

UW Medicine



Treatment with Warfarin (Coumadin)

What to expect

This handout explains what to expect when your doctor has prescribed warfarin (Coumadin).

What is warfarin?

Warfarin sodium (Coumadin) is an *anticoagulant* medicine. “Anti” means “against” and “coagulant” refers to blood clotting. An anticoagulant helps prevent clots from forming in the blood. Although warfarin may be called a “blood-thinner,” it actually works in the liver to decrease the production of natural blood components called *clotting factors*.

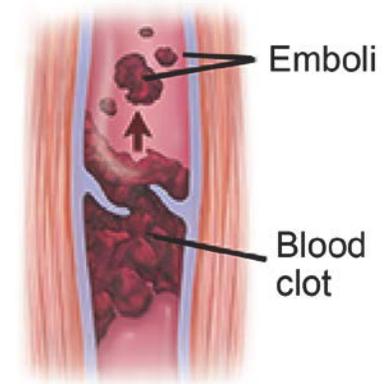
Why am I taking warfarin?

Your doctor has prescribed warfarin to help prevent harmful clots or to treat an existing blood clot. Blood clots may form in veins, arteries, or even within the chambers of the heart or on heart valves. Blood clots can create blocks in blood vessels and cut off the blood supply to a portion of the body. These clots may occur in the legs, lungs, heart, brain, and other parts of the body.

Rarely, blood clots can break into pieces called *emboli*, and be swept along by the blood. Emboli from the veins can travel through the heart and get stuck in the lung, causing a *pulmonary embolus* (PE). Emboli from the heart or arteries can cause a stroke if they lodge in the brain.

Warfarin may be used to treat or prevent:

- Stroke
- Heart attack
- *Deep vein thrombosis* (DVT), a blood clot in a vein that leads to the heart
- *Pulmonary embolism* (PE), a blood clot in the lung
- Blood clots in patients with *atrial fibrillation* (irregular heart beat), heart valve disease, or heart valve replacement



A blood clot can break apart and form emboli that move into other areas of the body.

How does warfarin work?

Warfarin blocks some of the ability of your liver to use vitamin K. This vitamin is needed to make clotting factors that help your blood clot and prevent too much bleeding when you are injured. Vitamin K is found naturally in certain foods, such as green vegetables and some oils.

Warfarin reduces the body's ability to make blood clots. It can help stop harmful clots from forming and keeps clots from getting larger, but it does not break up existing clots.

How long does it take for warfarin to work?

Warfarin begins to reduce blood clotting within 24 hours after taking the first dose. But, the full effect may take 3 to 5 days to occur. Until the warfarin is in full effect, you may need to be treated with an injectable anticoagulant such as heparin, enoxaparin (Lovenox), dalteparin (Fragmin), or fondaparinux (Arixtra).

How much warfarin should I take?

The amount of warfarin needed is different for each person. Your body's response to warfarin is monitored by a blood test called the *Prothrombin Time* (PT) or *International Normalized Ratio* (INR). Your warfarin dose is adjusted to get to your goal range for the INR based on the results of this blood test.

What are the PT and INR?

PT is measured in seconds. PT is the time it takes for your blood to form a clot. The INR is one way to report the PT. It is used to check how your body reacts to your dose of warfarin.

Your INR is based on how much warfarin you need for your health condition. Most people have an INR of about 1.0 before they take warfarin. After they start warfarin, their goal INR range is usually between 2.0 and 3.0. It may be higher if you are at higher risk of forming clots.

If your INR is below your target range (less than 2.0), this usually means you are at higher risk of forming clots. If your INR is above your target range (greater than 3.0), you are at higher risk of bleeding.

When will my blood be tested?

When you first start taking warfarin, you may need to have your blood tested twice a week. As your results become more consistent and your warfarin dose becomes stable, blood tests are usually done once a month.

Your doctor will decide how often your INR is tested. Or, if you go to an anticoagulation clinic, the clinic pharmacist or nurse will decide how often to test your INR.

It is very important that you get your blood tested on the date and time that you are told. If you cannot make a scheduled appointment, you must call and reschedule. Your INR must be checked often to monitor whether you have blood clots and bleeding.

What are the side effects of warfarin?

Side effects from warfarin therapy do not occur very often, but bleeding is the most common. Very minor bleeding may occur even when your INR is in your goal range. You may have an increase in small bruises, or slight gum bleeding when you brush your teeth. Rarely, some people have a skin rash or lose their hair when taking warfarin. If you have symptoms that are not normal, that you feel may be caused by your warfarin, please call your Anticoagulation Clinic.

