**Hemodialysis**

Healthy kidneys clean your blood and remove extra fluid in the form of urine. They also make substances that keep your body healthy. Dialysis replaces some of these functions when your kidneys no longer work. There are two different types of dialysis - hemodialysis and peritoneal dialysis.

**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.

**How does hemodialysis work?**

In hemodialysis, a dialysis machine and a special filter called an artificial kidney, or a dialyzer, are used to clean your blood. To get your blood into the dialyzer, the doctor needs to make an access, or entrance, into your blood vessels.

**How does the dialyzer clean my blood?**

The dialyzer, or filter, has two parts, one for your blood and one for a washing fluid called dialysate. A thin membrane separates these two parts. Blood cells, protein and other important things remain in your blood because they are too big to pass through the membrane. Smaller waste products in the blood, such as urea, creatinine, potassium and extra fluid pass through the membrane and are washed away.

**Where is hemodialysis done?**

Hemodialysis can be done in a hospital, in a dialysis center that is not part of a hospital or at home. You and your doctor will decide which place is best, based on your medical condition, and your wishes.

**How long will each hemodialysis treatment last?**

In a dialysis center, hemodialysis is usually done 3 times per week for about 4 hours at a time. People who choose to do hemodialysis at home may do dialysis treatment more frequently, 4-7 times per week for shorter hours each time.

Your doctor will give you a prescription that tells you how much treatment you need. Studies have shown that getting the right amount of dialysis improves your overall health, keeps you out of the hospital and enables you to live longer. Your dialysis care team will monitor your treatment with monthly lab tests to ensure you are getting the right amount of dialysis. One of the measures your dialysis care team may use is called urea reduction ratio (URR). Another measure is called Kt/V (pronounced kay tee over vee).

**Do I need to eat a special diet?**

Yes. Generally speaking, patients on dialysis are advised to increase their protein intake and limit the amount of potassium, phosphorus, sodium, and fluid in their diet. Patients with diabetes or other health conditions may have additional diet restrictions. It's important to talk with you dietitian about your individual diet needs.

Your dialysis care team will monitor your treatment with monthly lab tests to ensure you get the right amount of dialysis and that you are meeting your dietary goals.

**Can dialysis cure my kidney disease?**

In some cases of sudden or acute kidney failure, dialysis may only be needed for a short time until the kidneys get better. However, when chronic kidney disease progresses to kidney failure over time, your kidneys do not get better and you will need dialysis for the rest of your life unless you are able to receive a kidney transplant.

**Will I be uncomfortable on hemodialysis?**

When you begin hemodialysis, the needles put in your fistula or graft may be uncomfortable. Most patients get used to this in time. Your dialysis care team will make sure you are as comfortable as possible during your treatment. Symptoms like cramps, headaches, nausea or dizziness are not common.