

Fruit and Vegetables Help Improve Kidney Health in Black Adults

Black adults who received cooking instructions saw improved kidney health after six months.

December 12, 2023 By Laura Schmidt

A recent study found that Black Americans with early-stage [chronic kidney disease](#) responded well when provided with a [diet](#) that included cooking instructions for fruit and vegetable consumption, [Medical News](#) reports.

About 33% of American adults are at risk for kidney disease, according to the [National Kidney Foundation](#). Black adults are at an increased risk for kidney disease and more than three times as likely to have kidney failure compared with white adults. Risk factors for kidney disease include diabetes, high blood pressure, heart disease, obesity and family history of [kidney failure](#).

Published in [Kidney Medicine](#), the prospective randomized trial sought to determine whether providing fruits and vegetables along with cooking instructions to Black patients could reduce their risk for developing more severe chronic kidney disease and other conditions, such as cardiovascular disease.

The study involved 142 Black adults who had early-stage chronic kidney disease and a urine albumin to creatine ratio of more than 10 milligrams/gram, a significant risk factor for chronic kidney disease. The study builds off previous research showing that regularly eating fruits and vegetables reduces the risk for kidney damage in people with albuminuria.

Participants were split into two groups. One group was provided only two cups of fruits and vegetables per day for six months. The other group received a set of cooking instructions along with the same amount of fruits and vegetables.

After six months, both groups had a lower albumin to creatine ratio, lower glucose levels and lower blood pressure; however, participants who had been given cooking instructions had a 31% lower albumin to creatine ratio compared with the other group.

The National Kidney Foundation recommends increased fruit and vegetable intake as well as a [plant-based diet](#) rich in fiber, vitamins and minerals to reduce the risk of kidney disease, diabetes, high blood pressure and heart disease. A plant-based diet can also benefit people with early

kidney disease.

To learn more, click [#Diet](#) or read Real Health's [Basics on Kidney Disease](#). It reads in part:

What is chronic kidney disease (CKD)?

According to the National Kidney Foundation, chronic kidney disease (CKD) includes conditions that damage your kidneys and decrease their ability to keep you healthy by detoxifying and eliminating wastes in your blood, maintaining normal blood pressure, supporting healthy bones and tissues, regulating your body's salt potassium and acid content and producing hormones that affect the way other organs function.

In the United States, 30 million American adults have CKD, and millions of others are at increased risk.

What are the symptoms of CKD?

Signs and symptoms of chronic kidney disease develop over time if kidney damage progresses slowly. These may include:

- Nausea
- Vomiting
- Loss of appetite
- Fatigue and weakness
- Sleep problems
- Changes in how much you urinate
- Decreased mental sharpness
- Muscle twitches and cramps
- Swelling of feet and ankles
- Persistent itching
- Chest pain, if fluid builds up around the lining of the heart
- Shortness of breath, if fluid builds up in the lungs
- High blood pressure (hypertension) that's difficult to control.

What is the testing procedure for CKD?

Doctors primarily use blood and urine tests to check kidney function. These tests measure the levels of various substances in the body, such as urea, creatinine, certain electrolytes (sodium and

potassium, for example), glucose (sugar) hormones in the blood and protein in the urine.

Doctors may also use other tests to monitor reduced kidney function or determine whether another kidney disease condition is contributing to decreased kidney function. These may include an ultrasound of the kidneys to assess the size, shape and location of the kidneys and, at times, blood flow to the kidneys; an angiogram of the kidneys to check for problems caused by restricted blood flow; and a kidney biopsy to obtain a sample of your kidney tissue so that it can be examined under a microscope.