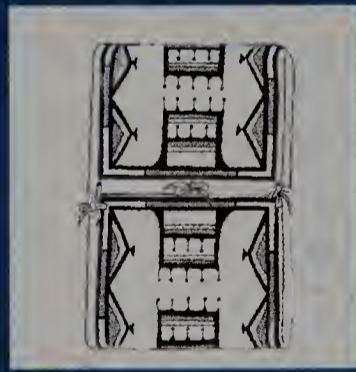
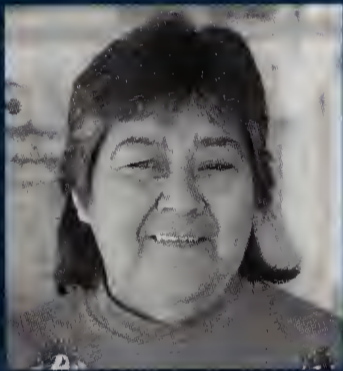
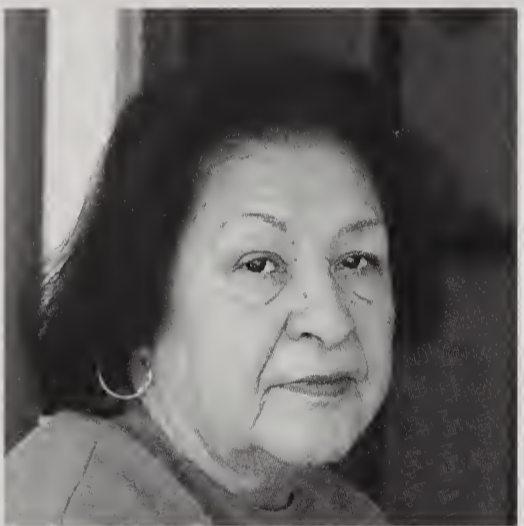


Kidney Damage "Nephropathy"



**Indian Health Service Division of
Diabetes Treatment and Prevention**



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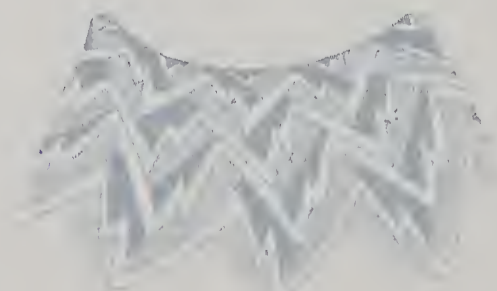
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**“We are learning
all we can about
how to protect
our kidneys.”**

Learn about kidney disease

Nephropathy (ne-FROP-ah-thee) means kidney disease or kidney damage.

