

*Ask your  
physician or  
nurse if you  
have any  
questions or  
concerns.*

## Peritoneal Dialysis

The kidneys play an important role in helping your body work. When the kidneys fail, peritoneal dialysis (PD) is a treatment that takes over some of the work of the kidneys. Your kidney care team, which includes your physician, physician assistant (PA) and nurse, will help you learn more about this. This brochure will help you understand:

- What PD is
- How it can help
- What to expect
- Lifestyle changes
- How to care for yourself

## Kidney function

Healthy kidneys:

- Remove waste and extra fluid from the blood
- Manage certain chemicals (hormones) in the blood
- Manage blood pressure

When the kidneys do not work well, blood pressure, waste products and fluids in the body can rise to unsafe levels. Urea and creatinine are examples of waste products. These are normal and come from body functions. Some chemicals in your blood, such as potassium and phosphorus, may also rise to dangerous levels if your kidneys cannot remove them.

Peritoneal dialysis removes these wastes and extra fluid so they do not build up in your body. It also helps manage your blood pressure.

## When to start dialysis

Kidney failure progresses through stages. Your physician or PA will check your blood tests and tell you when you need to prepare for dialysis. Usually, this happens when your glomerular filtration rate (GFR) falls below 15.

Creatinine is a normal waste product of muscle tissue. Your kidneys filter it out of the blood and it leaves your body in urine. The lab uses the results from the creatinine blood test to calculate the GFR. A low GFR means that the kidney's ability to get rid of creatinine is dropping. Therefore, creatinine is building up in the blood. This is a sign of kidney failure.

## Types of PD

PD is one form of dialysis. It can be done while you are at home or work, or even you travel. There are 2 types of PD:

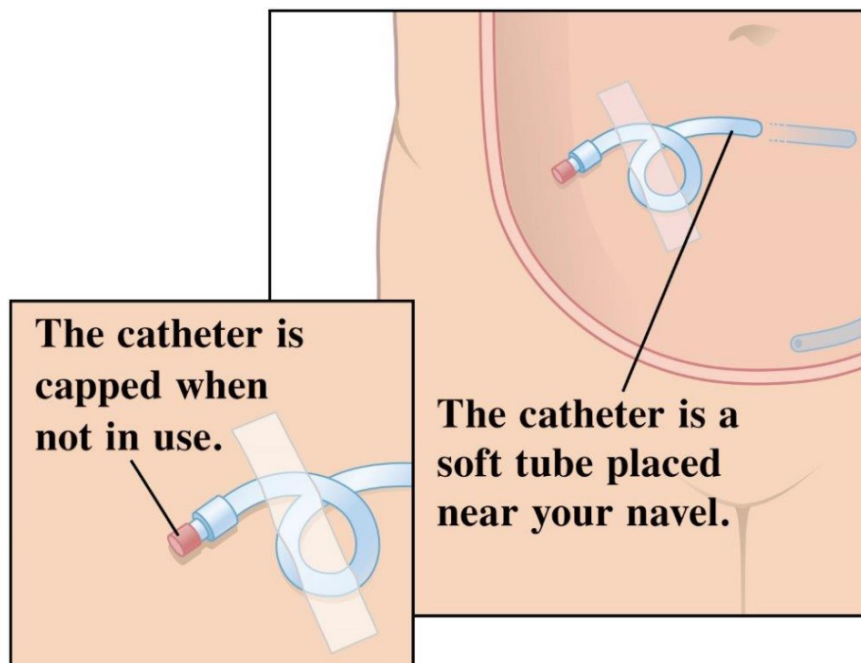
- **Continuous ambulatory peritoneal dialysis (CAPD).** You will do this 3 to 4 times a day. Your dialysis team will teach you how to do the PD process explained below.
- **Automated peritoneal dialysis (APD).** A machine does the dialysis while you sleep. Depending on your remaining kidney function, you may also need to use it during the day. If you use APD, you will be taught how to use the machine.

Your care team can help you decide which type is best for you.

## About PD

This type of dialysis involves placing a soft tube (catheter) into an empty space (cavity) in your abdomen. This requires minor same-day surgery. Part of the catheter is in the abdomen and part stays outside. The outer part of the catheter will be connected to special tubing for dialysis (Figure 1).

