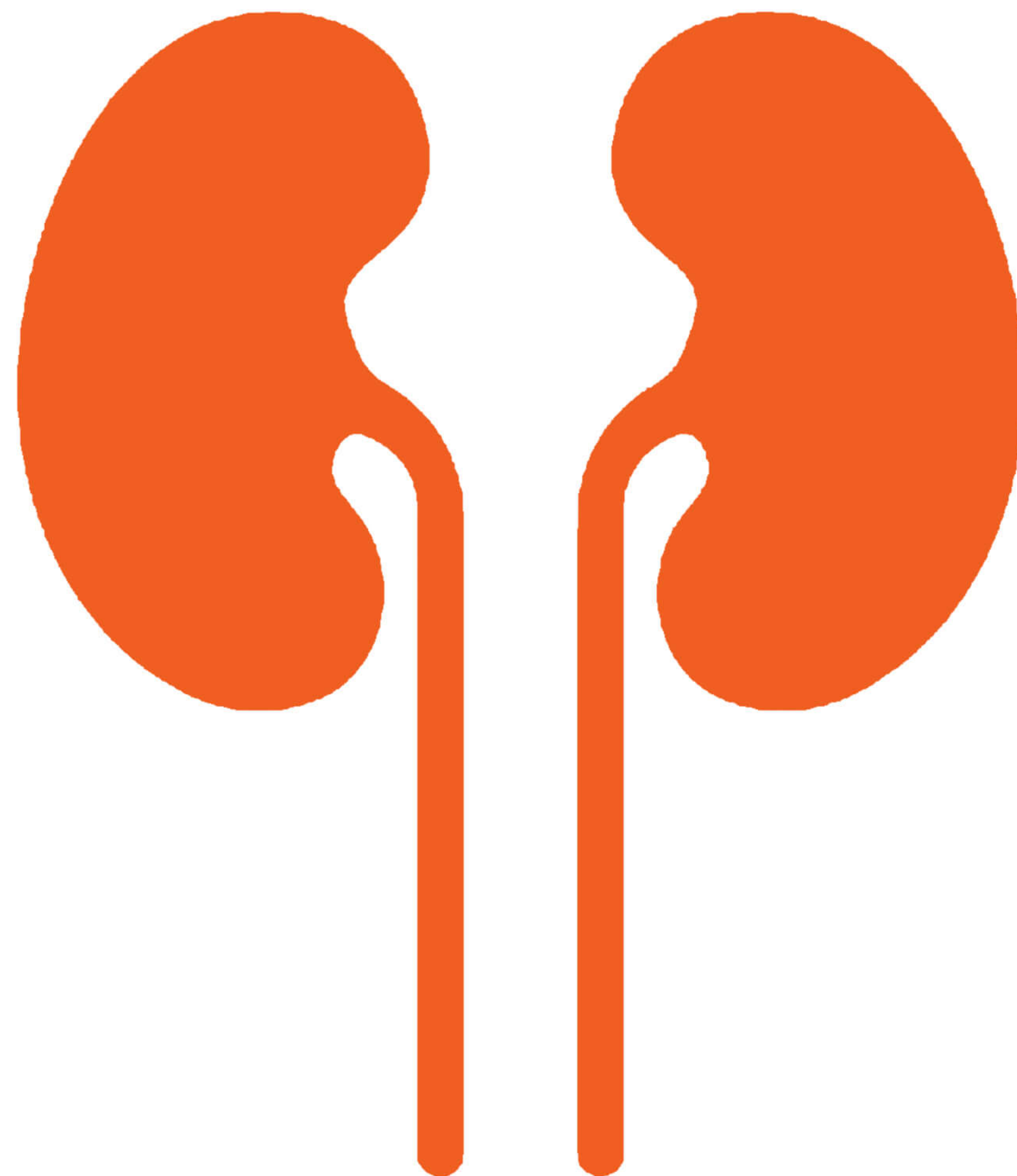


## ***How Your Kidneys Work?***

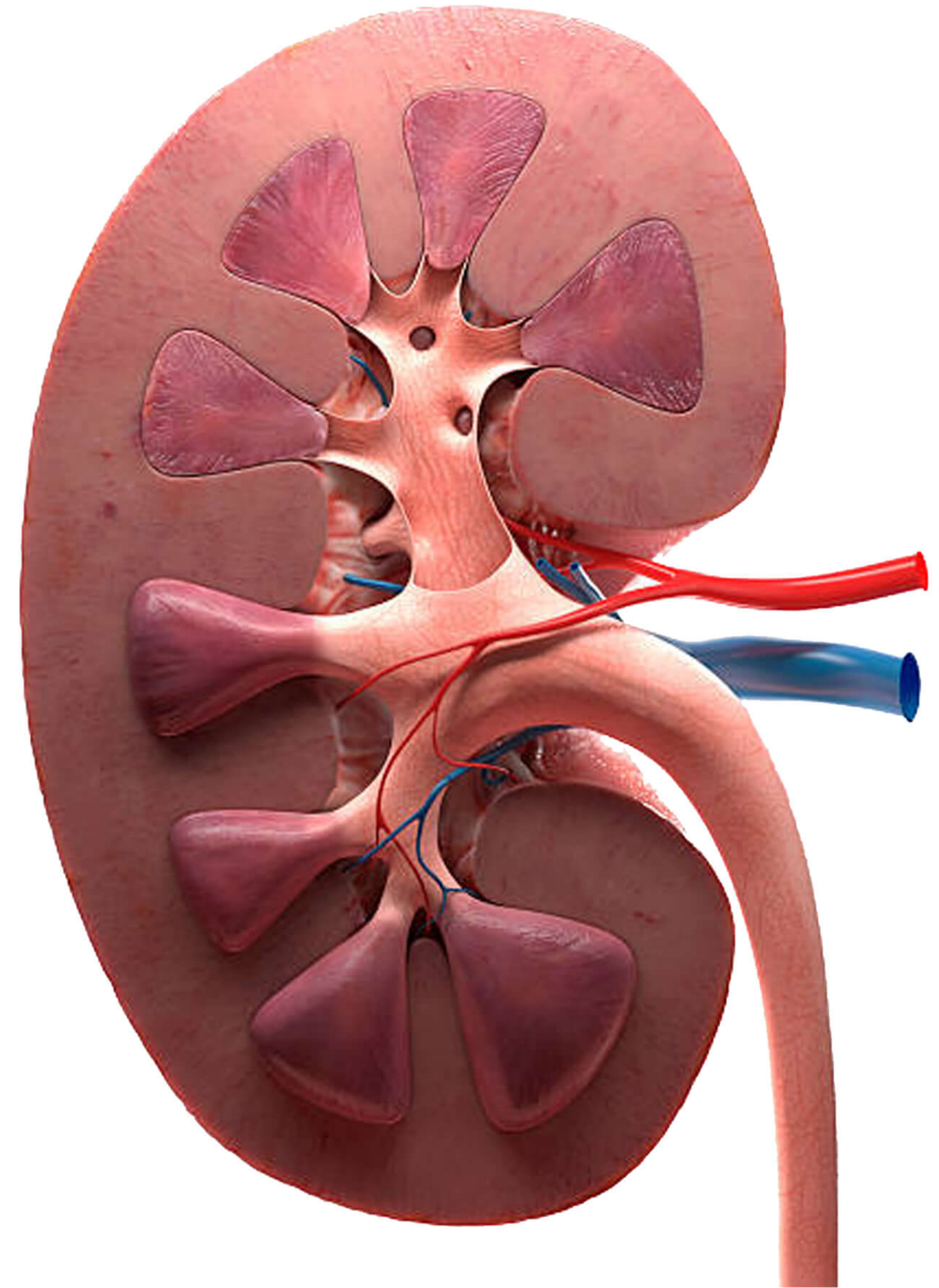
You have two kidneys, each about the size of an adult fist, located on either side of the spine just below the rib cage. Although they are small, your kidneys perform many complex and vital functions that keep the rest of the body in balance. For example, kidneys:

- Help remove waste and excess fluid
- Filter the blood, keeping some compounds while removing others
- Control the production of red blood cells
- Make vitamins that control growth
- Release hormones that help regulate blood pressure
- Help regulate blood pressure, red blood cells, and the amount of certain nutrients in the body, such as calcium and potassium.



## 10 SIGNS YOU MAY HAVE KIDNEY DISEASE

- You're more tired, have less energy or are having trouble concentrating.
- You're having trouble sleeping.
- You have dry and itchy skin.
- You feel the need to urinate more often.
- You see blood in your urine.
- Your urine is foamy.
- You're experiencing persistent puffiness around your eyes.
- Your ankles and feet are swollen.
- You have a poor appetite.
- Your muscles are cramping.



If you are having any of these symptoms please talk to your doctor.

For more information please visit: [www.kidney.org](http://www.kidney.org)

# KIDNEY STONES

## SIGNS & SYMPTOMS

- severe pain on either side of your lower back
- more vague pain or stomach ache that doesn't go away
- blood in the urine
- nausea or vomiting
- fever and chills
- urine that smells bad or looks cloudy

## PREVENTION

- Drink plenty of water
- Be aware of sweat
- Cut back on sodium in your diet

If you are having any of these symptoms please talk to your doctor.



## *When is dialysis needed?*

You need dialysis if your kidneys no longer remove enough wastes and fluid from your blood to keep you healthy. This usually happens when you have only 10 to 15 percent of your kidney function left. You may have symptoms such as nausea, vomiting, swelling and fatigue. However, even if you don't have these symptoms yet, you can still have a high level of wastes in your blood that may be toxic to your body. Your doctor is the best person to tell you when you should start dialysis.



For more information please visit: [www.kidney.org](http://www.kidney.org)