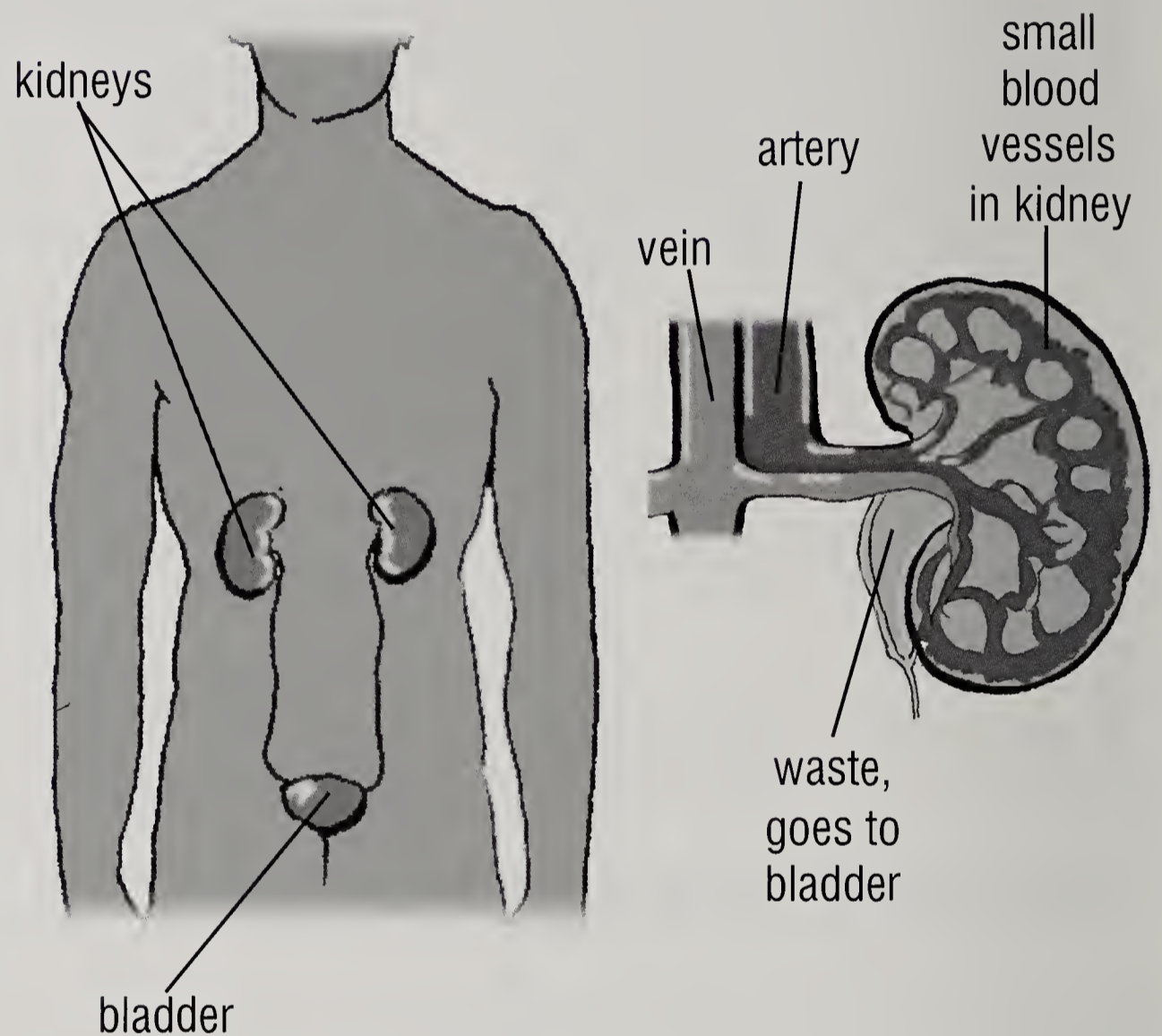
This booklet will help you learn about protecting your kidneys. You will learn:

- what kidneys do
- what causes kidney damage
- things you can do to delay kidney damage
- dialysis treatment and kidney transplants

How do your kidneys work?

Your kidneys filter or clean your blood, and remove waste products from your blood.

Your kidneys clean your blood.



Small blood vessels in your kidneys clean your blood. The waste products are sent to your bladder.



“Every day, I do things to protect my kidneys.

I keep my blood sugar and blood pressure in a good range.

I am careful about taking medicine.”

What causes damage to your kidneys?

Four things can cause kidney damage:

