A Guide to Living Well with Chronic Kidney Disease

Ochsner Health

Welcome

Thank you for choosing Ochsner for your kidney care. The goal of this guide is to help you better understand your chronic kidney disease (CKD) and learn how to take good care of your kidneys.

At Ochsner, we understand that sometimes a diagnosis like CKD can be overwhelming. That's why we have a whole team here to help you.

You can contact us at any time through the MyOchsner portal or by calling your clinic.

We are here to answer your questions and help you learn how to take care of your kidneys.

Sincerely,

Your Ochsner Kidney Care Team

What You'll Learn

- What your kidneys do and why they're important
- What it means to live well with CKD
- How to keep your kidneys working as well as they can

The information in this booklet and Ochsner Chronic Kidney Disease workshop have been adapted from educational material created by the National Kidney Foundation, Renal Physicians Association, and National Institute of Diabetes and Digestive and Kidney Diseases.

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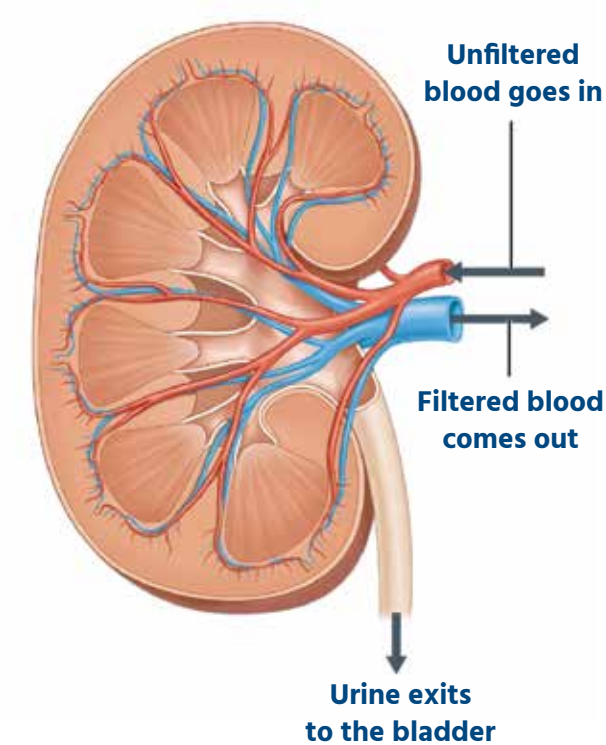
What is Chronic Kidney Disease (CKD)?

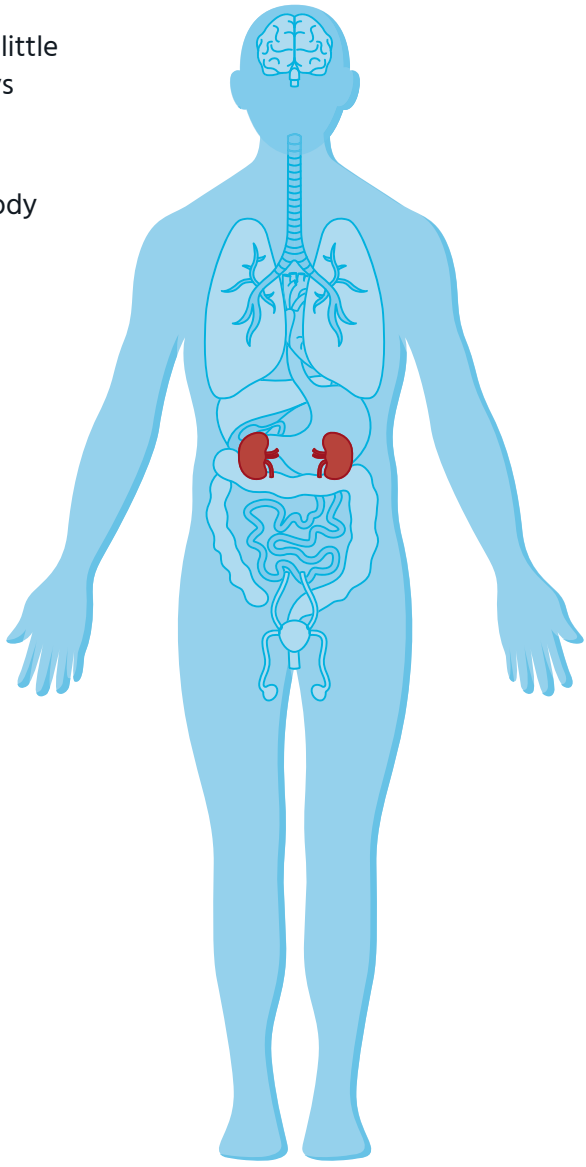
Let's start with some basics. CKD is a lifelong illness. It means your kidneys are damaged and cannot do their many jobs well. It gets worse over time and cannot be reversed. **The goal of this guide is to help you slow down kidney damage and keep your kidneys working as long as possible.**

What do your kidneys do?

