

## Diuretics, Long-Term Use

### What is it?

A diuretic is a medicine that helps your body get rid of fluids. It makes you urinate more. There are several types of diuretics:

- Thiazides are usually prescribed when symptoms are mild. This is the type most often prescribed for high blood pressure.
- Loop diuretics act very quickly and are used when a quick loss of extra fluid is needed.
- Potassium-sparing diuretics act very slowly. They do not cause potassium loss like other diuretics. They are used when symptoms are mild and potassium loss is a concern.

Two or more kinds of diuretic may be combined in a single medicine. Usually this will be a potassium-sparing diuretic and a thiazide. This combination limits potassium loss and is more effective.

Diuretics are often given to control chronic problems that can't be cured. Therefore, people tend to take them for many years. Long-term use of any medicine may cause problems that need to be watched for.

### Why take this medicine?

We prescribe diuretics when people have a medical problem that is made worse by excess fluids in the body. We may prescribe them for a problem that can cause fluid buildup.

Diuretics are most often prescribed for:

- Congestive heart failure
- High blood pressure

Diuretics may be helpful for the following problems:

- Kidney failure and other kidney problems.
- Meniere's disease. This is an inner ear problem that causes dizziness.
- Swelling in hands or feet.
- Diabetes insipidus (water diabetes).
- Polycystic ovary syndrome or excess hair growth in women.
- Excess calcium levels in the blood.

### What are the risks and side effects?

Any diuretic can cause you to lose too much water. If this happens, you may become dizzy, thirsty, and weak.

Thiazides and the loop diuretics can cause you to lose minerals. These include potassium, calcium, and magnesium. Your body needs these minerals for proper function. If you lose too much, you may become extremely tired, have muscle cramps, or have an irregular heartbeat. Older people especially may be more sensitive to this side effect. We may suggest that you eat foods rich in these

minerals or take a supplement.

Many of these medicines can raise blood sugar. Diabetics should check blood sugar levels regularly.

Diuretics may raise blood levels of triglycerides and cholesterol. They may also raise uric acid levels and cause gout symptoms to become worse.

Thiazides and furosemide can make your skin more sensitive to the sun. Use sunscreen, avoid tanning booths, and drink plenty of water when out in the sun.

Loop diuretics can cause you to have to urinate very often. Loop diuretics can also cause trouble with hearing.

Spironolactone, a potassium-sparing diuretic, can cause breast pain. It can make menstrual problems worse.

Tell us any time you are prescribed a new medicine. Tell us about all vitamins and herbal supplements you use. Tell us about any over-the-counter medicines you are using. For example, we need to know if you are taking an anti-inflammatory medicine like ibuprofen (Advil, Motrin) or naproxen (Aleve, Naprosyn). It can affect your kidneys in a way that makes a diuretic not work as well.

Use of diuretics may be banned by some sports organizations. If you are an athlete, you may want to check with your school or organization about this.

### What other treatments are available?

If you smoke, it is vital you stop. As long as you smoke, your risk of problems related to high blood pressure or heart disease will remain high. We know this is not easy. We can help you find the best way for you to stop smoking.

Following our recommendations for a healthy lifestyle will also help. Eat a good diet and get plenty of exercise. Do what you can to reduce stress.

### What can I expect?

We will need to see you regularly to check on how well your medicine is working. We may need to do tests.

Diuretics tend to work less well after you have been taking them for a while. We may need to change your medicine or add another diuretic.

The following problems may occur in people who have been taking diuretics for a long time:

- Spironolactone can cause breast growth in men. This slowly becomes better after the medicine is stopped. It may not go completely away.
- Diuretics may cause an amino acid called homocysteine to build up in your body over time. This may increase your risk of heart attack or stroke. We may suggest that

you take a vitamin supplement that contains folic acid, vitamin B6, and vitamin B12. These vitamins help lower homocysteine levels.

- Most diuretics lower folic acid levels. Folic acid is especially important in women who are planning on getting pregnant soon or who are pregnant. Lack of it can cause serious birth defects. If you want to get pregnant soon, let us know. Diuretics are not recommended while you are pregnant. Spironolactone may be safe to use while breast-feeding.
- High doses of hydrochlorothiazide for longer than 20 years slightly raise the risk of kidney cancer in women.

