

### Diet

**Salt restriction** Avoid papad, chatni, pickles, salty snacks, canned food items, junk food and addition of extra salt in food

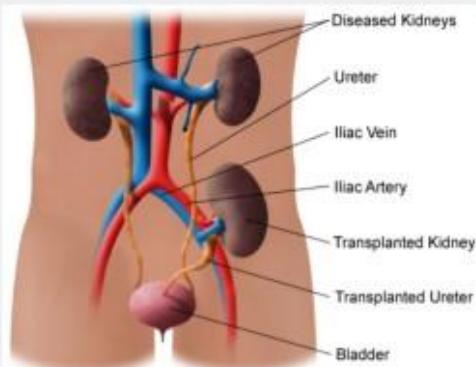
**Potassium restriction** – According to the advice of treating doctor (Avoid dry fruits, coconut water, tomatoes, banana etc)

**Protein** – Avoid high protein diet

**Fluid intake** – Fluid restriction in patients with swelling over feet, face or all over body

### Transplantation

is a surgical procedure in which a healthy kidney (from living donor or



cadaver donor) placed in to a body of a patient with end stage kidney failure.

### What is Kidney Stone?

A kidney stone is a solid mass made up of tiny crystals of calcium that gets collected in kidney & urinary tract.

### Symptoms of Kidney Stone ?

- ❖ Pain may be felt in the belly area or side of the back
- ❖ Blood in the urine

### Diagnosis :

- ✳ Sonography
- ✳ X-Ray

### Treatment of stone :

- ✳ Treatment with Medicines
- ✳ Special treatment for removal of stone through urinary tract :-  
Operation, Lithotripsy etc.

### How to keep your kidneys healthy

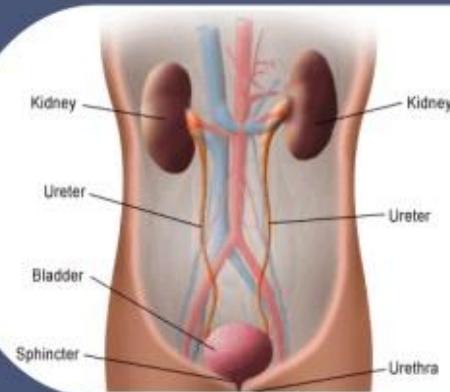
1. Blood sugar control
2. Blood pressure control
3. Don't smoke
4. Regular Exercise
5. Take medications as prescribed by your doctor
6. Balanced diet to maintain weight
7. Annual kidney check up

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# About your Know... Kidneys



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## Introduction

There is a rapid rise in number of kidney disease patients in last few decades. Generally, population is not aware of symptoms of kidney failure. Treatment of advanced kidney failure such as dialysis and kidney transplantation is expensive and only less than 10% of Indian patients can afford it. Hence early diagnosis and treatment remains the only and most feasible option to decrease progression of kidney failure.

## What do healthy kidneys do?

Kidneys are two bean-shaped organs located in lower back. They constitute human body's filtration system, cleaning waste and extra fluids from body. Kidneys also produce and balance chemicals that are necessary for the body to function.

### Healthy kidneys:

1. Clean and filter blood
2. Maintain Water, acid base & salt balance
3. Maintain blood pressure
4. Keep bones strong
5. Maintain Haemoglobin

## Types of Kidney Diseases

- \* Kidney failure
- \* Stones in kidney and urinary tract
- \* High blood pressure
- \* Infection in urine

## Kidney Failure

Kidneys are no longer able to remove waste effectively from the body to balance fluids. The build up of waste products can change the chemistry of

your body causing symptoms.

There are two types of kidney failure:

1. Acute kidney failure
2. Chronic kidney failure

## Acute Kidney Failure

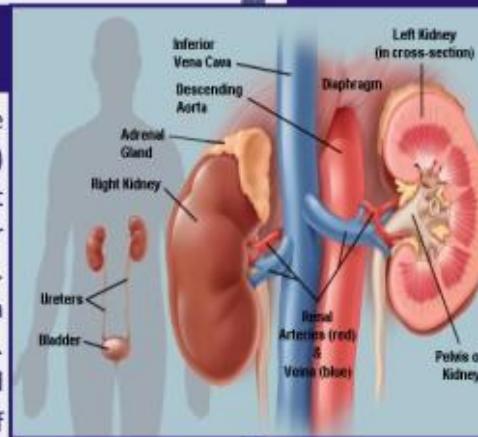
Acute means the kidneys have failed suddenly, often due to infections, a toxin (a drug allergy or poison) severe dehydration or blood loss. This type of kidney failure is usually temporary. If the cause is treated, the kidneys may be able to recover some or all of their function.

## Chronic Kidney Failure

Chronic kidney failure (chronic kidney disease) occurs when kidneys not able to perform their functions to full capacity. This can happen all of a sudden or over time. Gradual progressive and irreversible loss of kidney function over several months to years leads to complete kidney failure.

## Symptoms of chronic kidney failure

- \* Swelling of face, feet and sometimes all over body
- \* Loss of appetite
- \* Nausea and vomiting
- \* High blood pressure



\* Low haemoglobin

\* Fatigue

## Who is at risk for developing chronic kidney failure?

Person who has –

- \* Diabetes mellitus and uncontrolled blood pressure
- \* Smoker, obese, age above 60 years
- \* Long term treatment with pain killers
- \* Recurrent kidney stones

## How can I find out if I have kidney disease?

Kidney disease can be found through lab tests or by symptoms. High blood levels of creatinine and urea nitrogen (BUN) or high levels of protein in urine suggest kidney disease. Sonography of kidneys and urinary tract is very important in kidney failure.

## Management of chronic kidney failure

There is no cure for chronic kidney failure. So, early detection and meticulous conservative medical treatment is the only way to retard the progression of kidney failure and delay the need for dialysis.

There are three treatment options for chronic kidney failure:

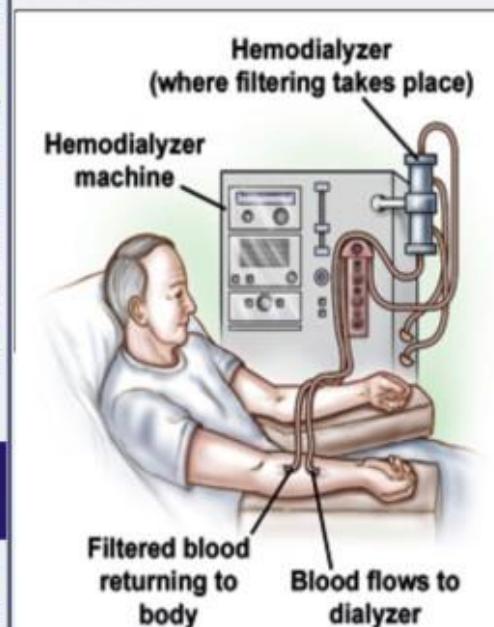
1. Dialysis
2. Medicine and dietary modification
3. Kidney transplantation

## Dialysis

When kidney function reduces by 90 %, It leads to various symptoms. At this stage, medical management is not sufficient for survival. Hence, patient requires dialysis (process through which waste and fluid from the body is removed).

There are two types of dialysis:

**Hemodialysis** - Process of removing waste and fluid from blood with the help of machine.



**Peritoneal dialysis** - Dialysis through abdomen via specialized soft tube without the help of machine. Both the processes have their own advantages and disadvantages.