

Your Amazing Kidneys

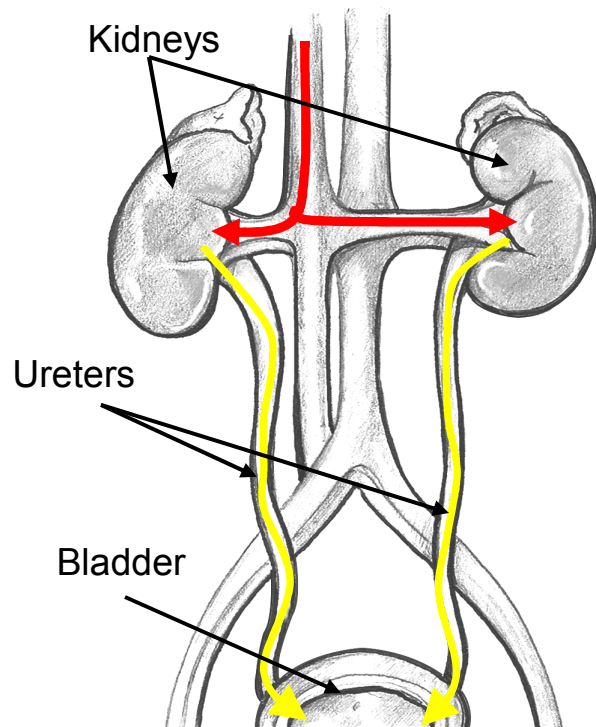
Keeping your body in balance

What are kidneys and what do they do?

- Kidneys work 24 hours a day, cleaning your blood and keeping your body working
- Your kidneys are two organs in your middle back, each the size of your fist
- Each is made up of about a million tiny filtering units called **nephrons**
- Nephrons are clusters of tiny blood vessels (called **glomeruli**) attached to tubes (called **tubules**)
- Your heart pumps blood through your **renal artery** to the nephrons, where waste and extra water are filtered out in the form of urine
- The urine then travels down tubes called **ureters**, into your bladder
- Kidneys also balance chemicals in your body, keeping what you need, and removing what you don't need
- Kidneys send out hormones (chemical messengers) that help control red blood cell production, blood pressure, and how your body uses minerals for strong bones and a healthy heart

CKD (chronic kidney disease) means your kidneys aren't working well

- It's very common—1 in 7 adult Americans has CKD, and most don't know it
- CKD is found by testing for protein leaking from your kidneys into your urine, and by checking your blood for creatinine, a waste product that's removed by healthy kidneys
- Your creatinine number is used to calculate **eGFR**, the rate at which your kidneys are filtering



What happens with CKD

- Kidney damage is usually permanent and gets worse over time
- Although CKD can't be cured, you can prevent it or slow it down
- The leading causes are diabetes and high blood pressure, diseases that destroy small blood vessels; other causes include inflammation, inherited diseases, infection
- With CKD, waste and water build up in your body, and chemicals get out of balance
- CKD can cause heart disease, anemia, and bone disease
- There are no symptoms in early stages of CKD
- As CKD get worse, you may have tiredness, poor appetite, itching, sleep disturbance, swelling, shortness of breath, trouble concentrating
- When your kidneys are working at less than 15%, you will need dialysis or a kidney transplant in order to survive