Your kidneys are a kind of smart filter. Inside your kidney, millions of little filters ("nephrons") do lots of different jobs. For example, your kidneys

- Make urine to carry away waste and clean your blood
- Balance the amounts of fluids, chemicals, and minerals in your body
- Help control blood pressure
- Make hormones
- Keep bones healthy
- Help make red blood cells





The kidneys are located on either side of the spine, at the bottom of your rib cage.

What causes CKD?

The most common risk factors for CKD in the United States are **diabetes** and **high blood pressure** (hypertension).

How does diabetes cause kidney damage?

When someone has diabetes, they may have really high blood sugar for a very long time. This really high blood sugar has to pass through the small kidney filters, which can hurt those filters over time.

For example, imagine what would happen if you tried to pour pancake syrup through a coffee filter. It would damage the filter and the syrup wouldn't flow properly. When you have high blood sugar, your blood becomes too sweet like syrup. This causes damage to your tiny kidney filters.

How does high blood pressure cause kidney damage?

When someone has high blood pressure, it's kind of like having a fire hose blasting through the blood vessels in the body. Imagine trying to clean your blood through the kidneys with the pressure of a fire hose! It would damage the millions of little kidney filters, and the kidneys would stop working as well.

Other factors can put you at risk of developing CKD. These include

- family history of CKD or of kidney failure
- genetic disorder that causes many cysts to grow in the kidneys (polycystic kidney disease)
- heart disease and/or heart failure
- obesity
- age – being over 60
- smoking and/or use of other tobacco products
- certain drugs or medications that can damage your kidneys (for example, NSAIDs and some antibiotics)
- frequent or long-lasting urinary tract infections (UTIs, or bladder infections) – even if treated, frequent UTIs can increase your risk of CKD.
- diseases of your immune system, such as lupus
- severe infections

How is CKD diagnosed?

Two simple tests can tell if you have CKD. Your provider needs both to get a clear picture of how well your kidneys are working.

- **Blood test** – A small sample of blood is drawn from your arm and analyzed in a lab. (Your provider may order a comprehensive metabolic panel, a basic metabolic panel, or a renal function panel.)

  The blood test looks for the amount of creatinine in the blood. The creatinine number is used to calculate the "estimated glomerular filtration rate" (eGFR). Your eGFR is an important way to tell how well your kidneys filter your blood.

- **Urine test** – After you provide a urine sample, a lab will analyze it to look for the amounts of certain proteins (see "What does the urine test show?" on page 6).

Did You Know?

90% of people with CKD do not know they have it! This is because most people don't have any symptoms.

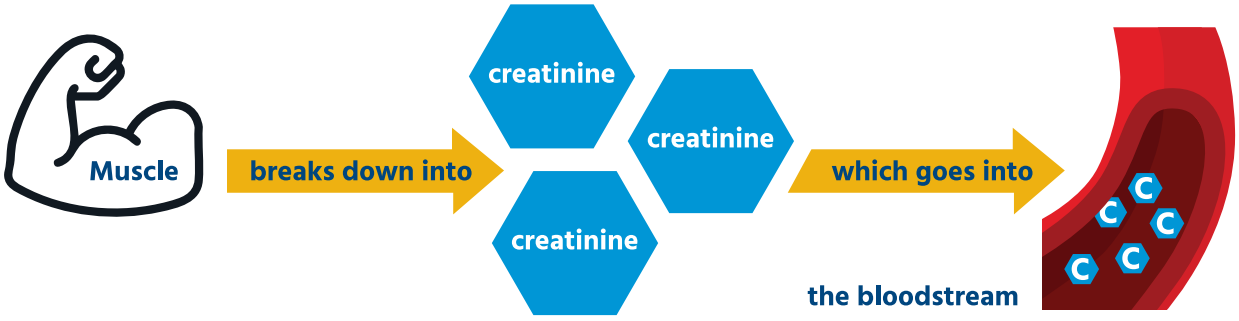
Both the blood test and urine test are important. These two tests are the only way to really tell if you have early-stage kidney disease. Most people with early chronic kidney disease don't have symptoms. **Be sure to get your lab work done on time!**

What does the blood test show?

We use a blood test to look for things that show how well your kidneys are filtering your blood. The test shows how much creatinine is in your blood. From that, we can calculate your estimated glomerular filtration rate (eGFR). This rate shows how successfully your kidneys are filtering your blood. Here's a little more explanation.