### **What to watch for.**

Call us right away or seek medical help if you have any of the following:

- Dry mouth or increased thirst
- Irregular heartbeat or weak pulse
- Mood changes
- Confusion or nervousness
- Muscle cramps or muscle pain
- Numbness or tingling in hands, feet, or lips
- Nausea or vomiting
- Unusual tiredness or weakness, or heavy feeling in legs
- Shortness of breath or trouble breathing
- Severe abdominal pain
- Severe pain in side or lower back

Let us know if you get dizzy or feel faint when you first get up from sitting or lying down. Let us know if you are bothered by a side effect you think is caused by your medicine.

### **Instructions:**

**A diet low in sodium and high in potassium, magnesium, and calcium can help your blood pressure.**

To decrease the sodium in your diet:

- Use fresh vegetables and foods as much as possible.
- Avoid canned and processed foods. Cured meats such as bacon, ham, and sausages are high in salt.
- Try using different herbs and spices in your cooking instead of salt.
- In restaurants, avoid foods with sauces, cheese, and cured meats. Ask for low-sodium choices.

To get more potassium in your diet, eat:

- Bananas, fresh or dried apricots, peaches, citrus fruits, melons
- Cauliflower, broccoli, tomatoes, carrots, raw spinach, beet greens, potatoes

To get more magnesium in your diet, eat:

- Whole grain foods, leafy green vegetables, dried fruits
- Fish and seafood, poultry

To get more calcium in your diet, eat:

- Nonfat milk, yogurt, and low-fat cheeses
- Salmon and sardines
- Cooked dried beans
- Broccoli, kale, and bok choy
- Tofu or soybean curd

### **Avoid foods and beverages that contain caffeine.**

These include coffee, colas and other soft drinks, chocolate, and tea. Caffeine may make your condition worse. There are many caffeine-free products available. Many herbal teas contain no caffeine. Read labels to be sure.

### **Begin a limited exercise program.**

Exercise includes anything that increases your normal level of activity. This may be as simple as walking around your house or slowly walking around the block. In many areas there are groups of "mall walkers." These groups get together and walk in shopping malls in the morning before the stores open.

The key to finding the right amount of exercise is to listen to your body. You should work at a level that feels somewhat hard but does not make you so short of breath that you can only speak a few words at a time. You should be able to carry on a light conversation while you exercise. If you cannot, you may be working too hard. Avoid exercising in the heat of the day, right after a heavy meal, or right before bed. Exercising in extreme cold conditions also should be avoided.

Many methods of exercise are available. Stationary bicycles, swimming, aerobic classes, and Cardiac Rehab classes are just a few. Walking is often the easiest and least expensive form of exercise. Let us know if you need help in choosing the best type of exercise for you.

### **Begin or continue regular aerobic exercise. Gradually work up to at least 3 sessions of 30 minutes of exercise a week.**

Exercise is aerobic when it increases the speed of your heart to a certain level. If your heart rate is too slow, the exercise is not helping. If your heart rate is too fast, the exercise can be harmful. We will tell you what level is right for you.

Walking vigorously (not strolling) is an excellent aerobic exercise. So are bicycling, swimming, jogging, and dancing.

If you are not exercising, we can give you instructions on how to start safely.

### **There are many exercise options for seniors.**

Walking is the easiest way for most people to exercise.

- Start out walking only 10 to 15 minutes at a time, and avoid hills.
- Stretch your leg muscles before and after walking. Ask us to show you how to stretch.
- Wear comfortable, supportive shoes.

- Wear sunscreen or a hat whenever you're outdoors for more than a few minutes. In cold weather, add gloves and a scarf.
- Gradually work up to walking 20 to 40 minutes at least every other day.
- Talk to us before you start walking up hills.
- Check your breathing. If you can sing, walk faster. If you can't talk, slow down.
- Shopping malls are safe and sheltered places to walk. Many malls open their doors early for walkers.
- Walk with a friend, You'll both be more likely to stick to it.