Minor Bleeding

You might see any of these symptoms from time to time:

- Gum bleeding while brushing teeth
- Nosebleed
- Easy bruising
- More bleeding after minor cuts
- Longer menstrual bleeding

When to Call

Call your doctor or your Anticoagulation Clinic, or go to the emergency department *right away* if you:

- Have a serious fall or hit your head
- Have any of these symptoms of **major bleeding**:
 - Red or dark brown urine
 - Red or black, tarry stool
 - Vomiting or coughing up blood
 - Bad headache or stomachache
 - Bruising for unknown reasons
 - Nosebleeds or bleeding gums that happen often, or other unusual bleeding
 - Any bleeding that doesn't stop or is very heavy

What are the signs of too much warfarin or a high INR?

The main sign of too much warfarin or a high INR is bleeding. If you are unsure whether you are bleeding too much, call your doctor or your Anticoagulation Clinic. We may need to check your INR.

What are the signs of too little warfarin or a low INR?

Blood clotting is a serious result of too little warfarin or a low INR.

When to Call

Call your doctor or Anticoagulation Clinic, or go to the emergency department *right away* if you have *any* of these symptoms:

- Sudden weakness in an arm or leg
- Numbness or tingling anywhere
- Vision changes or loss of sight in either eye
- Sudden slurred speech or not being able to speak
- Feeling dizzy or faint
- New pain, swelling, redness, or heat in your arm, leg, or foot
- New shortness of breath or chest pain

When should I take warfarin?

Take your warfarin once a day, at about the same time. We advise taking it in the evening or at bedtime because you will be having your INR test during the daytime. That way, if your dose needs to be adjusted, the change can easily be made that day.

You may take warfarin with *or* without food. It should not upset your stomach. You may also take warfarin when you take your other evening or bedtime medicines.

To help keep track of doses, try using a daily pill box, *mediset* (a box that holds all your pills for 1 week), or a dosing calendar. If it is hard for you to remember to take your warfarin, talk with your doctor or the Anticoagulation Clinic pharmacist or nurse.

What should I do if I miss a dose?

Try not to miss any doses of warfarin. If you do miss a dose:

- If you remember the same day, take your warfarin later than the usual time.
- If you miss a day, call your doctor or your Anticoagulation Clinic. If you can't reach the clinic, skip the missed dose and take your usual dose the next day at the normal time.

- Do **not** double your dose to “catch up.”
- Mark the missed dose on your calendar. Tell your doctor, pharmacist, or nurse at your next clinic visit.

Does warfarin interact with any other medicines?

Warfarin interacts with *many* other medicines. This includes some prescription drugs, over-the-counter medicines, herbs, and vitamins. It is very important that you tell your doctor or anticoagulation clinic whenever you start or stop taking any medicine, herb, or vitamin. Please check even if the medicine was prescribed by another doctor! You may need to have INR checks more often to prevent interaction with warfarin.

There are some medicines that you should **never** take with warfarin. They may decrease your ability to form clots and increase your risk of bleeding:

- **Never** take aspirin without first talking to your doctor or Anticoagulation Clinic. If your doctor tells you to take 1 aspirin a day, your daily dose should not be more than 81 mg.
- Do **not** take:
 - Over-the-counter products that contain **aspirin**. These include Alka-Seltzer, Ascription, Bayer, Bufferin, Ecotrin, Empirin, Excedrin, Nyquil, Pepto Bismol, and others.
 - Over-the-counter products that contain **ibuprofen**. These include Advil, Motrin, Nuprin, Medipren, Excedrin IB, Haltran, Midol 200, Pamprin-IB, and others.
 - Over-the-counter products that contain **naproxen**. These include Aleve, Naprosyn, Anaprox, and others.
 - **Cimetidine** (Tagamet HB) or **famotidine** (Pepcid AC).

If you need relief for mild pain, you can take acetaminophen (Tylenol). Limit your use of acetaminophen to no more than 2 grams a day (6 of the 325 mg tablets, or 4 of the 500 mg tablets).

Is it safe to drink alcohol while taking warfarin?

If you want to drink alcohol while taking warfarin, have **only 1 drink a day** and no more than 2 drinks every now and then:

- 1 drink = 1 beer **OR** 1 glass of wine **OR** 1 cocktail **OR** 1 shot

Drinking more than this can make your INR too high and increase your risk of bleeding.

