

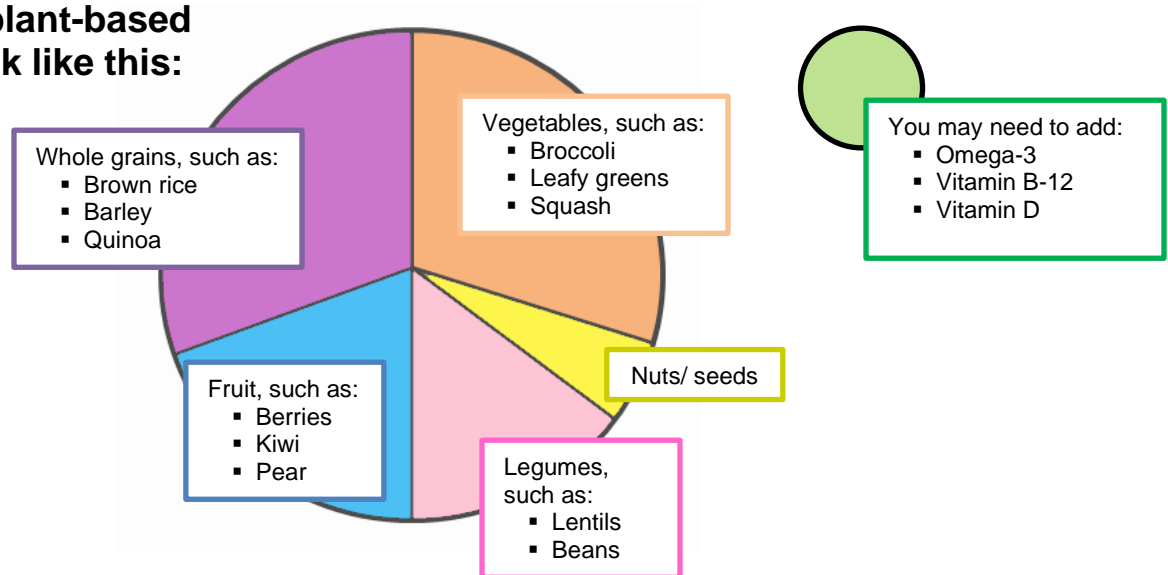
Plant-Based Diet and Chronic Kidney Disease

A Guide to Starting a Plant-Based Diet with Kidney Disease

What is a plant-based diet?

A plant-based diet is one that includes mostly plant foods like whole grains, fruits, vegetables, nuts, legumes (beans, peas and lentils), and healthy plant fats (such as olive oil or avocado oil). This diet is low in animal foods like dairy, eggs, fish, and meat. Ideally, this diet includes whole foods in place of highly processed foods.

A balanced plant-based plate can look like this:



Is a plant-based diet right for me?

Plant-based diets can help improve blood pressure, control high blood sugar (if you have diabetes), and maintain a healthy weight. Plant-based diets can help prevent other medical problems such as heart disease and help to manage or slow the progression of kidney disease.

How to start a plant-based diet

When making any change, it's important to make one small change at a time. The tips below can help get you started:

- Consider starting with just one plant-based meal per day.
- Look at your usual diet and find the foods you can swap out for plant-based alternatives. Ask about each food choice: Does this food come from a plant or animal? Is this food in its whole form? Has it been minimally processed and packaged?
- When in doubt, start by picking a fruit or vegetable to replace a more processed meal item or snack.

Nutrients to Consider

If you have kidney disease, you may need to be mindful of your intake of protein, potassium, phosphorus, and sodium. When starting a plant-based diet, it is important to consider certain nutrients.

Plant-based sources of protein and minerals may not be as fully absorbed as animal-based or highly processed foods. For that reason, you may not need to restrict these plant-based foods as much, or at all.

Talk with your kidney team about what nutrients you need to restrict on a plant-based diet. Your routine lab work will continue to be the best way to know how much of these nutrients you should be eating.

Protein

- Work with a Registered Dietitian to make a meal plan with the right amount of protein from beans, nuts, seeds, and nut butters.
- If eating animal protein, choose fish and skinless poultry more often than red meat. Cook egg whites in healthy plant fats. Avoid packaged and processed meats like hot dogs, sausage, bacon, which are often high in unhealthy fats and sodium.

Potassium

- Whole plant foods contain potassium and fiber. The fiber in these foods limits the potassium absorbed by the body. Work with a Registered Dietitian to make a meal plan with plenty of whole plant foods.

Phosphorus

- Very little of the phosphorus in whole plant-based foods is absorbed, so you do not need to limit these foods.
- If you include dairy (cheese, milk, or yogurt) in your diet, use in small amounts (1 oz cheese, ½ cup (4 oz) yogurt or milk).
- Limit or avoid highly processed and packaged foods, which contain added phosphorus that is easily absorbed by the body.

Sodium

- Sodium naturally found in plant-based foods does not affect your fluid status or blood pressure.
- Limit or avoid packaged and highly processed foods and snack items, which may affect your fluid status and increase blood pressure.