Creatinine

Creatinine is a normal waste product. It comes off the muscles as you move and goes into the blood stream. A working kidney cleans the creatinine from the blood. If creatinine starts to build up in the blood, that can be a sign of kidney damage.



Creatinine comes off the muscles, even when you are sleeping or at rest. As your creatinine goes up, it shows that your kidney filters are not cleaning your blood as well. When your creatinine goes up, your eGFR goes down (see page 5 to learn about eGFR).

Creatinine over time

CKD is a lifelong illness that gets worse over time. That is why we watch your creatinine levels. Once your blood tests show the same creatinine range 3 months apart, it is called your baseline. This baseline shows where your kidney damage stands.

Once you have a baseline creatinine, the creatinine generally does not go lower. This means that your kidneys generally do not get better once your creatinine is the same number three months apart.

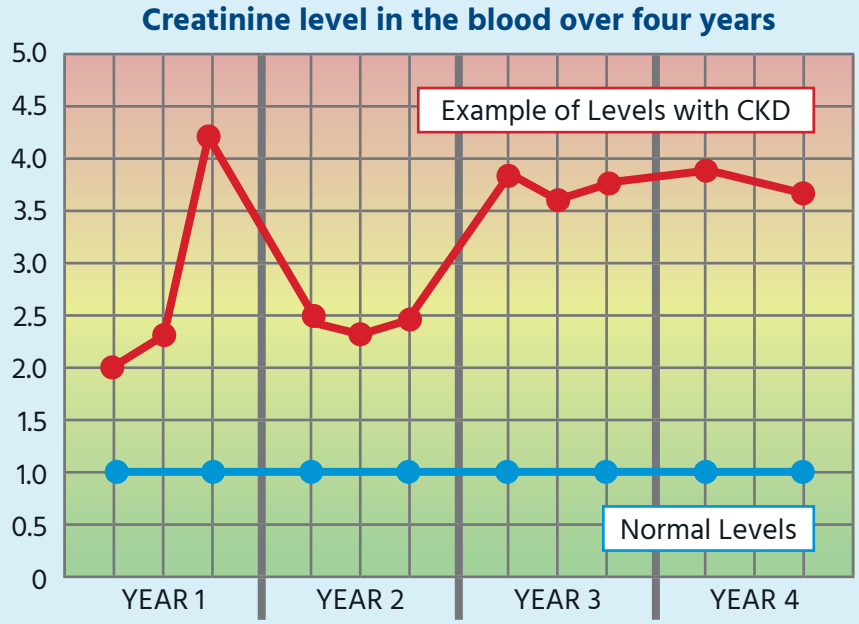
Did You Know?

There are 2 goals in CKD treatment

1. Keep your creatinine baseline stable
2. Avoid any big jumps in your creatinine (big jumps show acute kidney injury)

The colors in this chart show that the higher the creatinine, the more severe the kidney damage.

Once the creatinine is the same range three months apart, the creatinine does not get better (or go back down to the green zone).



Acute Kidney Injury

Sometimes your creatinine can go up quickly but come back down. This is called "Acute Kidney Injury" and is different from CKD. Even though the creatinine will go up slowly as you get older, the goal of CKD care is to prevent the creatinine from going up quickly.

Acute kidney injury can be caused by a lot of different things, including

- really high blood pressure or blood pressure that is too low (less than 90/60)
- really high blood sugar
- fluid overload or dehydration
- severe infections (like sepsis)
- some medications
- problems with the heart

If you have had an acute kidney injury, talk to your doctor about what caused it so you can try to stop it from happening again. Quickly finding and treating the cause of kidney damage can help your kidneys recover and go back down to your baseline.

Estimated glomerular filtration rate (eGFR)

Your creatinine level is used to calculate the eGFR. The eGFR is like a rough percentage that tells us how well your kidneys are filtering the blood.

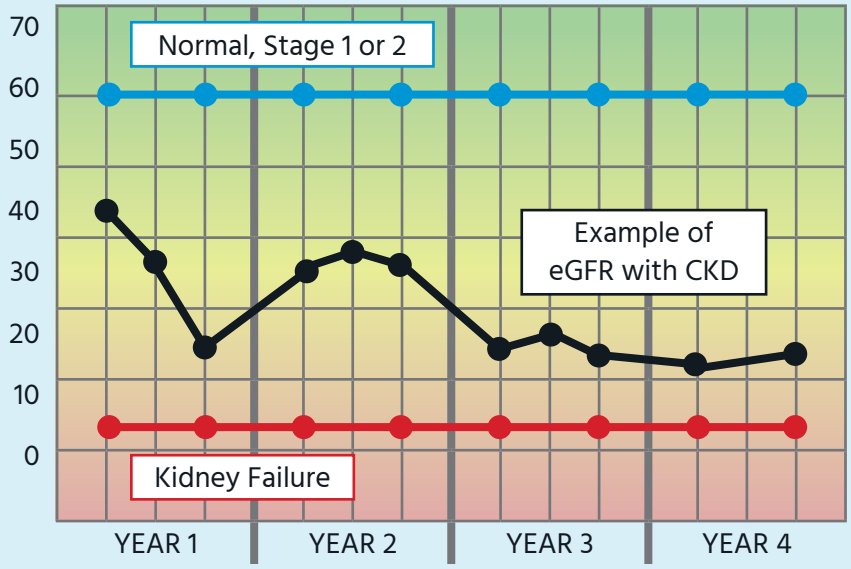
> *A normal eGFR is 90 or higher. Lab results often only show a result of greater than 60 (>60) as the best score.*