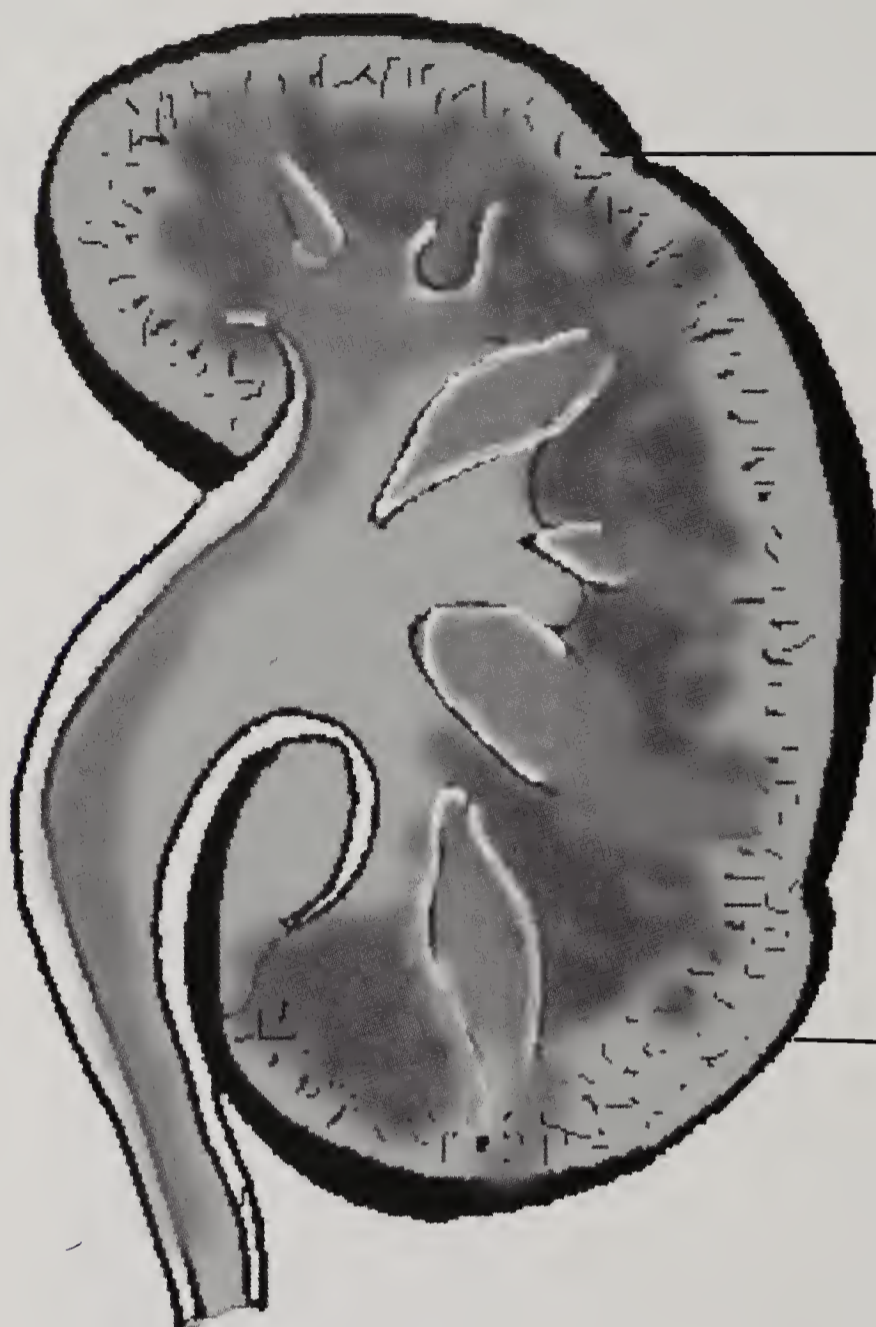
- high blood sugars over a long period of time
- high blood pressure over a long period of time
- untreated kidney infections
- some medicines

You can protect your kidneys.



**There are very
small blood
vessels inside
your kidneys.**

**When these
become damaged,
the kidneys
cannot clean
the blood.**



Very small
blood vessels
are in your
kidneys.

How does kidney damage happen?

Damage to small blood vessels causes most kidney damage.

When the blood vessels are damaged, your kidneys cannot filter the blood. When the filtering system is not working, your kidneys cannot remove the waste products.

Are there tests for kidney damage?

Yes. Blood and urine tests can tell the health care provider how your kidneys are working. The blood tests show how well the kidneys are filtering or cleaning your blood.

These tests will show the early signs of kidney damage that you may not notice or feel. Your health care provider can do these tests.

If you have diabetes, it is best to ask for these tests once a year.



“I get my blood tested once a year.”

What are the signs of kidney damage?

Usually there are no signs of kidney damage. It may take many years to feel any signs of severe kidney damage. Some signs are:

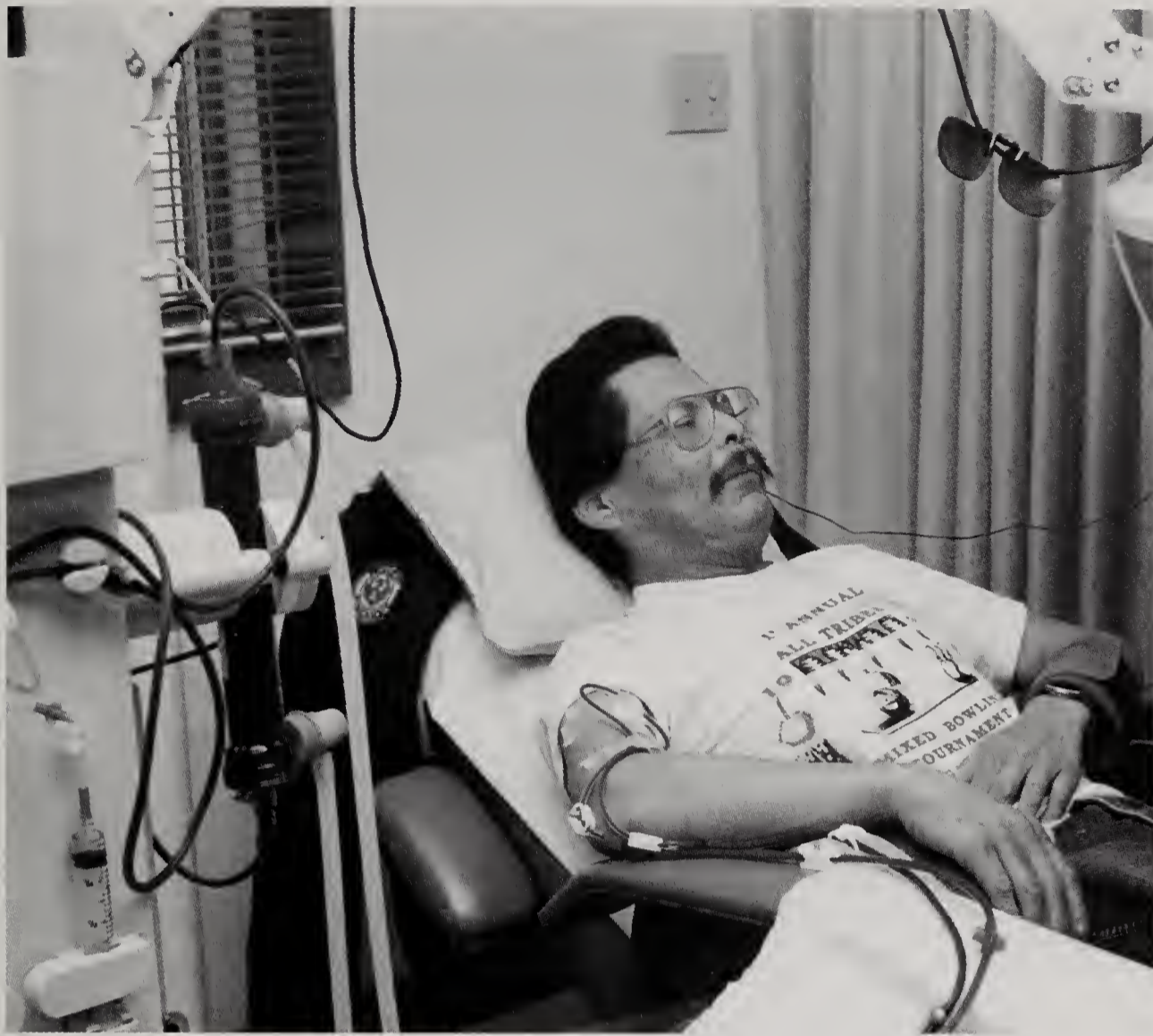
- swollen ankles and legs
- feeling very tired
- itchy skin
- long-lasting nausea
- vomiting

Remember, kidney damage develops slowly. You may not notice or feel any signs of kidney damage.

If you have diabetes, it is best to have your blood and urine tested once a year for kidney damage. Talk with your health care provider about the tests.

“I might have kidney damage and not know it. That’s why I get tested once a year.”





“My kidneys could no longer filter my blood. I now use a dialysis machine to filter my blood.”

