WHAT IS KIDNEY FAILURE?

living WELL with kidney failure

WHAT IS KIDNEY FAILURE?

National Kidney Foundation™
Contents

2 Introduction
3 What will I learn?
5 Who is on my healthcare team?
7 What is kidney failure?
7 How will I learn to cope with kidney failure?
8 What treatments are available for kidney failure?
8 What is the best treatment for me?
9 What is hemodialysis?
10 What is peritoneal dialysis?
10 What role do diet and medicines play in dialysis?
11 What is a kidney transplant?
12 What role do diet and medicines play in transplantation?
12 How will I pay for treatment?
14 Review
15 True or False
16 Words To Know
21 The People on My Healthcare Team
22 Questions for My Healthcare Team
23 About the National Kidney Foundation
Introduction

“Living Well with Kidney Failure” is a video series created by the National Kidney Foundation to help you understand kidney failure and its treatments. There are six videos. Each video has a companion booklet to provide more information and to help you review what you’ve learned. The six videos and booklets are:

- What is Kidney Failure?
- How Kidney Failure Affects Your Body
- Kidney Transplant
- Peritoneal Dialysis
- Hemodialysis
- Living Well

This booklet talks about the treatments available for kidney failure. It also describes the professionals who make up the healthcare team in hospitals, dialysis centers, and transplant centers. But, more importantly, it focuses on the role you play in your own care. That role begins with learning all you can about kidney failure and its treatment.
What will I learn?

You’ll learn about kidney failure, and what it means when your kidneys don’t work.

You’ll learn about other health problems that can happen as a result of having kidney failure, and what you can do about them. These are discussed in the video and booklet called “How Kidney Failure Affects Your Body.”

You’ll learn about the two basic treatments available—kidney transplant and dialysis. There are two kinds of dialysis—peritoneal dialysis and hemodialysis. Each treatment is discussed in this booklet, and also in the videos and booklets called “Kidney Transplant,” “Peritoneal Dialysis,” and “Hemodialysis.”

You’ll also learn about some of the personal and lifestyle changes you can expect, and how you and your loved ones can learn to cope with them. These are discussed in the video and booklet called “Living Well.”

Finally, you will be introduced to some medical terms and important words that may be new to you. To help you get to know these new words, there’s a list of “Words to Know” at the end of each booklet.
What is the right treatment choice? What’s happened to you is very serious and will mean changes in your life. But with the right treatment and outlook, you can live a long, full life.

Your decision on what type of treatment is right for you usually isn’t based just on your medical history and your doctor’s opinion. It’s also based on what you and your family want, either as you first start treatment, or later on, because your life and health may change with time, and so can your treatment.

You’ll also have to make everyday choices about how to live a better life. The choice to accept the fact that you need treatment may be the toughest choice of all.

“Your healthcare team members do their jobs best when you work with them as part of the team.”
Who is on my healthcare team?

The healthcare team works with you wherever your treatment takes place—in hospitals, dialysis centers and transplant centers. The team’s job is to help you understand and deal with your kidney disease and kidney failure.

Your healthcare team members do their jobs best when you work with them as part of the team. You do that by telling them what your concerns are, asking them questions, and by learning as much as you can about kidney failure and its treatment.

On the healthcare team:

- **Nephrologists** are doctors who are trained in treating kidney disease and kidney failure. They will give you regular checkups, look after your health, prescribe medicines, oversee your monthly blood tests, and much more.

- **Advanced practitioners** are also trained in treating kidney disease and kidney failure. They work closely with your nephrologist to give you checkups, medicines, and other medical care.

- **Nurses** work closely with other team members to coordinate all medical aspects of your care at the dialysis center.

- **Dialysis technicians** keep an eye on you and the dialysis machine while you’re having your treatment to make sure all is going well, and that you are as comfortable as you can be.
**Dietitians** keep you healthy by showing you how to eat and drink the right things in the right amounts. The dietitian will be working closely with you to plan a diet that you can follow and enjoy.

**Social workers** help you and your family cope with kidney disease. They provide counseling, identify sources of emotional support, and help you access services provided by federal, state, and community agencies.

If you feel that transplantation is a treatment you’d like to consider, then your healthcare team will also include a transplant physician, a transplant coordinator, and a transplant surgeon.

**Transplant physicians** and **transplant surgeons** take care of all medical aspects of your transplant, from the evaluation process right through surgery and postoperative care.

**Transplant coordinators** are registered nurses with a specialty in transplantation. They work with all members of the healthcare team to see if transplantation is right for you, and if it is, they’ll help you prepare for surgery and see that all goes well afterwards.
What is kidney failure?
You have two kidneys. Each is about the size of your fist, and they’re on both sides of your spine at the bottom of your rib cage. Together, they weigh about one pound. When your body uses the food you eat and the liquids you drink, there are waste products that your kidneys filter out as urine.