The eGFR gets *lower* with age and as your kidney disease gets worse. If your eGFR number is in the same range 3 months apart, this will help your doctor know how far your CKD has progressed. **A low eGFR is a sign of severe CKD. The lower the eGFR number, the worse your kidney disease.**

The eGFR goes down as the creatinine gets higher. In the chart below, the red zone on the eGFR is now at the bottom. Just like creatinine, the same eGFR three months apart is your baseline number. This baseline eGFR number is how your doctor will determine your CKD stage.

eGFR indicates CKD stage	
Normal, Stage 1 and Stage 2	Greater than 60 (>60)
Stage 3a Stage 3b	45-59 30-44
Stage 4	15-29
Stage 5	Less than 15

eGFR in the blood over four years



What does the urine test show?

Your blood contains many proteins that have important jobs in the body. One blood protein is called albumin. Healthy kidneys do not allow proteins, like albumin, to pass into the urine. When kidneys are damaged, albumin and other blood proteins can start to leak through the small filters in the kidneys.

> *Protein in the urine is a sign of a damaged kidney. A lot of protein in the urine is a sign that your kidneys may get worse, faster. It also puts you at a higher risk of having issues with your heart and blood vessels (cardiovascular issues).*

A few different tests can check for protein in your urine. Your provider might order one of these to check for protein in your urine

- Urinalysis
- Urine albumin-creatinine ratio (uACR)
- Urine protein-creatinine ratio (uPCR)

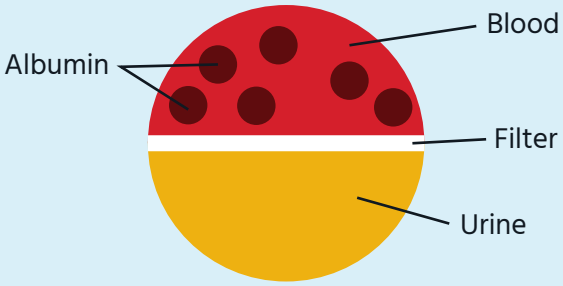
Did You Know?

Protein in your urine does not come from protein you eat. No matter which test you have, protein in the urine is a sign of kidney damage. Normal urine protein value should be

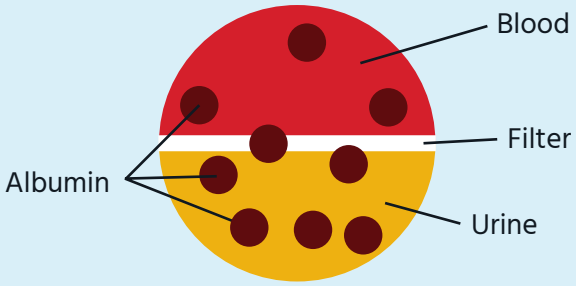
- on uACR: less than 30mg/g
- on uPCR: less than 0.2g/g (200 mg/g)

A healthy kidney filters protein out so it doesn't end up in the urine. A damaged kidney leaks protein into the urine. Protein in the urine is a sign of kidney damage.

Inside a HEALTHY kidney



Inside a DAMAGED kidney



Urine may appear foamy.

The good news is that protein in the urine can be lowered using medications and by slowing down kidney damage. See the Common CKD Medications chart on page 19 to learn more.

How to Keep Your Kidneys Working Longer

The purpose of this section is to help you learn steps you can take to keep your CKD stable and keep your kidneys working as well as they can for as long as possible.

> *CKD is irreversible and progressive. That means there is no cure for CKD, and it will get worse over time. You can learn to keep your kidneys as healthy as they can be.*

Your care team treats CKD by addressing whatever is causing it. Most often, this is diabetes or high blood pressure.

