### Chronic Kidney Disease



#### 1. What do the kidneys do?

- We have two kidneys. They filter blood to remove wastes and excess fluid that are expelled in urine.
- The kidneys also help control blood pressure and make hormones that the body needs to stay healthy.

#### 2. What is chronic kidney disease?

- Kidney disease is defined as damaged kidneys that lose the ability to filter blood.
   As the disease gets worse, wastes build up in the blood.
- Other problems may develop, such as high blood pressure, anemia, weak bones, poor nutritional health, and nerve damage.
   Because kidneys are vital to so many of the body's functions, kidney disease also increases the risk of cardiovascular disease.
- While these problems may happen slowly and without symptoms, they can lead to kidney failure, which can happen without warning. Dialysis or a kidney transplant is needed to stay alive once the kidneys fail.
- Chronic kidney disease often has no symptoms until the kidneys are damaged.

# 3. What are the main causes of chronic kidney disease?

- Diabetes and high blood pressure, or hypertension, cause two-thirds of chronic kidney disease cases.
- Diabetes occurs when your blood sugar remains too high. Over time, high blood sugar can damage many organs in your body, including the kidneys, heart and blood vessels, nerves, and eyes.
- High blood pressure occurs when the force of blood against the artery walls is too high. If it is not controlled wellor poorly controlled, high blood pressure can lead to heart attacks, strokes, and chronic kidney disease. Also, chronic kidney disease can cause high blood pressure.

# 4. How do I find out how my kidneys are doing?

- Tests that determine kidney function are:
  - Estimated glomerular filtration rate, or eGFR: This blood test measures how well kidneys are removing wastes and excess fluid from the blood.
    - eGFR <60% is a sign that kidneys are not working properly. eGFR is a percentage of kidney function.



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- Urine albumin-creatinine ratio, or uACR: Measures the amount of protein (called albumin) in urine.
  - In kidneys that work well, there's almost no albumin found. uACR >30 means albumin is spilling into urine.

#### 5. How is kidney disease treated?

- When it is found early, kidney disease can be slowed or stopped.
  - Treatment includes diet, exercise, medications, lifestyle changes, and managing risk factors like diabetes and high blood pressure.
  - See your doctor routinely.
- Once the kidneys fail, dialysis or a kidney transplant is needed.

#### 6. What are the types of dialysis?

- There are two types of dialysis hemodialysis and peritoneal dialysis.
  - Both forms remove wastes and extra fluid from the blood.
  - Home dialysis is more popular and may have with better outcomes.
- Hemodialysis involves a machine that pumps blood out of the body, cleans it, then returns it to the body. This is usually done three or four times a week at home or at a dialysis center.
- With peritoneal dialysis, the blood is cleaned inside your body every day through the lining of your abdomen using a special fluid that's periodically changed.
  - This can be done at home, at work, at school, and/or even during travel.

#### 7. How does a kidney transplant work?

- A healthy kidney from a living or deceased donor (e.g., a close relative, friend, spouse, or stranger) is transplanted into your body.
- Antirejection and other medications are needed to maintain the transplant.
- Note that a transplant is a treatment, not a cure for kidney disease.

# 8. What can I do to avoid problems and slow the loss of kidney function?

- See your doctor to find out as early as possible if you have kidney disease.
- See a nephrologist (kidney specialty doctor) if you have kidney disease.

#### 9. How can I prevent kidney disease?

- Early detection is the best way to fight kidney disease (see eGFR and uACR tests).
- Exercise regularly, control your weight, eat
  a balanced diet, stay hydrated, quit smoking,
  drink alcohol in moderation, monitor your
  cholesterol levels, get an annual physical,
  and know your family medical history.
- See your primary care provider as scheduled.

### Watch this video, "What is Kidney Disease?"

• https://youtu.be/za78Ugroios