Supplements

- If avoiding all animal products, you may need to supplement certain vitamins and minerals. Talk with your doctor or Registered Dietitian before starting any new supplements.

Building a Plant-Based Meal

To make sure you are getting the right amount of nutrients your body needs, try to eat from all food groups. Pick items from each of the groups below to help you build your plate. Aim to choose “green light” foods most of the time, “yellow light” foods some of the time and aim to limit or avoid “red light” foods.

Food Group	Green Light	Yellow Light	Red Light
<p>Vegetables</p> <p>Goal: at least 5 servings per day</p> <p><i>One serving = 1 cup raw or ½ cup cooked</i></p>	<p>Fresh, frozen, or canned with no added salt. Some examples:</p> <p>Asparagus</p> <p>Bell pepper</p> <p>Broccoli</p> <p>Cabbage</p> <p>Cauliflower</p> <p>Cucumber</p> <p>Dark leafy greens (like kale, spinach, collard, and mustard greens)</p> <p>Green beans</p> <p>Mushrooms</p> <p>Onion</p>	<p>Canned vegetables with added salt</p> <p>Jarred marinara/ tomato sauces</p> <p>Potatoes (soak and rinse to reduce potassium)</p>	
<p>Legumes and beans</p> <p>Goal: at least 3 servings per day</p> <p><i>One serving = ½ cup</i></p>	<p>Beans- dry or canned* with no added salt: All varieties including lentils, soybeans/ edamame</p> <p>Tofu/tempeh</p> <p>*Rinse canned beans to lower sodium.</p>	<p>Meat alternative products (such as soy sausage, veggie burgers)</p>	
<p>Whole grains</p> <p>Goal: at least 4 servings per day</p> <p><i>One serving = ½ cup cooked grain/pasta, 1 slice bread, 1-6” tortilla</i></p>	<p>Barley</p> <p>Brown rice</p> <p>Oats- steel cut or rolled</p> <p>Quinoa</p>	<p>Corn tortillas</p> <p>Whole wheat bread, pasta, tortillas, chapati/roti</p>	<p>White bread</p> <p>Cookies/ cakes</p> <p>White rice</p> <p>Flour tortillas</p> <p>Chips</p> <p>Naan</p> <p>Pastries/ muffins</p>

Food Group	Green Light	Yellow Light	Red Light
<p>Nuts/Seeds</p> <p>Goal: 1-2+ servings per day</p> <p><i>One serving = ¼ cup nuts, 2 Tbsp nut/seed butter</i></p>	<p>Unsalted nuts (such as almonds, walnuts, pistachios)</p> <p>Pumpkin seeds</p> <p>Chia seeds</p> <p>Flax seeds</p> <p>Nut/seed butters (natural, no added sugar or salt)</p>		<p>Salted nuts</p> <p>Nut/ seed butters with added salt and/or sugar</p>
<p>Fruit</p> <p>Goal: 3+ servings per day</p> <p><i>One serving = 1 cup raw or ½ cup cooked/ blended</i></p>	<p>Fresh or frozen fruits, such as:</p> <p>Berries</p> <p>Apples</p> <p>Pears</p> <p>Banana</p> <p>Kiwi</p> <p>Melon</p>	<p>Dried fruit</p> <p>Apple sauce (unsweetened)</p> <p>Fruit leather</p> <p>Canned fruit in 100% juice</p> <p>Avocado</p>	<p>Jams/jellies</p> <p>Fruit snacks</p> <p>Canned fruit in heavy syrup</p> <p>Applesauce with added sugar</p>
<p>Beverages</p> <p>Talk to your doctor about your daily fluid goals</p>	<p>Water</p> <p>Sparkling seltzer/ soda water</p> <p>Unsweetened coffee and tea</p>	<p>100% fruit juice</p> <p>Clear diet soda</p> <p>Root beer</p> <p>Diet tea and juice</p> <p>Unsweetened milk alternatives (soy, almond, coconut, rice)</p>	<p>Regular dark sodas</p> <p>Sweetened coffee beverages</p> <p>Energy drinks</p> <p>horchata/ sweetened agua fresca</p> <p>Cow's milk</p> <p>Fruit punch/ Kool-aid®</p>
<p>Fats</p> <p>Goal: less than 1-2 tsp <u>per meal</u></p>	<p>Olive oil</p> <p>Avocado oil</p>	<p>Canola or vegetable oil</p>	<p>Animal-based fats such as butter and lard</p> <p>Coconut oil</p> <p>Coconut milk</p> <p>Margarine</p> <p>Pre-made salad dressings</p>



Resources

General Resources

National Kidney Foundation: <https://www.kidney.org/atoz/content/vegetarian-diet-and-ckd>

Vegan Health: <https://veganhealth.org/kidney-disease/>

The Vegetarian Diet For Kidney Disease: Preserving Kidney Function with Plant-Based Eating. Joan B. Hogan, ISBN 9781591202660

Recipes

Vegetarian Nutrition Dietetics Practice Group: <https://www.vndpg.org/vn/resources/recipes>