7 steps you can take to prevent more damage to your kidneys

1. Control your **blood sugar** if you have diabetes.
2. Keep your **blood pressure** under control.
3. Stay **physically active**.
4. **Eat well** for your kidneys.
5. Take **medication** safely.
6. Understand **heart disease**.
7. **Quit smoking** to protect your kidneys.

Read on to learn more about each of these steps!

You and your provider will work together to manage your kidney disease. Your treatment plan will likely have multiple goals.

- **Treat the condition that is most likely causing your CKD.** This might be diabetes, high blood pressure, or **another cause.**
- **Take steps to slow down the CKD disease process** (your provider may call it "slowing CKD progression") and lower your risk of kidney failure.
- **Reduce your risk of having a heart attack or stroke** (cardiovascular disease).
- **Treat any complications** from your CKD.

Did You Know?

You are unique. So is your CKD. Your treatment plan will depend on your stage of CKD and any other health conditions you may have. However, there are many things people with CKD may need to watch and do.

1 Do you have diabetes? Control your blood sugar (Hemoglobin A1C).

Your hemoglobin A1C shows how well your blood sugar is controlled over a 3-month period. **The goal for most adults with diabetes is an AIC level lower than 7%.** (This depends on your age and any other illnesses).

> *If your blood sugar drops, take glucose tablets or drink some apple juice. Orange juice has a lot of potassium, which may be limited in some people with CKD.*

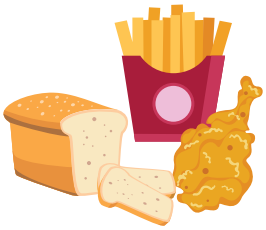
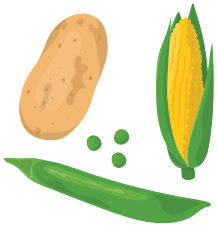
Did You Know?

Has your doctor prescribed an SGLT2 inhibitor such as Jardiance® (empagliflozin), Farxiga® (dapagliflozin), or Invokana® (canagliflozin)? These drugs have extra benefits beyond helping regulate your blood sugar. They also protect your kidneys and improve your heart health.

Lowering Hemoglobin A1C

To lower your hemoglobin A1C, you may need to make carbohydrate and diet changes, take medications, and exercise regularly. See "My CKD plate" on page 12 for understanding portions and carbohydrates.

Carbohydrate Foods to Limit or Avoid with Diabetes

Sweets	Drinks with Sugar	Starches	Starchy Vegetables	Alcohol
				
candy, cake, cookies, ice cream, sweet cereals	juice, soda, sports drinks, sweet tea, lemonade	white rice, bread, pasta, tortillas, fried foods, chips, fries	potatoes, corn, peas, sweet potatoes, winter squash	wine, beer, liquor

Ask your doctor to see a Diabetes Care and Education Specialist for one-on-one support for managing your diabetes and reaching your blood sugar goals. Ochsner Digital Medicine for Diabetes may help too. See the blue box on the next page to learn more.

2 Keep your blood pressure under control.

A blood pressure goal is individual to you. Usually the goal is to be at or lower than 120/80. This goal may be too low for you if it makes you feel bad, like too weak or dizzy when it is below 120/80. In that case or if you are older, your goal may be a little higher.

Lowering blood pressure

You and your care team will work out a combination of ways to lower your blood pressure if needed. This may be through

- medication (see chart on page 19)
- exercise
- following a healthy (low salt) diet
- weight loss
- consistent good sleep
- stress reduction (like deep breathing, mindfulness, or seeing a counselor)

If your blood pressure drops too low (if the top number goes lower than 110), this can also damage your kidneys. Be sure to follow your provider's instructions to keep your blood pressure stable and safe. Ochsner Digital Medicine for hypertension can also help. See the blue box below to learn more.

If you also have a diagnosis of heart failure, it can be difficult to keep your blood pressure at the right level. **Ask your doctor for specific recommendations for monitoring your weight, fluid intake, and blood pressure to protect your kidneys**.

3 Stay physically active.

Physical activity is good for your kidneys and can help you maintain a healthy weight. Regular physical activity can

- help you sleep better
- lower anxiety or blood pressure naturally
- keep your bones and brain healthy – bone health is especially important for those with CKD
- lower your risk of 8 different types of cancer
- lower blood sugar levels naturally

Increasing your physical activity

Many people with CKD find they often feel tired. It can be hard to start moving if you are mostly sitting during the day and at night. **Try to set VERY small goals and slowly increase.** For example, start with 5 minutes of exercise while in a chair, then slowly increase to 10 minutes or more over time.

Try combining activities you enjoy with exercise. For example, invite friends or family members to join you on a walk, turn your exercise into a game, or add some entertainment like TV, music, or radio. Many people find setting a regular time to exercise with a friend helps them stick to their plan.