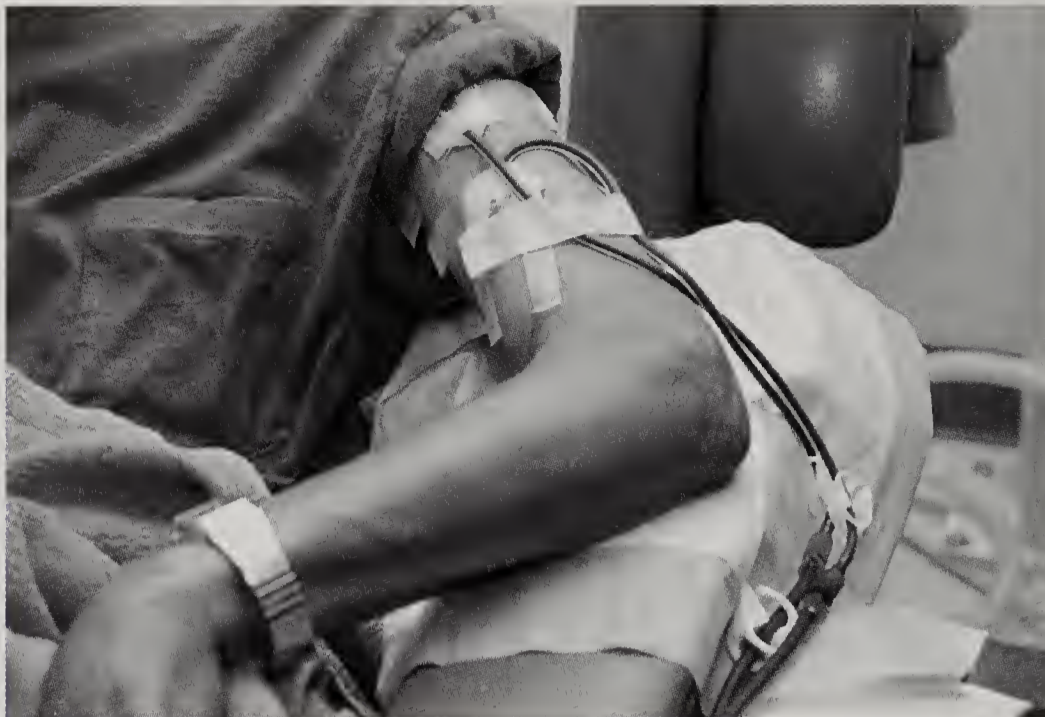
What happens if the kidneys become damaged?

People with kidney damage may need to go on dialysis, or have a kidney transplant.

Damaged kidneys cannot filter the blood. When the filtering system is not working, waste products build up in the blood.

The build up of waste products can cause many health problems.

**Dialysis moves
the blood through
a machine.
The machine
cleans the blood.**



How does dialysis work?

Dialysis is a way to clean the blood when the kidneys stop working. When a person is on dialysis, a man-made filter is used to clean the blood.

There are two types of dialysis:

- Hemodialysis (HE-mo-di-AL-i-sis)
 - A person on hemodialysis will have their blood cleaned by a machine 2-3 times a week.
- Peritoneal (PER-i-toe-NEAL)
 - This type of dialysis is done at home. You can do this during the day or night while you sleep.

People can live many years with the help of dialysis. Talk to your health care provider about dialysis.

What about kidney transplants?

Another way to remove waste is to transplant a new kidney.

Transplantation of a healthy kidney replaces a damaged one. Talk to your health care provider about kidney transplants.