Gardening counts as exercise.

- Be sure to stretch before and after you garden to avoid stiff muscles. Ask us to show you how to stretch.
- Drag or roll heavy items like bags of mulch instead of lifting them.
- Use pads to sit or kneel on.
- Always wear gloves to protect your hands.
- Always wear sunscreen or a hat when working outdoors.

Golfing can be good exercise.

- Walk as much of the course as you can each time. Try to work up to walking the entire way.
- Stretch your back, shoulders, and arms before you play. Ask us to show you how to stretch.
- Always wear sunscreen or a hat when outdoors for more than a few minutes.

Water exercise is good if you are unsteady on your feet or have sore joints. Water supports you while you exercise. Your local senior center or exercise center may offer water aerobics or exercise classes. You don't have to know how to swim. The classes are held in the shallow end. Wear a pair of old sneakers or special water shoes to protect your feet.

Weight training will help you stay strong. Your local senior center or exercise center may have classes in weight training for seniors. You can do most weight training while sitting down.

**Limit your use of alcohol to 2 drinks or cans of beer a day.**

A drink is one:

- 12-ounce can of beer or
- 5-ounce glass of wine or
- 1-ounce shot of 100 proof liquor.

Excess use of alcohol can cause damage to the brain, liver and other organs. It can lead to high blood pressure. It can cause many problems for families and jobs. If you have difficulty decreasing the amount of alcohol you drink, please let us know.

Do not drive or operate machinery when you have been drinking.

**Monitor your urine output.**

Make note of how many times you urinate during the day. You may want to write it down.

**Rest for 1 hour at least 4 times during the day.**

Take a nap or sit with your feet up.

**Restrict the salt in your diet by avoiding highly salted foods.**

Start by avoiding highly salted foods. Do not salt food at the table.

You can increase the flavor of your food without adding salt. Try using different herbs and spices in your cooking.

You can control your sodium intake by using fresh vegetables and foods. Avoid canned and processed foods, which contain high amounts of salt. Cured meats such as bacon, ham and sausages are high in salt. Look for low sodium foods to replace these.

In restaurants, avoid foods with sauces, cheese, and cured meats. Ask for low sodium choices. A baked potato is a better choice than French fries.

**Restrict your sodium (salt) intake to 4 grams per day.**

A dietitian can help you and provide a detailed diet.

**Take your blood pressure twice a day.**

The first, higher number measures the pressure in the blood vessels when your heart is beating. This is called the systolic pressure. The second, lower number measures the pressure between beats. This is called the diastolic pressure.

Measure your blood pressure at about the same time each day.

- Rest without talking for 3 to 5 minutes first.
- Sit comfortably with your back supported. Do not cross your legs or ankles.
- Place your arm on a table or desk so that it is at the level of your heart.
- Wrap the cuff around your upper arm. The bottom edge should be 1 inch above the bend in your elbow. Make sure the cuff is smooth and snug. However, it should not be so tight that you can't slip a finger under it.
- Follow the directions that come with your device for measuring your blood pressure.

Bringing a record of your blood pressure measurements to your appointments will help us treat you.

**Weigh yourself every day.**

**You need to quit smoking.**

## **Precautions:**

### **Call 911 if:**

You experience a new kind of chest pain (angina) or pressure.

You have any symptoms of a stroke.

### **Call Your Physician if:**

The swelling and puffiness in your ankles and feet is not better in 1 week.

You become dizzy or lightheaded, especially when you stand up after sitting for awhile.

You have a dry, hacking cough.

You have swelling and puffiness of your lower leg or ankles.

You see any blood in the stool.

Your blood pressure is frequently higher than 140/90.

Your breathing is not better in 2 days.

## **Seek Immediate Medical Attention if:**

You feel short of breath even while resting.

You gain more than 2 pounds in 1 day.

You have a severe headache that will not go away.

You have pain in the kidney or low back area.

You have pain in your abdomen.

You or your family members notice any confusion or difficulty with memory.

Your blood pressure is greater than 250/120 for 2 consecutive readings.

Your eyesight becomes blurry or you have difficulty seeing.

Your shortness of breath is getting worse.