Always ask a doctor before exercise to make sure that you are safe. You may also be a candidate for physical therapy, which can help you get physically active under the guidance of a professional.

4 Eat well for your health (and kidneys).

Many people find it difficult to sift through all the dietary recommendations they see in the news or on social media. Unfortunately, no single superfood can cure your kidneys.

> *It's important for you to learn general healthy eating guidelines to protect your kidneys. Your diet might change based on your other conditions.*

Remember these 3 tips for eating well for your kidneys

1. Eat balanced meals.
2. Read food labels.
3. Watch your intake of sodium.

Ask your doctor if you need to watch your potassium and phosphorous intake (also called micronutrients).

Online Resources

- Find recipes for every stage of kidney disease at **kitchen.kidneyfund.org**.
- You can check the amounts of sodium, potassium and phosphorous in certain foods on **MyKidneysMyHealth.com**.

It is VERY IMPORTANT to follow YOUR specific diet.

Over time, you will learn how to adapt the general guidelines for your specific needs. Ask your provider to meet with a specialist kidney Registered Dietitian. This dietitian can develop a plan that's right for you. **Check out the following pages for tips and advice on eating well with CKD.**

How to eat balanced meals: My CKD Plate

Protein	Non-Starchy Vegetables	
Plant-based sources: nuts, nut butters, beans, soy, tofu, seeds (hemp, chia) **Lean meats:** chicken, fish, turkey, seafood **Other proteins:** eggs, cheese **Proteins to AVOID:** beef, pork, ultra-processed meats like andouille, bacon, boudin, deli meats, ham, hot dogs, smoked sausage, tasso	**LOW potassium:** arugula asparagus cabbage (green or red) carrots cauliflower celery cucumbers eggplant green beans kale mustard and collard greens (1/2 cup) okra onions peppers radishes turnips yellow squash zucchini	**HIGH potassium (limit or avoid if you have been told to watch potassium levels):** artichokes beets broccoli (cooked) Brussels sprouts Chinese cabbage mushrooms (cooked) parsnips spinach (cooked) tomatoes
Carbohydrates *(watch closely if you have diabetes)*		
Starches: rice, pasta, oatmeal, grits, bread, tortillas, fruit **Starchy vegetables:** corn, potatoes, peas, sweet potatoes, winter squash **Carbs to AVOID:** candy, cake, cookies, ice cream, sweet cereal, drinks with sugar, fruit juices, sodas (soft drinks), sports drinks, alcohol		

Listen up: Tips & advice for eating well with CKD

1. Avoid ultra-processed foods (UPF)

Generally, ultra-processed foods are not good for your kidneys. Try to avoid these whenever you can. Ultra-processed foods are often found in the center aisles of the grocery store or the freezer section. They come in a box, bag, can, or through a fast food window. They are made of ingredients that you generally would not find in a household kitchen. Unfortunately, ultra-processed foods are often more affordable than fresh or organic foods.

2. Eating on a budget

Canned or frozen vegetables can be an affordable alternative to fresh produce. **Choose canned vegetables without added salts (look for a label of "No Salt Added" or "Salt-free").** Be careful with products labeled "Reduced Sodium" or "Low Sodium" since they may have high sodium content. See the next page about how to read food labels.

TIP: Drain and rinse canned vegetables to lower the sodium content.

TIP: Choose frozen vegetables without sauces or seasonings.

3. Preparing balanced, kidney-friendly meals

TIP: Rinse canned vegetables or fruits in running water twice.

TIP: For plant-based foods high in potassium: boil water, then soak the foods in the boiled water for 5-10 minutes. This can lower the potassium by as much as 50%. You can also do this with meat, fish or seafood.

4. Feel thirsty? Drink water.

Drink water first (avoid sports drinks, dark sodas, powdered drink mixes). Avoid dehydration and over-hydration. Follow the fluid intake recommendations specifically for you.

5. The Mediterranean Diet

Some kidney doctors recommend following a Mediterranean Diet, which is a **balanced dietary pattern**. The Mediterranean Diet is very similar to diets recommended for people with diabetes or heart disease.

Did You Know?

Drinking water DOES NOT work your kidneys harder. Blood is always flowing through your kidneys. You need to drink enough water to stay hydrated.

IMPORTANT: Your diet needs are individual to you.

Plan meals for YOUR individual needs. Your doctor or renal dietitian may tell you to avoid, limit, or watch how much you eat of certain foods.

Read food labels to watch your intake of sodium

Watch how much sodium you eat every day. The maximum for each day should be 2,000mg or less.