Should I limit activities while taking warfarin?

- Since warfarin increases your risk of bleeding, avoid activities that involve a risk of injury.

- Talk with your doctor or your Anticoagulation Clinic pharmacist or nurse about your current activities. Ask if you should keep doing them while taking warfarin. Activities that are usually safe are walking, jogging, swimming, and gardening.
- Tell your doctor or Anticoagulation Clinic staff about any *changes* in your activity level, as this may also affect your INR.

What if I get sick?

Illness changes your body's response to warfarin. If you have congestive heart failure, fever, flu, viral or bacterial infection, nausea, vomiting, or diarrhea, your INR can go up and your risk of bleeding will increase. If you have any of these conditions, call your doctor or your Anticoagulation Clinic. Please remember to call before starting an antibiotic.

Vitamin K and Warfarin

Foods that are high in vitamin K may reduce the effect of warfarin and decrease your INR. The list below shows foods with high vitamin K levels.

While you are taking warfarin, you may eat the foods on the list, but **the key is to be consistent**. If you usually eat a few servings of one or more of these foods each day, it is OK to keep doing so. If you usually do not eat these foods, keep doing that. Your anticoagulation manager will ask you about your diet at each visit to check your intake of foods high in vitamin K.

Foods and drinks that are low in vitamin K do not influence warfarin. These include breads and grains, meat and dairy products, fruits and fruit juices, herbal and black tea (except for green tea), coffee, and cola. Ask to talk with a dietitian if you have questions about what to eat.

Remember to be **as consistent as possible** in the types of foods you eat. Do **not** significantly change the amount of foods high in vitamin K that you eat. If you plan to change your usual diet, call your Anticoagulation Clinic so that we can monitor your INR more closely.

Foods with High Levels of Vitamin K

These foods are high in vitamin K:

- Asparagus
- Broccoli
- Brussels sprouts
- Cabbage, coleslaw, sauerkraut
- Greens: beet, collard, dandelion, endive, kale, mustard, turnip
- Green tea and oolong tea
- Green onions and scallions
- Lettuce: bib, butter, green leaf, red leaf, romaine
- Okra
- Parsley
- Peas, black-eyed
- Spinach
- Spinach noodles
- Swiss chard
- Watercress

Nutritional Products with High Vitamin K

Vitamin K may also be found in some nutritional products:

- Some multiple vitamins
- Some liquid nutritional supplements such as Ensure and Boost

Other Foods

Foods with moderate amounts of vitamin K can become a significant source of vitamin K if we eat them in large amounts. This includes some foods that we may eat a lot of at a time, such as blueberries, kiwi, pistachios, plums, prunes, and rhubarb.

Who should know that I'm taking warfarin?

It is very important to tell all your healthcare providers that you are taking warfarin. Tell your doctors, your dentist, and all pharmacists who fill your prescriptions. Being on warfarin may affect how they care for you in some situations. Think about wearing a medical alert bracelet or necklace that tells emergency healthcare providers that you take warfarin.

What about pregnancy?

Do **not** take warfarin if you are pregnant or are trying to get pregnant. There are other types of anticoagulation medicine that are safer for pregnant women. Talk with your doctor, anticoagulation pharmacist, or nurse to switch to another medicine to prevent harm to your unborn baby.

Remember:

- Take your warfarin exactly as prescribed, at the same time each day.
- Watch for signs of bleeding or clotting and report them right away.
- Tell your doctor or your Anticoagulation Clinic about any changes in:
 - How many foods you are eating with high vitamin K
 - Your activity level
 - The medicines you take, including prescription drugs, herbal products, vitamins, and over-the-counter medicines
- Call your doctor or your Anticoagulation Clinic if you have a fever, diarrhea, vomiting, or loss of appetite that lasts longer than 1 day.
- Limit alcohol to 1 to 2 drinks per day (see page 5).
- Tell all of your healthcare providers that you are taking warfarin.
- Carry a wallet card. Think about wearing a medical alert bracelet or necklace.
- Keep all healthcare appointments or call promptly to reschedule.
- Call your Anticoagulation Clinic if you have any questions!

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Anticoagulation Clinics:

- UW Medical Center: 206.598.4874
- Seattle Cancer Care Alliance: 206.288.6756
- Harborview Medical Center: 206.744.2976