What is dialysis?

Dialysis filters a person's blood to remove waste products when their kidneys can no longer do the job. Dialysis is a type of life-sustaining treatment.

There are two main types of long-term dialysis.

**Hemodialysis** is the more common type of dialysis. In hemodialysis, your blood flows through a tube outside of your body into a filter to remove waste products. A needle is inserted into one of the blood vessels, usually in your arm. The needle is attached to a tube that carries a steady flow of your blood into the filter. After the blood is filtered of waste products, it returns to your body through a second needle that is inserted into another blood vessel. Each session lasts about four hours and must be repeated at least three times a week.

In **peritoneal dialysis**, your blood is cleaned when waste products pass out of the blood vessels of your intestines into clean fluid that is flushed in and out of your belly. Clean fluid from a bag flows through a tube that goes through the skin of your belly into a space inside, around your intestines. The fluid stays there for several hours, and waste products from the blood pass into it. The fluid containing waste products then drains out through the tube and is thrown away. This process is repeated several times a day, or each night while you are sleeping.
When Might Dialysis Be Considered?

In many people with long standing kidney disease, the problems slowly get worse over time. Dialysis would be considered when your kidneys could no longer remove enough waste products from the blood to keep you feeling well, and a kidney transplant was not available. You might feel sick to your stomach, tired, and weak. You could have little appetite and might have swelling. You might also have difficulty breathing or thinking clearly. Dialysis might help to partly relieve these symptoms.

Kidney problems may also come on quickly. If a severe illness causes the kidneys to fail or suddenly get worse, dialysis might be considered to help clean the blood during that time. Sometimes the kidneys start working again after the severe illness has passed. Other times, the kidneys don’t start working normally again, and long-term dialysis may be needed after the severe illness has passed. The kidneys are more likely to begin working again if the person's overall recovery from the sudden illness is good.
Benefits and Risks

What are some possible benefits of dialysis?

Dialysis may prolong your life, depending on your other health problems.

Dialysis may help you feel better. You may feel less sick to your stomach, tired, or weak. You may have less swelling. Your appetite may get better. You may have fewer problems breathing or thinking clearly.

Unless you have other health problems that would prevent you from being active, you may be able to go back to work and participate in activities that you enjoy.

If you are eligible for a kidney transplant, dialysis can keep you alive while you wait for a donor.

What are some possible risks of dialysis?

You may feel dizzy, tired, or have cramping after dialysis.

Access to your blood vessels (for hemodialysis) or the tube into your abdomen (for peritoneal dialysis) may get blocked. This can cause discomfort, and you may need a procedure to fix the problem.

You may be more likely to get infections, and suffer from heart disease and other medical problems. As a result, you may need to come into the hospital more often and stay longer. These problems can also increase the risk of death.

For people with some medical problems, dialysis does not help them live longer or feel better.
What to Expect

What if my kidneys fail and I have dialysis?

You may choose dialysis when your kidneys can no longer remove enough waste products from the blood to keep you feeling well.

If your kidneys fail quickly, a tube will be placed into one of your blood vessels. The tube carries a steady flow of your blood through a filter to clean it. This may be done daily or as needed until your kidneys get better. If your kidneys do not get better, you and your health care team will discuss whether long-term dialysis will help.

For long-term dialysis, you would need surgery to prepare the blood vessels in your arms (for hemodialysis), or surgery to have a tube placed into your belly (for peritoneal dialysis).

Most people receive long-term hemodialysis in a hospital or in a dialysis center, usually three times each week. You may be able to have hemodialysis at home if you have a trained helper. During each hemodialysis session, you would sit next to a machine that removes waste products from your blood. Each session lasts about four hours.

Peritoneal dialysis is usually given at home, and may also be given while a person is at work or traveling away from home. To have peritoneal dialysis, you must be able to do it yourself or have someone who can help you. Peritoneal dialysis is repeated several times a day, or each night while you are sleeping.
What to Expect

More about what to expect with dialysis...

If you receive dialysis, you would have to be careful about the types of food you eat. You would need to limit the amount of salt and certain other foods that you eat, and how much water you drink.

Medicines may be needed to control blood pressure, treat anemia, and prevent bone and heart disease.

You would have to adjust your schedule to allow time for dialysis.

Dialysis is not as good as healthy kidneys at filtering your blood. As a result, you may not feel well.

Most people receiving long-term dialysis have a shorter than normal life span.
What to Expect

What if my kidneys fail and I do not have dialysis?

Most people can live for some time with kidneys that are only partly working. When the kidneys are not working properly, waste products slowly build up in the bloodstream. This might make you feel sick to your stomach, tired, and weak. You might have little appetite and have swelling. You will receive care to help you be as comfortable as possible.

When a person’s kidneys become very weak, death may occur within days to weeks. Death from kidney failure usually involves feeling less and less awake and may result eventually in coma. You will be given treatments to manage discomfort from pain or fluid build-up to help you be comfortable.

Your health care team can tell you if you are at risk for kidney failure. Talk with them about treatment options that support your goals and preferences.