Many foods in the typical American diet are high in sodium. These include foods that are packaged, frozen, or canned, such as

- Canned foods or soups
- Prepared burritos or tacos
- Pizza
- Bread
- Processed or cured meats
- Cold cuts or deli meats
- Bacon
- Hot dogs
- Cheese
- Chicken nuggets
- Sausage
- Pre-made burgers

Helpful Tip

Choose foods with **5% or less of sodium** on the label.

How to read food labels

1. SERVINGS

Check the number of servings. A whole package is usually multiple servings. The label below lists nutrition facts for 1 serving and for the whole container (2 servings). If you eat two servings, the amount of each ingredient doubles.

- To stay within your limits, eat just one serving, not the whole package.

2. SODIUM

Don't buy "Reduced sodium" or "light sodium" or "low sodium." These things only mean they have less sodium than the original version. The sodium is probably still too high. Choose products with 5% or less sodium. Their labels may say

- Salt-free
- Sodium-free
- No salt added

3. POTASSIUM

Look for potassium content.

- 3% or less (100 mg or less) is low potassium content
- 3-6% (101-200 mg) is medium potassium content
- 6-9% (201-300 mg) is high potassium content
- More than 9% (300 mg or more) is very high potassium content

Nutrition Facts

2 servings per container
Serving size 1 cup (255g)

	Per serving		Per container	
Calories	220		440	
		% DV*		% DV*
Total Fat	5g	6%	10g	13%
Saturated Fat	2g	10%	4g	20%
Trans Fat	0g		0g	
Cholesterol	15mg	5%	30mg	10%
Sodium	240mg	10%	480mg	21%
Total Carb.	35g	13%	70g	25%
Dietary Fiber	6g	21%	12g	43%
Total Sugars	7g		14g	
Incl. Added Sugars	4g	8%	8g	16%
Protein	9g		18g	
Vitamin D	5mcg	25%	10mcg	50%
Calcium	200mg	15%	400mg	30%
Iron	1mg	6%	2mg	10%
Potassium	470mg	10%	940mg	20%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Source: FDA

Some people may also need to watch other micronutrients such as phosphorous, which is found in high amounts in ultra-processed foods.

Many patients find balancing micronutrients (sodium, potassium, and phosphorous) for their kidneys challenging. **You're not alone.** If this feels overwhelming, talk to your doctor about a referral to a renal dietitian.

5 Take medications safely.

Some medications (like NSAIDs in the pictures below) can be harmful to the kidneys. Talk to your provider about ways to avoid harmful medications and herbal supplements.

DO NOT TAKE NSAIDs IF YOU HAVE KIDNEY DISEASE. *An 81mg per day dose of aspirin ("baby aspirin") is safe for people to take when they have CKD, if recommended by their provider.*

Online Resources

MyKidneysMyHealth.com is a great resource to learn more about medication safety with kidney disease.

Helpful Tips

- When you take your medications (especially blood pressure medications), **take them at the same time every day, on a schedule.**
- Always check with your doctor to see if a new medication will hurt your kidneys.

General guide for over-the-counter medications

Reason	Generally OK to Take	Generally Avoid
Pain, headache, fever, muscle aches	• Acetaminophen (Tylenol®) – *may depend on liver function* • Acetylsalicylic acid (baby aspirin 81mg or 325mg daily) if recommended by your doctor to prevent heart attack or stroke • Diclofenac topical (Voltaren®) – *short-term (less than 1 week) only*	• NSAIDs such as ibuprofen (Advil®, Motrin®) or naproxen (Aleve®, Naprosyn®) • Acetylsalicylic acid (aspirin) if not prescribed by a doctor
Cold, cough, congestion	• For a productive cough – Guaifenesin (Robitussin®) syrup (sugar-free for diabetics) • For a dry cough – Dextromethorphan DM (Robitussin DM, Mucinex® DM, NyQuil®, Dimetapp®, Vicks®, TheraFlu®, Delsym®) (sugar-free for diabetics) • Saline nasal sprays (Salinex®) • Inhaled menthol or steam	• Products with multiple ingredients, such as Robitussin Cough & Cold, Tylenol Cough & Cold, etc. • Oral decongestants such as pseudoephedrine (Sudafed®) or phenylephrine (Sudafed PE, Neo-Synephrine®, Suphedrine® PE, Biorphen®)
Indigestion (talk to your provider if you have indigestion regularly)	Short-term, as needed only • Calcium carbonate (Tums®) • Ranitidine (Zantac®) • Famotidine (Pepcid-AC®)	Antacids with • Aluminum, magnesium (Maalox®, Mylanta®, Gaviscon®) • Sodium (Alka-Seltzer®)
Constipation	Short-term, as needed only • Docusate sodium (Colace®) • Bisacodyl (Dulcolax®) • Sennosides (Senokot®) Longer term • Polyethylene glycol 3350 powder (Miralax®, Lax-a-day®, Gavilyte-C®, Gavilyte-G®, Gavilyte-N®, Laxaclear®)	Laxatives with magnesium or phosphate • Milk of Magnesia® • Fleet® enema • Oral Fleet
Diarrhea (talk to your provider if diarrhea lasts longer than 2 days)	Short-term, as needed only • Loperamide (Immodium®)	• Bismuth sabsalicylate (Pepto-Bismol®, Kaopectate®)
Nausea, vomiting	If you are not able to eat or drink your regular amount of fluids, check with your provider about how to take any fluid pills until you are able to eat and drink regularly again. **If you cannot keep anything down, seek medical attention.**	

