a food has added phosphorus. Look for ingredients with "phos" in the names such as:

- Phosphoric acid
- Sodium, **phosphate**
- Dicalcium **phosphate**

Academy of Nutrition and Dietetics. Pediatric Nutrition Care Manual. <http://www.nutritioncaremanual.org> Accessed September 14, 2022

# Phosphorus binders

## The do's and don'ts

- ✓ Take as prescribed!
- ✓ Take 5-10 minutes before or immediately after meal/snack
- ✓ Carry with you for meals out
- ✓ Track your phosphorus levels and discuss with your doc or dietitian.
- ✗ Self-prescribe
- ✗ Take apart from meals/snacks
- ✗ Skip because you're eating out.
- ✗ Ignore phosphorus levels because why bother?

## A day with phosphorus binders



**Breakfast**  
prescribed dose



**Lunch out**  
prescribed dose  
**+ extra binder\***

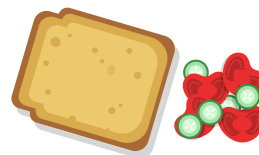


**Dinner**  
Prescribed dose



**AM snack**  
No binder (no phos!)

\*Always follow your prescribed phosphorus binder dose. Speak with your doctor about adding more binders if needed.



**PM snack**  
Prescribed dose





## Contact us

**Nephrology**  
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[chnola.org/our-services/nephrology](https://chnola.org/our-services/nephrology)



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