

Chronic Kidney Disease and Diet

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More than 1 in 7 people in the United States are living with chronic kidney disease (CKD). Approximately 90% of people with CKD do not know that they have it. On top of that, 1 in 3 Americans are at risk for developing the disease. Some risk factors include diabetes, high blood pressure, heart disease, and obesity. Fortunately, these health conditions can be prevented, delayed, or managed with diet.

What is chronic kidney disease (CKD)?

Chronic kidney disease is a diagnosis for damaged kidneys. Kidneys play a major role in removing waste from the body. Your blood flows through the kidneys and they work to filter out unwanted compounds and excess fluid. The kidneys then work to remove the excess fluid and waste through urine. When kidneys are damaged, they cannot filter blood like they are supposed to. This can cause dangerous levels of waste and fluid to build up in your body.

Chronic kidney disease is diagnosed in stages and is determined by the amount of damage to the kidneys. These stages range from stage 1 to the most progressive form, stage 5. Your health-care provider will use medical tests, usually with blood and urine samples, to identify the stage of CKD. This will then determine the treatment plan. Being able to diagnose CKD early allows kidney function to be preserved and symptoms that people experience may be reduced.



What are the symptoms of CKD?

Chronic kidney disease can go unnoticed for some time. Symptoms often do not occur until the disease has progressed. Some symptoms of CKD include:

- Urinating more often than usual
- Bubbly or foamy urine
- Nausea and loss of appetite
- Feeling tired
- Unwanted weight loss

Symptoms may worsen as kidney disease progresses, if it remains untreated. These symptoms can advance to vomiting, numbness or swelling of the arms and legs, muscle aches and muscle cramps, difficulty breathing, and trouble sleeping.

Who is at risk for CKD?

Anyone can develop chronic kidney disease at any age, but some factors can put you at higher risk.

- Certain health conditions increase this risk including diabetes, high blood pressure, and heart disease.
- Family history of kidney disease also increases your risk.
- Smoking and having obesity are some modifiable factors that also put you at greater risk.

If you have any of these symptoms, conditions, or a family member with kidney failure, talk with your health-care provider about testing for kidney disease.

Management of CKD

Chronic kidney disease often goes undiagnosed until it has advanced to cause noticeable symptoms. CKD is often treated with medications to slow the progression of kidney damage. Medications may also be prescribed to treat other health conditions you may have like diabetes, heart disease, high blood pressure, and more. Use medications as prescribed by your provider and do not hesitate to ask any questions to make sure you are taking your prescribed medications correctly. Once the damage to kidneys has progressed to stage 5, the condition



must be treated with dialysis. This process removes waste and excess fluid from the blood when the kidneys are not able to.

Management of CKD can start in the kitchen. Depending on the stage of CKD, your provider may suggest changing your diet to be more mindful of specific nutrients like protein, sodium, phosphorus, potassium, or calcium. Work with your health-care provider and a registered dietitian to determine what nutrients you should focus on in your eating pattern and how to do so.

Kidney health in the kitchen

In general, those with CKD can follow general nutrition guidelines outlined in the Dietary Guidelines for Americans. These science-based guidelines encourage people to choose foods from plants more often. The United States Department of Agriculture's (USDA) MyPlate resource provides visual guidance to a balanced meal with more than 75% of the plate coming from plants in the grains, fruits, and vegetables groups. Organizations like the American Heart Association, the American Cancer Society, the American Diabetes Association, and the National Kidney Foundation also encourage people to eat plant-based foods to support overall health and well-being. By prioritizing plant food sources in eating patterns, we can prevent and manage chronic health conditions including CKD.

Prioritizing plants

Plant-based diets are eating patterns that incorporate more foods from plant sources. Plant foods include grains, nuts and seeds, fruits and vegetables, beans, peas, lentils, and products made from plants. Some people might mistake this as advice to remove all animal products from their diet. You can still enjoy food products from animal sources in moderation as part of a nutritious, balanced diet.



Adding more plant foods into your diet can help to increase your intake of nutrients we all need more of, like fiber. Plant foods are usually lower in nutrients we want to limit in our diets including sodium, saturated fat, and added sugars. Many of these plant-based foods come in fresh, frozen, and canned options helping to meet a variety of budget needs.

Canned and frozen vegetables may require some additional considerations for diets limiting sodium. Look for "low sodium" or "no salt added" options for canned vegetables and rinse them before eating. Some frozen vegetables include seasonings or sauces that can be high in sodium. When possible, choose plain frozen vegetables that give you the flexibility to flavor as you please.

For the prevention and management of many chronic diseases, the Dietary Guidelines and MyPlate resources can provide general guidance. Adding more plant foods into your existing eating pattern can help support overall health. However, there is not one specific eating plan that will work for everyone with kidney disease. Working with your health-care provider can help tailor your eating pattern to meet your needs.

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