What is Chronic Kidney Disease (CKD)?
Chronic kidney disease (CKD) includes several conditions that damage your kidneys and decrease their ability to keep you healthy. Healthy kidneys filter waste products from your body. If you have CKD, wastes can build up in your blood and can make you sick. You may develop problems like high blood pressure or heart and blood vessel disease. CKD may develop slowly over a long period. Detecting and treating CKD early can often keep it from getting worse. It can also lower your risk of heart attack, stroke, kidney failure, and other complications. High blood pressure and uncontrolled diabetes are common causes of CKD. These conditions also increase your risk of heart attack and stroke, so it is very important to prevent, treat, and control them.

Medicines that can help you
Your doctor may recommend that you take some or all of these medicines to help prevent heart attack and stroke:

• **ACE (Angiotensin Converting Enzyme) inhibitors**: ACE inhibitors lower blood pressure. They do this by causing your blood vessels to relax and widen. This lets more blood and oxygen reach your heart. It also helps your heart to beat more easily. It can help to slow down the progress of kidney disease, too. ACE inhibitors include lisinopril (Prinivil, Zestril) and captopril (Capoten).

• **Aspirin**: Aspirin makes blood cells (called platelets) less sticky. This lowers the chances of blood cells clumping together to form a blood clot. Clots can block your arteries and lead to a heart attack or stroke. To protect your heart and brain, taking low-dose (81 mg) aspirin can help.

• **Statins**: Statins work to lower your LDL (bad) cholesterol. This type of cholesterol can build up in your artery walls and make it harder for blood to flow through. Statins may help to stop blood clots from forming and reduce swelling inside your arteries. Statins include simvastatin (Zocor), lovastatin (Mevacor), and pravastatin (Pravachol).

• **Diuretics**: Diuretics help your body get rid of extra fluid and help to control your blood pressure. Diuretics include furosemide (Lasix), and hydrochlorothiazide (HCTZ). Some people take a combination pill with a diuretic (hydrochlorothiazide) and an ACE Inhibitor (lisinopril) together in the same tablet.

Make healthy choices
Your doctor or other health care professional can recommend a lot of ways for you to feel better and live healthier:

• Eat more fresh foods and fewer processed foods like potato chips, crackers, or fast food.

• Choose foods low in saturated fat and trans fat. These fats are harmful to your heart.

• Limit the amount of salt and sodium you eat to less than 1500 mg per day.

• Making other changes in your diet might help you. You can reduce foods high in potassium (such as bananas, potatoes, and most tropical fruits), reduce your phosphorus intake (less cheese, milk, and cola drinks), and limit your protein (4 to 7 oz. of meat each day).

• Add other fruits and vegetables and whole grains to your diet.

• Cook foods using the lowest temperature possible. Instead of deep frying or barbequing, which is very hot, try cooler ways of cooking like steaming or baking.

There are other things you can do to feel better and healthier:

• Get up and move or walk for at least 30 minutes or more on most days of the week.

• Keep your weight at a healthy level.

• Quit smoking, if you smoke. This is the single most important change you can make to be healthier. We can help you quit. Visit your Health
Education Center for tips on how to quit and stay smoke free.

- Know your blood sugar, blood pressure and cholesterol levels and what the best levels are for you.
- Talk with your doctor about completing an Advance Health Care Directive to make your wishes known if, in the future, you cannot speak for yourself.

You may also want to share information about CKD with members of your family. Because CKD tends to run in families, they have a higher risk of developing CKD, but can help prevent it by staying active, eating a heart-healthy diet, and keeping their cholesterol at a healthy level.

Lab tests you may take

- **Glomerular filtration rate (GFR):** Shows how well your kidneys work. A lower number means that your kidneys are not working as well.
- **Potassium:** Potassium is a mineral that is needed for your muscles to work properly. People with CKD or taking medications used to treat CKD may have a high or low potassium.
- **Creatinine:** Creatinine is a waste product found in blood. When kidneys are not working well, creatinine levels will be higher. This test is another way to show how well your kidneys are working.
- **A1C/eAG:** Shows your average blood sugar for approximately three months (very important if you have diabetes).

**Medication Safety:**

**Taking other medications or nutritional products**

- Read the labels carefully on over-the-counter medicines and herbal or weight loss products. Some over-the-counter medicines have warnings that say that people at risk for a heart attack, stroke, or anyone with kidney disease should not use them. Let your doctor or pharmacist know if you are taking any over-the-counter product.
- Don’t take medicines or products that make your kidneys work harder or can harm your kidneys.
- These include non-prescription, nonsteroidal anti-inflammatory drugs (NSAIDs), such as:
  - Aspirin (full strength Bayer®, Aspirin, Ecotrin®, Excedrin®, St. Joseph’s®, and many others)
  - Ibuprofen (Advil®, Motrin®, and others)
  - Ketoprofen (Orudis®)
  - Naproxen (Aleve®)

**Lipid Panel:** Your total cholesterol, LDL (bad) cholesterol, HDL (good) cholesterol, and triglycerides (fat particles in the blood).

Talk to your doctor about these and other lab tests to show how well your kidneys work. They can also help show how the medicines you take are affecting you. Also, ask your doctor about combining blood tests to help keep your veins healthy.

If you need to take pain medicine, acetaminophen (Tylenol®) is usually safe and effective for people with CKD. Talk with your doctor if you need to take pain medicine for more than 2 to 3 days.

- Be careful of salt substitutes or potassium supplements. Most salt substitutes have potassium instead of sodium. Potassium in high levels can harm you if you have chronic kidney disease.
- Talk with your doctor about how much medicine you take (your dose). If your kidneys become weaker, you may need lower doses of some medicines.
- If you take medication for diabetes, tell your doctor if your blood sugar levels are very low or if you often feel very hungry. Your medication levels may need to be adjusted.

**Additional resources**

- Connect to our website at kp.org
- Visit your doctor’s home page to access the video “Taking Care of Your Kidneys” at kp.org/mydoctor
- National Kidney Foundation 1-800-622-9010, kidney.org
- National Kidney Disease Education Program, nkdep.nih.gov/
- If you are hit, hurt, or threatened by a partner or spouse, this can seriously affect your health, including your CKD. There is help. Call the National Domestic Violence Hotline at 1-800-799-7233 or connect to ndvh.org