When your kidneys are healthy, they keep your whole system in balance. They help your body make red blood cells. They also release hormones that help regulate blood pressure and keep your bones healthy and strong. Usually, you don’t have to worry about any of this. But when your kidneys fail, it’s a different story.

Waste products and fluids build up in your body. You may feel weak or tired. You may feel sick to your stomach. You may lose your appetite, feel irritable, or have trouble thinking clearly. And, you’ll need dialysis treatment or a kidney transplant to stay alive.

How will I learn to cope with kidney failure?
What’s happened to you is very serious and will mean changes in your life. But with the right treatment and outlook, you can live a long, full life.

You and your family probably have many questions right now. You may have been told that your kidneys are failing, or you may already be in treatment. You may be feeling angry, confused, depressed or even a little frightened—and that’s understandable. Kidney failure is a lot to handle. In time, you and your family can come to understand these feelings and learn to cope with them.

Because you have kidney failure, you’ll need to learn more about a lot of things that affect your health. The more you know, the better you’ll understand why some things are part of your treatment. As a result, you’ll be more likely to follow your treatment plan faithfully, and you’ll be better prepared for the many choices you’ll have.
to make in the months and years ahead. To learn more about coping with kidney failure, see the video and booklet called “Living Well.”

What treatments are available for kidney failure?
There are two treatments for kidney failure—dialysis and kidney transplant.

Dialysis is available in two forms—hemodialysis and peritoneal dialysis. Both remove waste products and extra fluid from your blood. A kidney transplant is an operation that places a healthy kidney in your body.

What is the best treatment for me?
Learning about your treatment choices will help you decide which one is right for you. Your decision should be based on more than your medical history and your doctor’s opinion. It should also be based on what you and your family want when you first start treatment, or later on. Your life and health may change with time, and so can your treatment.

You should consider many things when choosing your treatment—your lifestyle, your age, any other health problems you may have, and whether you have a friend or relative to help you. These are just some of the things to consider.

Remember, you play an important role in choosing the treatment plan that’s right for you, and your treatment can change over time to fit changes in your lifestyle and health.
What is hemodialysis?

Hemodialysis is a treatment that uses a special machine to remove waste products and extra fluid from your blood.

In hemodialysis, your blood flows out of your body through a specially prepared blood vessel in your arm, called an access, to a dialysis machine, where it passes through a filter—an artificial kidney—called a dialyzer. Waste products and extra fluid are carried away into a solution called dialysate.

Your cleaned blood returns back to you through the access.

On average, the process takes four hours. Most people have treatment three to four times a week.

Depending on where you live, you can get hemodialysis at a hospital, a dialysis center, or at home. If your treatment center offers home hemodialysis, it will arrange for training for you and a care partner (a family member or someone close to you) to help you do the procedures safely. It will also arrange for you to get the supplies and equipment you need, and provide information on how to contact them if you need them. You’ll still have to come into the treatment center for checkups. And if you want to talk to your healthcare team between visits, they’re only a phone call away.
What is peritoneal dialysis?
Peritoneal dialysis does much the same thing as hemodialysis, but it is not done at a center. It can be done at home, at work, anywhere—even while you sleep. It gives you control over your own treatment, and puts responsibility on you to do the treatments yourself.

With peritoneal dialysis, a special sterile cleansing solution flows into your abdominal cavity through a tube in your belly called a catheter.

The lining of the abdominal cavity (called the peritoneum) acts as a natural filter.

The waste products from your blood flow through this lining into the solution, which is then drained from the body through the catheter. Your blood never leaves your body.

The process is done several times a day, every day. Because it’s done daily, salt, water, and waste products do not build up in your body.

What role do diet and medicines play in dialysis?
Hemodialysis and peritoneal dialysis do a good job of filtering out waste products and extra fluid—but they can’t completely take over the work healthy kidneys do in balancing important substances in your blood. That’s done through medicines you’ll need to take and the diet plan you’ll need to follow.

Your healthcare team will work with you to develop a treatment plan that’s right for you. The plan will take into account your overall health, any medicines you’ll need to take, and what you and your family like to eat.
What is a kidney transplant?

The other form of treatment for kidney failure is kidney transplantation. With a transplant, the work of your kidneys is done by a healthy kidney that is surgically placed into your body.

Donated kidneys can come from a living donor. This person may be a family member, friend, or even a stranger. A donated kidney can also come from someone who died and donated a healthy kidney. A person who has died and donated a kidney is called a deceased donor.

For your body to accept the new kidney, it must be compatible with your blood and tissue types.