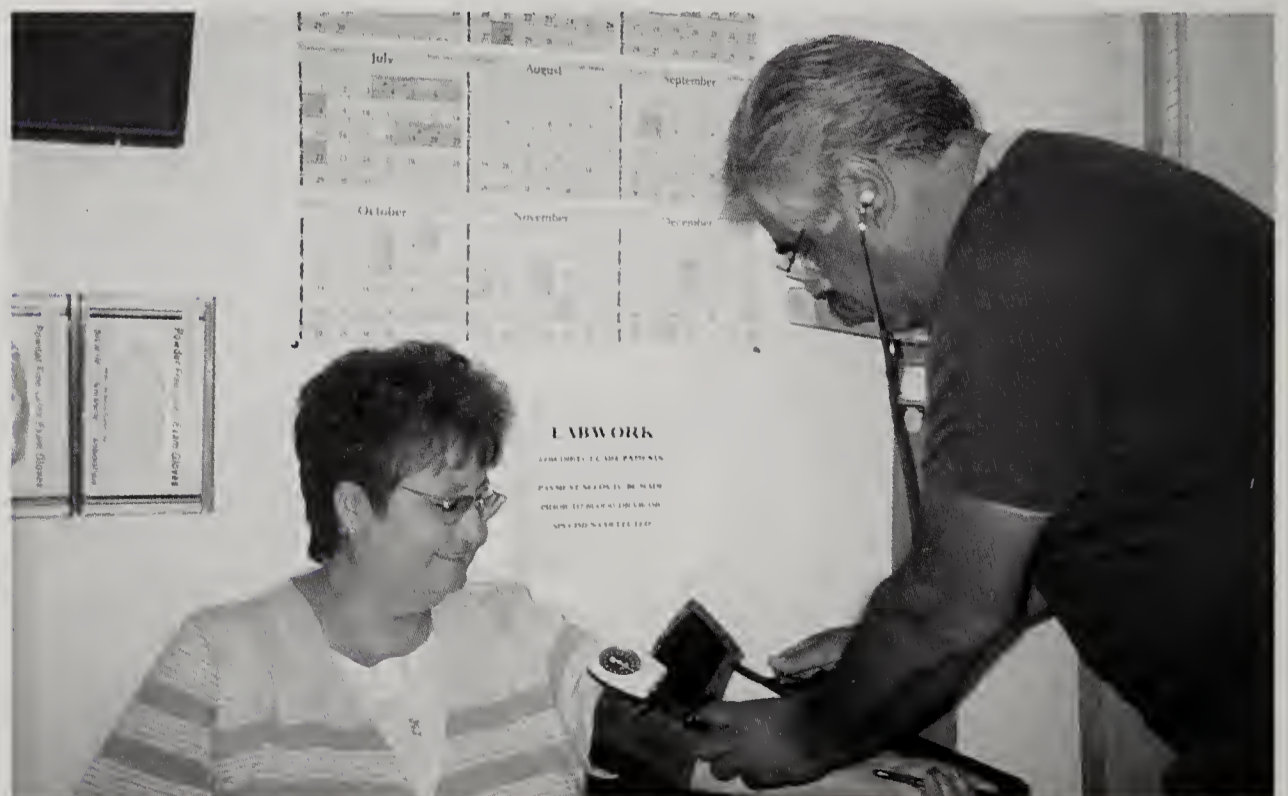
“I am on a waiting list for a kidney. Getting a kidney transplant may help me live longer. I have a lot to live for. I have grandchildren.”

Things you can do to protect your kidneys

There are several things you can do to protect your kidneys:

- Control your blood sugar.
- Control your blood pressure.
 - Take your blood pressure pills and your water pills as prescribed.
 - Eat less salt and salty foods.
- Check your blood pressure often. Your blood pressure should be less than 130/80.
- Do not take over-the-counter medications without checking with your health care provider. Some medicines can cause damage to your kidneys.

**“I get my
blood pressure
checked often.”**





**“I have changed
the way I eat.
I choose
salads instead
of burgers.
I eat less
protein.”**

More things you can do to protect your kidneys

Here are more things you can do to protect your kidneys:

- Talk to your nutritionist. Some people with kidney problems need to change their diet to protect their kidneys. A low-protein diet may be recommended. Too much protein and salt in your diet will cause your kidneys to work harder.
- Get your blood and urine tests once a year.
- See your health care provider as scheduled. Tell them how you are feeling. Share your concerns. Ask questions.

You can protect your kidneys

You can delay kidney damage. Here are ways to protect your kidneys:

- Control your blood sugar.
- Control your blood pressure.
- Do not take over-the-counter medications.
- Follow your special meal plan.
- See your health care provider as scheduled. Get your lab tests done.
- Ask questions, and share your concerns with your health care provider.
- Do not smoke or use tobacco.

**See your health
care provider.
Ask for your
kidney
tests.**



Mark the dates and results of your kidney tests

Day/Month/Year	Blood Pressure Reading	Blood Sugar or A1C	Urine Tests	Blood Tests

Sincere thanks go to the many people who appear in this booklet. They generously shared their stories about diabetes, and allowed photographs to be taken to help others who have diabetes or are at risk for diabetes.





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