

# FAQs about Warfarin

(brand name Coumadin®)

## What is warfarin?

Warfarin is the most commonly used anticoagulant in the US. An anticoagulant is a drug used to prevent unwanted and harmful blood clots. Although anticoagulants are often called “blood thinners,” warfarin does not actually make your blood thinner. Warfarin interferes with the body’s ability to form a blood clot. Unwanted blood clots may cause strokes, heart attacks, and other very serious events – such as blood clots in the legs or lungs. If used correctly, warfarin can be one of the most valuable drugs we have. If warfarin therapy is not managed very carefully, it can also be very dangerous because of the potential to cause bleeding.

## How does warfarin work?

In order for your body to form a clot, you have to have certain proteins in your blood. Normally, your body makes these proteins and it requires vitamin K to do so. You get vitamin K from many of the foods you eat (especially dark green vegetables).

Warfarin reduces your liver’s ability to use vitamin K to make these blood clotting proteins, which makes it harder for your blood to clot. Vitamin K and warfarin tend to work against one another. If your intake of vitamin K increases, you will need more warfarin to keep your blood from clotting. If your intake of vitamin K is decreased, your dose of warfarin will probably need to be decreased to keep you from bleeding.

Fortunately, both the amount of vitamin K and warfarin in your body tend to rise and fall slowly. Therefore, one way to think about this balance between warfarin and vitamin K is that it is the **weekly** (rather than the daily) intake that is being balanced against each other.

## How is warfarin taken?

The clinician who is responsible for managing your warfarin therapy will tell you exactly how to take it. If these instructions are not clear, ask your clinician to explain the instructions again or to write out the instructions for you.

- Take your warfarin exactly the way that your clinician instructs you. It is not unusual for your dosage schedule to require you to take different doses on different days of the week. This may be required to “fine tune” the weekly dose of warfarin to meet your needs. It may be helpful to use a calendar or a weekly “pill box.”
- Take your warfarin at the same time each day. This will not affect how your warfarin works, however, taking your warfarin at the same time each day will decrease the chance of you missing your dose.
- Take your warfarin with water.
- **Do Not** skip a dose. If you miss a dose, please keep track of the amount of dose missed and the day of the week in which you missed your dose. This will be important information for your clinician when interpreting the results from blood tests. If you miss two or more doses, you should notify your clinician immediately and continue current dosage until further instructions are received.
- Report all new medications and significant diet changes to your clinician. It will also be important to inform all your healthcare providers (physicians, pharmacists, dentists, nurse), that you are taking warfarin.

## How often will my blood be tested and what does the test mean?

How often your blood is tested will depend on how stable the blood test results have been, whether your dose of warfarin has changed recently, and whether other factors that may alter your dose of warfarin have happened recently. If your blood tests and all other factors have been stable, your test should be performed at least every four weeks. It is not unusual to require more blood tests when initially started on warfarin or after any other new medications have been added.

## What blood test will be used to measure the effects of my warfarin?

The test that is used to adjust your warfarin dose is called the prothrombin time (PT) and it measures how many seconds it takes for your blood to form a clot. Although this test is measured in seconds, it is often reported in INR (international normalized ratio) units. Your physician will decide the INR which is appropriate for your condition. Your INR goal will often be an INR of 2-3, but in certain conditions can be as high as an INR of 3-4. **Your own INR goal is\_\_\_\_\_.**

## **What side effects can occur with warfarin?**

Side effects with warfarin are not common, but bleeding is the most common. Very minor bleeding may occur even when your INR is in your goal range. This may include an increase in small bruises, or slight gum bleeding when brushing your teeth. Rarely, some patients experience skin rash or hair loss when taking warfarin. If you are experiencing something abnormal please contact your clinician.

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

### **Minor Bleeding**

- Gum bleeding while brushing teeth
- Occasional nosebleed
- Easy bruising
- Prolonged bleeding after minor cuts
- Prolonged menstrual bleeding

You might notice any of these symptoms from time to time. If you are unsure if whether the bleeding is significant, call your doctor or your anticoagulation clinician. It may be necessary to have your INR checked to be sure.