Kidneys from live donors and deceased donors both work well in a successful transplant. However, the earlier you get your transplant, the better. Some studies show that an early transplant, with little or no time spent on dialysis, can lead to better long-term health.

The process for getting a kidney from a deceased donor can take some time. You may have to be on some form of dialysis while you wait.

The first step in getting a transplant is to ask to be evaluated for one. If you know someone who may be able to donate a kidney to you, they too will have to go through an evaluation process.
**What role do diet and medicines play in transplantation?**

With a kidney transplant, there are few restrictions on your diet. Most people simply need to watch their weight and eat healthy meals.

You’ll need to take antirejection medicines for as long as you have your transplanted kidney. They make sure that the kidney is accepted by your body and functions well.

It’s important for you to know that getting a transplant is major surgery for you and anyone who may be considering donating a kidney to you.

To learn more about transplantation, watch the video “Kidney Transplant,” and read the booklet that goes with it.

**How will I pay for treatment?**

Many of the costs for dialysis and transplantation are covered by Medicare. Private insurers and state programs may cover some costs as well. Your social worker can answer questions you may have about coverage or direct you to others who can help.

---

**Acknowledgements**

The National Kidney Foundation is grateful to the patients, clinicians, dialysis units, and transplant centers that helped make this program possible.
“Talk to a dietitian about a meal plan that is right for you.”
In this booklet, you were introduced to your healthcare team, and you learned you’re an important member of that team.

You learned about **two forms of dialysis**—hemodialysis and peritoneal dialysis. You also learned about transplantation. (These treatments are discussed further in other videos and booklets in this program.)

You learned that there are **many choices in treatment**—and that treatment can change as your condition changes.

You also learned that whichever treatment you choose, you must **follow the plan** you and your healthcare team put together. This plan takes into account your overall health, your diet, and any medicines you take.

Most important of all, you’ve learned how important it is to **take an active role** in your own care. Learn all you can, ask questions, and talk things over with your family and healthcare team.
True or False

1. When they’re working properly, kidneys remove waste products and extra fluids from the body.  T  F
2. The dialysis technician is the member of the healthcare team who will help plan a good diet.  T  F
3. The first step in getting a transplant is asking for an evaluation.  T  F
4. There are two types of dialysis—peritoneal dialysis and hemodialysis.  T  F
5. In hemodialysis, a sterile cleansing solution flows into the abdominal cavity.  T  F
6. Peritoneal dialysis is performed once each month.  T  F
7. A donated kidney can come from a living person or from someone who has died.  T  F
8. Once you’ve chosen one form of treatment, you can never change to another form.  T  F
9. Diet is important in treating kidney failure.  T  F
10. Your healthcare team works with you wherever your treatment takes place—at home, in a center, or in a hospital.  T  F
Words to Know

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>abdominal cavity</td>
<td>The space in your body that contains your stomach, small and large intestines, kidneys, and other major organs.</td>
</tr>
<tr>
<td>access</td>
<td>A specially prepared blood vessel, usually in your arm, through which your blood flows to the hemodialysis machine.</td>
</tr>
<tr>
<td>advanced practitioners</td>
<td>Members of your healthcare team who work closely with your nephrologist to give you regular checkups, medicines, and other medical care. Advanced practitioners include nurse practitioners, physician assistants, and clinical nurse specialists.</td>
</tr>
<tr>
<td>care partner</td>
<td>A family member or other loved one who will help you do your treatment at home.</td>
</tr>
<tr>
<td>catheter</td>
<td>A soft plastic tube that is surgically placed in your body for dialysis. With peritoneal dialysis, the catheter is placed in your abdominal cavity. In hemodialysis, the catheter is placed in a large vein, usually in your neck or chest.</td>
</tr>
<tr>
<td>deceased donor</td>
<td>Someone who has recently died and wanted to donate a kidney.</td>
</tr>
<tr>
<td><strong>dialysate</strong></td>
<td>The cleansing solution used in hemodialysis and peritoneal dialysis.</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>dialysis</strong></td>
<td>A process that filters waste products and extra fluid from your blood when your kidneys are no longer doing their job.</td>
</tr>
<tr>
<td><strong>dialysis center</strong></td>
<td>A place in the hospital or community where dialysis treatments are given to kidney patients.</td>
</tr>
<tr>
<td><strong>dialysis machine</strong></td>
<td>A special machine that uses an artificial kidney to filter waste products and extra fluid from your blood.</td>
</tr>
<tr>
<td><strong>dialysis technician</strong></td>
<td>A member of your healthcare team who is specially trained to take care of the dialysis machine and other equipment at the dialysis center.</td>
</tr>
<tr>
<td><strong>dialyzer</strong></td>
<td>The artificial kidney that’s part of the dialysis machine, which cleans your blood of waste products and extra fluid. The dialyzer is a filter for your blood.</td>
</tr>
<tr>
<td><strong>diet plan</strong></td>
<td>The plan that you and your dietitian will develop to make sure you’re eating and drinking the right things in the right amounts.</td>
</tr>
<tr>
<td><strong>dietitian</strong></td>
<td>A member of your healthcare team who will help you plan what to eat and drink to help you feel your best.</td>
</tr>
</tbody>
</table>
healthcare team