**Figure 1. PD catheter**



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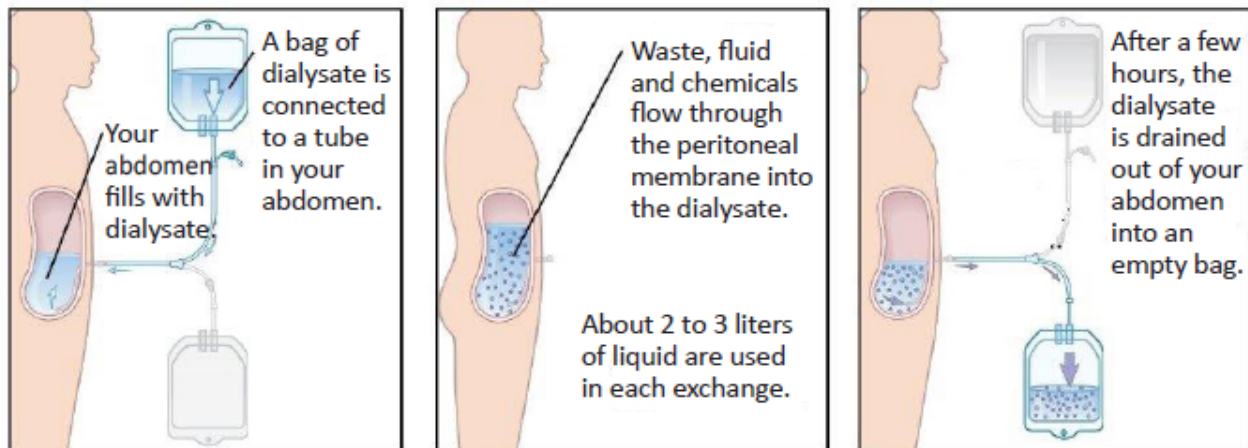
During PD, 2 to 3 quarts of a special cleansing fluid (dialysate) flow through the catheters into your abdominal cavity (belly). It takes about 10 minutes for the fluid to fill your belly. The fluid stays in your belly for a few hours. This is known as the dwell time. The dwell time depends on your body size and how much waste needs to be removed.

During the dwell time, wastes and fluids pass through the inside lining of your abdomen into the dialysate. This lining acts as a filter and prevents other important blood products from being washed out of your body.

If you use the CAPD method (Figure 2), you will cap the catheter after the dialysate fills your belly. This helps prevent leaks.

At the end of the dwell time, you will remove the cap and attach an empty bag to the catheter. The dialysate will drain into the bag. When your belly is emptied of dialysate, you will cap the catheter. You will empty the bags and throw them away.

**Figure 2. CAPD method**



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You will repeat this process several times throughout the day. Each sequence of filling the belly with fresh dialysate, letting the fluid dwell and then draining it is called an exchange. If you use the APD method, the machine will do the exchanges for you. The dialysis team will teach you how to set it up.

### ***Learning to do PD***

Before doing PD at home, your care team will teach you how to:

- Do the exchanges if you are using CAPD
- Set up the machine if you are using APD
- Order supplies
- Clean and care for your catheter
- Protect yourself from infection (You may need to avoid underwater activities.)

### ***Your PD prescription***

Your physician will prescribe the type of dialysis you need. Your prescription may vary and will depend on several factors, including:

- Your body size. This determines how much dialysate and how many exchanges you need.

- Remaining kidney function. You will have a blood test and 24-hour urine collection to determine this before starting dialysis and periodically afterwards. If your kidney function changes, your dialysis needs may change.
- Your nutrition. It is important to follow diet guidelines to get the right nutrients. This can help you feel better during dialysis. Changes in diet may affect your dialysis needs.
- General health. If you are getting enough dialysis, you should feel well, with a good appetite and the energy to do the activities you wish to do. If not, please tell your physician, especially if you cannot complete your day-to-day activities because of:
  - Nausea that interferes with eating
  - Loss of appetite or taste
  - Low energy or feeling tired
 Your physician may need to adjust your dialysis prescription or treat other medical problems that may be the cause.