### **Major Bleeding**

- Red or brown urine
- Red or black, tarry stool
- Vomiting or coughing up blood
- Severe headache or stomach ache
- Unexplained bruising
- Frequent nose-bleeds, bleeding gums, or unusual bleeding
- If you have a serious fall or hit your head

**If you experience any of these signs or symptoms, call your doctor, or come to the hospital emergency room immediately.**

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

### **Blood Clotting**

- Sudden weakness in any limb
- New numbness or tingling anywhere
- Visual changes
- Sudden onset of slurred speech or inability to speak
- Dizziness, faintness, loss of balance (lack of coordination)

- New pain, swelling, redness, or heat in an extremity
- New shortness of breath or chest pain
- Sudden, intense, severe headache

**All of the above symptoms can be serious. Contact your clinician right away with any of these symptoms.**

### **What can I do to minimize my risk of bleeding?**

- Your INR blood test should be monitored frequently.
- You should take your medication exactly as directed, and notify your clinician of any missed doses.
- Avoid aspirin, aspirin-containing medications, nonsteroidals (eg. naprosyn, ibuprofen) and nonsteroidal-containing medications. These medications are associated with an increased risk of bleeding that could be further increased in combination with warfarin. **DO NOT** Use these medications without your physician's approval.
- You should notify your clinician of any changes that may alter your response to warfarin. These changes include changes in your diet, vitamins, food supplements, herbal preparations (including herbal teas), new medications, change in level of exercise, getting sick, smoking, consuming alcohol, or any travel plans.
- **Consider getting a medic alert bracelet.** This could be very important in the event you were unable to communicate during an emergency.

### **What do I need to know about drug interactions with warfarin?**

Numerous “drugs” (including prescription medications, medications that you can buy “over-the-counter,” dietary supplements, herbal preparations) can interfere and change the effects of your warfarin. Such changes may increase your risk of blood clot or your risk of bleeding, and could lead to serious harm. **Therefore, it is very important that you keep your anticoagulation clinician up-to-date on any change in your medications. This includes new medications or changes in your current medication dosages.** Herbal products, such as; coenzyme Q10, garlic, ginko biloba and St. John's wort, are all examples of popular herbal products that can influence the effects of your warfarin.

If you are currently taking a daily multivitamin, please be aware that vitamin K is often added to these medications, so it is important to be consistent while on warfarin. There will be variability in the amount of vitamin K between products, so please continue a multivitamin with similar amounts of vitamin K if you change products.

## **What do I need to know about diet interactions with warfarin?**

Because warfarin exerts its effect by reducing the ability of your liver to use vitamin K to make normal clotting proteins, any dietary change that alters your vitamin K intake can alter your response to warfarin. These dietary changes may increase your risk of clotting or your risk of bleeding. Therefore, it is very important that you keep your anticoagulation clinician up-to-date on any planned changes in your diet (including vitamins, nutritional supplements, herbal preparations, herbal teas, etc.).

**The most important dietary consideration is consistency.** Large amounts of vitamin K are found in foods such as:

- Broccoli
- Brussel sprouts
- Cabbage
- Greens; collard, dandelion, mustard, turnip and beet greens
- Kale
- Spinach
- Swiss chard
- Green tea and other herbal teas

**Remember, you do not need to avoid these foods, just make sure that you do not make large changes in the amount of these foods in your diet. If you are used to eating these foods, you may continue to do so. Discuss changes in your diet and eating habits with your clinician.**

\*\*\*Currently, there is some controversy as to whether warfarin is influenced by large amounts of cranberry juice. Studies are inconclusive so far.

## **Are there other lifestyle factors I should know about?**

Yes. Smoking, alcohol ingestion, contact sports and other physical activities, may increase your risk of clotting or bleeding and should be discussed with your clinician.

- Smoking, in general, increases the risk of clot formation. The amount of smoking may influence the metabolism of your warfarin.
- Alcohol may increase or decrease the metabolism of your warfarin and influence your warfarin dosage. Try to limit alcohol intake to one drink per day (or 2 drinks for a special occasion).
- Limit any contact sports that may put you at risk of bleeding. It is common for you to experience an increased risk of bruising with physical activity that involves light contact.

## **WHEN TO CALL YOUR PHYSICIAN OR ANTICOAGULATION CLINIC**

1. When you miss a dose of warfarin (Coumadin®).
2. When there is a change in your current medications (including prescription medications, over-the-counter medications, herbal or natural products, vitamins or supplements).
3. When there is a significant change in your diet (especially dark green, leafy vegetables) for a week or longer.
4. If you notice any unusual or prolonged bleeding (red or dark brown urine, red or dark tarry stools, nosebleeds (lasting longer than five minutes), or significant bruising (from serious trauma or fall).
5. If you develop fever or significant illness (vomiting, diarrhea, infection, pain, swelling).
6. When you have been scheduled for a surgical, invasive, or dental procedure.
7. If your warfarin changes appearance when your prescription is refilled.
8. When anyone instructs you, to stop, hold, or change your warfarin therapy
9. If you are pregnant or planning to get pregnant
10. When you have any questions about your warfarin.