All the people responsible for planning your care and helping you cope with kidney disease and kidney failure. Your healthcare team may include your nephrologist, advanced practitioner, nurse, dialysis technician, dietitian, social worker, transplant coordinator, and transplant surgeon. You, too, are an important member of your healthcare team.

hemodialysis

One of the basic forms of dialysis treatment for kidney failure. In hemodialysis, your blood is cleaned of waste products and extra fluid through a dialysis machine.

hormones

Chemicals produced by different glands and organs—including the kidneys—to trigger certain responses in your body.

kidney disease

The loss of some or all of your kidney function. Kidney disease can result from conditions such as high blood pressure, diabetes, heredity, or injury to the kidneys.

kidney failure

Your kidneys no longer work well enough to keep you alive, and treatment is needed to replace the work they do. This is the stage of kidney disease at which treatment with either dialysis or a kidney transplant is needed to stay alive.

kidney transplant

One of the basic forms of treatment for kidney failure. In transplantation, a kidney from a living donor or from someone who has recently died is surgically placed into a patient’s body to do the work that diseased kidneys can no longer do.
<p>| <strong>living donor</strong> | A living person who donates a kidney to someone who needs a kidney transplant. |
| <strong>nephrologist</strong> | A member of your healthcare team who is a doctor specially trained in treating kidney disease and kidney failure. |
| <strong>nurse</strong> | A member of your healthcare team who is specially trained to care for kidney patients and to perform and monitor dialysis treatments. Nurses coordinate care between other team members. |
| <strong>nurse practitioner</strong> | A member of your healthcare team who works closely with your doctor to give you regular checkups, medicines, and other medical care. |
| <strong>peritoneal dialysis</strong> | One of the basic forms of dialysis treatment for kidney failure. In peritoneal dialysis, a solution called dialysate flows through a catheter into your abdominal cavity, where it removes waste products and extra fluids from your body, and then is drained out. |
| <strong>peritoneum</strong> | The lining of the abdominal cavity (your belly). |
| <strong>physician assistant</strong> | A member of your healthcare team who works closely with your doctor to give you regular checkups, medicines, and other medical care. |
| <strong>red blood cells</strong> | Cells in your blood that carry oxygen to all parts of your body. A loss of red blood cells can cause anemia. |</p>
<table>
<thead>
<tr>
<th><strong>Term</strong></th>
<th><strong>Definition</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>social worker</td>
<td>A member of your healthcare team who is specially trained to help you cope with the non-medical problems you may have, such as the stress of a serious illness.</td>
</tr>
<tr>
<td>sterile</td>
<td>Free of germs.</td>
</tr>
<tr>
<td>transplant center</td>
<td>A hospital where patients who are interested in getting a kidney transplant go for an evaluation or surgery itself.</td>
</tr>
<tr>
<td>transplant coordinator</td>
<td>A member of your healthcare team who is responsible for arranging many parts of the transplantation process. A transplant coordinator is usually a registered nurse.</td>
</tr>
<tr>
<td>transplant physician</td>
<td>A member of your healthcare team who will be responsible for much of your transplant care. He or she may also be a nephrologist.</td>
</tr>
<tr>
<td>transplant surgeon</td>
<td>A member of your healthcare team who will perform the transplant operation, should you choose transplantation as your treatment option.</td>
</tr>
</tbody>
</table>
The People on My Healthcare Team

Nephrologist ________________________________________________________________

Advanced practitioner ______________________________________________________

Nurse ________________________________________________________________

Dialysis technician _______________________________________________________

Dietitian ________________________________________________________________

Social worker ____________________________________________________________

Transplant coordinator ____________________________________________________

Transplant surgeon ______________________________________________________

Transplant physician _____________________________________________________

Important telephone numbers ______________________________________________
Questions for My Healthcare Team

---

---
About the National Kidney Foundation

The National Kidney Foundation (NKF) is a team member working behind the scenes. The NKF offers programs like “Living Well with Kidney Failure” so that you and your family can learn about kidney disease and kidney failure.

NKF also supports patient and community services, research, professional education, organ donation, and public information programs.

This is one of six videos and booklets in this program. If you have questions, ask any member of your healthcare team, or call the National Kidney Foundation at 1.855.NKF.CARES (1.855.653.2273) www.kidney.org