Your PD prescription will include:

- How many exchanges you need each day
- How long the dialysate should stay in your belly (dwell time)
- How much dialysate to use for each exchange
- What type of dialysate to use

## Infection control

Peritonitis is a serious infection that affects the inside lining of the belly where the dialysate dwells. This happens when germs get in through the PD catheter. If you get an infection, you will need antibiotics to treat this right away. Please follow these guidelines to prevent infection:

- Scrub your hands with an **antibacterial** soap for at least **2 minutes before each exchange**. Use a **disposable paper towel** to dry your hands. This avoids contact with germs that may be on a cloth towel.
- After washing your hands, touch only the supplies for PD. If you touch something else, be sure to wash your hands again.
- Make sure you do the PD exchanges in a **clean** area.
- You and anyone else in the room must wear a surgical **mask**. This prevents germs from settling on the catheter when you breathe.
- Prepare all your supplies and equipment before you start your PD.
- Children or pets should **not** be in the room during PD.
- Please turn off ceiling fans or air conditioners. This helps prevent dust germs from being blown onto the catheter or the sterile PD supplies.
- Close doors and windows to prevent drafts that may blow dust germs on the PD site.

- Do not cough or sneeze on to your PD supplies. They are sterile and need to be kept free of germs. If you do so, start again with new supplies. Throw away anything that has been contaminated with germs.
- Follow the instructions to do the exchanges exactly as you were taught. Ask your care team first if you need to make any changes.

## Catheter care

To keep your catheter working well, please do the following **each day**:

- Wear loose-fitting clothing, especially around the exit site. Tight clothes or belts can affect how your catheter works.
- Thoroughly wash your hands before and after each PD exchange.
- Do not tug or pull on the catheter.
- Tape the catheter to your skin to prevent accidental pulling. Check this each day.
- Keep sharp objects like knives or scissors away from the catheter.
- Check the catheter for any cracks.
- Clean the catheter and the exit site with soap and water at least once a day. Use a clean washcloth each time.

Your dialysis team may ask you to keep a special dressing over the catheter exit site. If so, follow their instructions to care for and clean the catheter and the site around it.

## Protecting your kidneys

Even if you need dialysis, you probably still have some kidney function left. Help keep your remaining kidney function and avoid unnecessary problems by following these tips:

- Take blood pressure medications as prescribed. Managing your blood pressure helps protect your kidneys from further damage.
- Do not take medications that can cause more kidney damage. These may include certain antibiotics and over-the-counter pain medications such as non-steroidal anti-inflammatory drugs (NSAIDs). NSAIDs include Ibuprofen (Motrin®, Advil®) and naproxen (Aleve®, Naprosyn®).
- Ask your team if taking water pills (diuretics) will help you. They may help prevent extra buildup of salt and water in your body.
- Keep other medical conditions well managed, such as diabetes and high blood pressure.

## Diet

You may need to change your diet after you start dialysis. Although you may need to limit some foods, it is still important to get the proper nutrition and calories needed to keep as healthy as possible. A registered dietitian can help you plan a menu and choose the right kinds of foods.

Note: Your PD fluid does have sugar in it. This may affect your weight. Talk with your dietitian to help you adjust your diet to avoid gaining weight.

If you take insulin or other medications for diabetes, your physician may need to adjust your dose.

## Lifestyle

It takes time to adjust to the changes that dialysis makes to your life. Once you become used to the dialysis routine, you may feel better. With dialysis and medications, you may feel stronger and less tired. You may even enjoy many of the same activities you did before you had kidney disease.

Regular exercise can help you feel better and make you stronger. To improve the quality of your life, ask your care team what type of exercise program is right for you.

The support of family and friends can make a difference. Continue to do the things you enjoy with loved ones.

## Questions or problems

Even after you start PD at home, you will still see your dialysis care team for blood tests and checkups regularly. They will check with you about:

- Your overall health
- Your nutritional status
- Your dialysis treatments
- Any problems or symptoms you may be having

Please talk with your care team about any concerns at your visits. Between visits, call the office if you have questions or concerns. Your care is our priority. Remember, you are not alone.