## Know your eGFR number

| Kidney Damage Stage | Description | gfr | Other Findings |
|---|---|---|---|
| 01 | Normal or minimal kidney damage with normal GFR | 90+ | Protein or albumin in urine are high, cells or casts seen in urine |
| 02 | Mild decrease in GFR | 60-89 | - - |
| 03 | Moderate decrease in GFR | 30-59 | - - |
| 04 | Severe decrease in GFR | 15-29 | - - |
| 05 | Kidney failure | <15 | - - |

## INTERESTING FACTS ABOUT KIDNEY

1. The kidneys have a higher blood flow than even the brain, liver or heart.

2. The kidneys reabsorb and redistribute 99% of the blood volume and only 0.1% of the filtered blood becomes urine.

3. Kidney stones are an accumulation of mineral salts and mostly combined with calcium which can lodge anywhere along the course of the urinary tract.

4. Refined carbohydrates and sugar may help the body to make kidney stones.

5. Sugar will stimulate the pancreas to release insulin. This causes extra calcium to be excreted in the urine. . . alas, kidney stones.

6. An excess of milk or antacids may cause kidney stones.

7. Each kidney is about 4 ½ inches long.

9. The kidneys of a newborn baby are about 3X larger in proportion to body weight as in the adult.

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# Microbiological Laboratory

MICROBES SINCE 1977


"WEALTH IS NOTHING BUT HEALTH"

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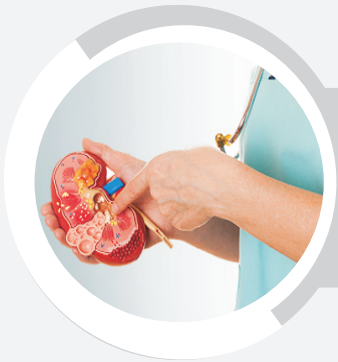


**Simply looking at serum creatinine level is not enough.**

**WORLD KIDNEY DAY**
**MARCH 14th**

**eGFR vs EGFR**

eGFR - Estimated Glomerular Filtration Rate

EGFR - Epidermal Growth Factor Receptor

## WHAT IS eGFR ?

estimated Glomerular filtration rate (eGFR) is a test used to check how well the kidneys are working. Specifically, it estimates how much blood passes through the tiny filters in the kidneys, called glomeruli, each minute.

## HOW CAN I GET MY eGFR ?

Your doctor will test your blood for creatinine or Cystatin C. Creatinine is a waste that comes from your muscles. Healthy kidneys filter creatinine out of your blood. Your doctor will use the result from your creatinine test, your age, your sex and your race to calculate your eGFR. Cystatin C is a better indicator of eGFR for it is not age/sex dependant.

## WHY THE TEST IS PERFORMED ?

The eGFR test measures how well your kidneys are filtering creatinine waste. When the kidneys aren't working as well as they should, levels of creatinine or Cystatin C build up in the blood.

The test is recommended for people with chronic kidney disease and those at risk due to:

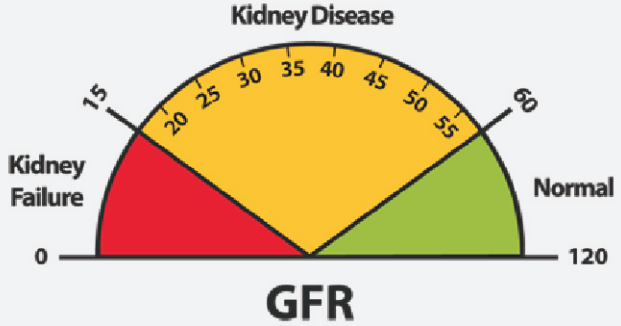
- Diabetes
- Family history of kidney disease
- Frequent urinary tract infections
- Heart disease
- High blood pressure
- Urinary blockage

## WHAT ABNORMAL RESULT MEAN ?

Levels below 60 mL/min/1.73 $m^2$ (1.73 $m^2$ = Standard body surface area) for 3 or more months are a sign of chronic kidney disease. A eGFR result below 15 mL/min/1.73 $m^2$ is a sign of kidney failure and requires immediate medical attention.

## WHAT IS THE DIFFERENCE BETWEEN CREATININE CLEARANCE AND eGFR ?

Creatinine clearance exceeds eGFR because creatinine is secreted by the proximal tubule as well as filtered by the glomerulus. Creatinine clearance can be measured from serum creatinine and creatinine excretion or from serum creatinine alone using established formulae. Measurements of creatinine clearance requires collection of a timed urine sample, which is inconvenient and frequently inaccurate. Serum creatinine is proportional to muscle mass and hence eGFR measurement using serum creatinine is approximate. Hence repeat measurement of creatinine clearance may be necessary. However cystatin c levels are independent of muscle mass.




## 10 REASONS TO TAKE CARE OF YOUR KIDNEYS

Kidneys clean blood from wastes

Kidneys help to keep your body water balance

Kidneys help to keep mineral balance

Kidneys can retain essential elements needed by the body

Kidneys help to maintain your blood composition and pH

Kidneys help to control your blood pressure

Kidneys help to keep strong bones

Kidneys help to produce red blood cells

Kidneys are the silent partner to good health

| AVERAGE eGFR BY AGE IN PEOPLE | |
|---|---|
| AGE (YEARS) | AVERAGE eGFR |
| 20–29 | 116 |
| 30–39 | 107 |
| 40–49 | 99 |
| 50–59 | 93 |
| 60–69 | 85 |
| 70+ | 75 |