

Bone Disease and Kidney Failure



▶ What does bone disease have to do with kidney failure?

Healthy kidneys help keep your bones healthy. They do this in two ways.

- Healthy kidneys help keep the right amounts of phosphorus and calcium in your body. When your kidneys are not working, too much phosphorus can build up in your blood. This can cause your body to pull calcium from your bones, making them weak.
- Healthy kidneys also help your body use vitamin D. When your kidneys are not working, your body may not be able to use vitamin D like it should. This can also cause your bones to get weak.

▶ How will I know if I have bone disease?

Bone disease can start long before you show any signs. Because of this, it is often called the “silent crippler.” The only way to know how healthy your bones are is to be tested.

Your doctor may do a few tests to check levels of chemicals in your body that affect your bone health. Your doctor might suggest a:

- Blood test to check for:
 - Calcium
 - Phosphorus
 - Parathyroid hormone (also called PTH)
 - Vitamin D
- Bone density scan or x-ray
- Bone biopsy (rare)



▶ Why is it so important to prevent or treat bone disease?

Bone disease affects many people with chronic kidney disease. It puts you at risk for bone and joint pain, broken bones, infections and skin problems. The things that cause weak bones can also put you at risk for heart attacks.

Talk to your doctor about how to prevent or treat your bone disease. Simple steps can help prevent bone disease, like changing your diet and taking a phosphate binder with your meals.

Prevent or treat bone disease to help improve your quality of life!



► How is bone disease treated?

There are many steps you can take to help keep your bones healthy. Your doctor might suggest that you:

- **Limit how much phosphorus you eat.** Some foods are very high in phosphorus. Avoid or limit how much of these high-phosphorus foods you eat to help keep your bones healthy. A renal dietitian (someone who specializes in the kidney-friendly diet) can help you limit the phosphorus in your diet.
- **Take a phosphate binder.** This is a kind of medicine that you take when you eat. It helps limit how much phosphorus your body absorbs from your food. Remember to take this *with* your meals so it can work.
- **Take vitamin D.** Healthy kidneys help your body use vitamin D to absorb calcium from the food you eat. If your kidneys are not working, your doctor might prescribe a calcitrol, a man-made vitamin D, to help calcium absorption.
- **Exercise.** Exercise can help strengthen your bones and help keep them from breaking.
- **Avoid tobacco.** Using tobacco can make bone disease worse.
- **Follow your treatment plan.** Take your medicines as your doctor prescribes and do not skip any dialysis treatments. Dialysis helps get rid of extra phosphorus that can cause bone disease.
- **Adjust your treatment plan.** Having more dialysis can help your body get rid of extra phosphorus. If your phosphorus is still high after diet changes and medicines, your doctor may suggest more dialysis to help treat your bone disease.

High-Phosphorus Foods

Talk to your dietitian about how much of these high-phosphorus foods you should have:

- Milk
- Cheese
- Fish
- Red meat
- Dried beans and peas
- Nuts and peanut butter
- Whole grain bread
- Bran
- Cocoa
- Dark sodas
- Beer

► Where can I learn more?

For more information about bone disease and your kidneys, talk to your doctor. You can also call our toll-free HelpLine at 866.300.2900 or visit our website at www.kidneyfund.org.