Note: These are general guidelines. Please talk to your provider for individual recommendations.

Other medications that can harm your kidneys

Reason	Generally Avoid
Some antibiotics	• Aminoglycosides (gantamicin, tobramycin, amikacin, neomycin, plazomicin, paromomycin, streptomycin) • vancomycin • Bactrim® (trimethoprim/sulfamethoxazole)
Proton pump inhibitors	• omeprazole (Prilosec®) • esomeprazole (Nexium®) • lansoprazole (Prevacid®) • pantoprazole (Protonix®)
Blood thinners	• warfarin (Coumadin®, Jantoven®)
Some chemo drugs	Ask your oncologist or kidney provider
IV contrast dyes for tests like CT scans	Ask your kidney provider which you should avoid when possible

Supplements

> *Herbal medicines, supplements, or natural remedies are not tested in the same way as prescription medications or over-the-counter drugs. They may harm your kidneys.*

Ask your provider if a supplement you take is safe for your kidneys. These common supplements may be linked to kidney damage. (There may be others not on this list).

- Echinacea
- Hemlock
- Noni juice
- St John's Wort
- Wormwood oil
- Alfalfa
- Black cohosh
- Cat's Claw
- Chaparral
- Creatine

Medications that can help your kidneys

Some medications can help keep your kidneys working well. Your doctor may give you medication to help manage the reasons for your CKD. See the Common CKD Medications chart on page 19.

6 Understand heart disease.

Unfortunately, having CKD puts you at a higher risk of having a heart attack.

1. **Watch your intake of saturated fats** (found in red meat and full-fat dairy products) **and trans fats** (found in processed foods).
2. **Keep an eye on your LDL ("bad cholesterol") levels** in your bloodwork. You may need medication to help lower your cholesterol.

> *One of the most common medications to help manage cholesterol ends in -statin (for example, atorvastatin).*

7 Quit smoking.

Almost every part of your body, including your kidneys, are affected by smoking. No matter your age or how long you've smoked, vaped or dipped, you can quit.

> *Ochsner has a smoking cessation program that has been proven to help people quit and it's free!*

Ready to quit? **Call 504-842-7490 or toll free 844-371-5806 or visit ochsner.org/stopsmoking to sign up.**

Want more information about the kidneys?

Scan these codes with your phone's camera or visit **kidney.org** or **MyKidneysMyHealth.com** for videos, recipes, and other great tips for living with CKD!

- Foods and diet
- Traveling with CKD
- Work and school
- Mental and physical well-being
- Learning materials and resources

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Common CKD medications and their purpose

Medication Class	Example Medications	Purpose	Possible Side Effects
ACE inhibitor	• Lisinopril (Zestril®, Prinivil®, Qbrelis®)	Lowers blood pressure, lowers protein in the urine, lowers risk of heart disease	Can increase the level of potassium in the blood
ARB	• Losartan (Cozaar®, Arbli®)	Lowers blood pressure, lowers protein in the urine, lowers risk of heart disease	Can increase the level of potassium in the blood
SGLT2 inhibitors	• Empagliflozin (Jardiance®) • Dapagliflozin (Farxiga®) • Canagliflozin (Invokana®)	Lowers protein in the urine, improves heart health, helps protect kidneys	Can cause urinary tract infections or dehydration (not enough water in your body)
Diuretic	• Furosemide (Lasix®)	Helps lower the amount of fluid in your body	May cause dehydration and/or low potassium levels.
GLP-1 RA	• Semaglutide (Ozempic®)	Lowers blood pressure and blood sugar, helps protect the kidneys, weight loss	Can cause nausea, vomiting, diarrhea, or constipation
MRA	• Spironolactone (Aldactone®)	Lowers blood pressure if other medicines are not enough, lowers protein in the urine	Can increase your risk of too much potassium in the blood
Nonsteroidal MRA	• Finerenone (Kerendia®)	Lowers protein in the urine, protects your kidneys, and lowers risk of cardiovascular disease	Can increase your risk of too much potassium in the blood or low blood pressure

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