

Examples of foods that are high in Vitamin K include:

- Broccoli
- Brussels sprouts
- Green leafy vegetables (e.g., spinach, kale, collards)
- Mayonnaise

Note: Check with your doctor or pharmacist for other foods that are high in Vitamin K.

Q: What side effects should I be aware of when taking warfarin?

A: Since warfarin decreases how fast the body can form clots, people who are taking warfarin bleed longer than people who are not taking warfarin, especially after an injury. Keeping your INR value in the proper range will decrease your risk of bleeding.

Note: Even when your INR value is controlled it is still possible to experience some bleeding.

You may notice minor bleeding, such as:

- Bleeding gums when you brush your teeth
- Bruises forming more easily
- Bleeding from small cuts

These types of minor bleeding are usually nothing to be concerned about. If the bleeding becomes bothersome or does not stop within a few minutes, or if larger bruises form for no reason, you should call the doctor who manages your warfarin.

Serious bleeding can be dangerous, so you should get immediate medical attention from your doctor, the emergency department, or 911 if you notice any of the following signs of serious bleeding:

- Vomit that contains blood or looks like coffee grounds

- When you actually see (red) blood in your stool or if your stool is dark and tar-like (The dark color may mean that there is blood in your stool)
- Urine that is red (could be “blood red” or any other shade of red – even as light as faint pink) or urine that is unusually dark
- Coughing up phlegm (mucus) that shows blood

Other Symptoms to Report Immediately:

- Severe abdominal pain
- Headaches that are severe or won’t go away
- Confusion or decreased alertness

Q: Are there tools I can use to help me safely take my warfarin?

A: Included with this newsletter is a safety guide called “**Taking Charge of My Warfarin**” that you can post on your refrigerator. It is meant to remind you, your family, and caregivers how to safely take warfarin. This guide:

- Prompts you to talk to your doctor when any of your medications change
- Reminds you of when to contact your doctor or seek immediate medical attention
- Provides a space for you to write down your doctor’s name and phone number
- Offers suggestions for how to best communicate with your doctor and his/her staff

Q: Who published these materials and why?

A: This issue of *Medication Safety & You* was prepared with support from the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services that oversees Medicare and the Medicare Part D drug benefit.

Medication Safety & You

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Are You Taking a Blood Thinner? Staying Safe and Healthy

Q: What are “blood thinners”?

A: Some prescription medications are commonly called “blood thinners.” They may also be called “**anticoagulants**” (**ant-eye-ko-ag’-u-lants**). “Anti” means against, and “coagulant” means blood clotting. These medications slow the formation of blood clots and protect the body from problems caused by unwanted clots. The blood is not really “thinner,” it just takes a little longer to clot than usual. Normal clotting is needed for the body to heal from cuts and other injuries. Unwanted clotting or harmful clots can block the flow of blood and cause serious problems. Certain conditions or diseases increase the risk of developing clots. Warfarin is the most commonly prescribed anticoagulant. Warfarin is the generic name; it is also known by the brand names Coumadin® and Jantoven®. This issue of *Medication Safety & You* discusses how to safely take warfarin.

Q: Why is warfarin prescribed?

A: Warfarin is used to prevent harmful clots from forming or growing larger and is prescribed for people at risk for the development of harmful clots.

You may be at increased risk for harmful clots if you have:

- Mechanical heart valves
- Atrial fibrillation (a type of irregular heartbeat)
- Prior history of medical problem resulting from a harmful clot such as stroke, heart attack, pulmonary embolism (blood clot in lungs) and deep vein thrombosis (blood clot in legs)

Q: What precautions can I follow while taking warfarin?

A: The following are important precautions:

- Tell all of your doctors, nurses, dentists, and pharmacists that you take warfarin, even if they didn’t prescribe it or fill the prescription for it, and make sure they know **all** your other medications, including over-the-counter medications, vitamins, supplements, and herbal products
- Tell your family and close friends that you are taking warfarin so they can tell your healthcare providers at times when you cannot
- Consider keeping a warfarin diary or

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557 Cranbury Road, Suite 21 ♦ East Brunswick, NJ 08816-5419
Phone: 732-238-5570 ♦ Fax: 732-238-7766 ♦ Website: www.hqsi.org

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KEY POINTS FOR SAFE WARFARIN USE

- ✓ Always take warfarin exactly as prescribed
- ✓ Be sure to have your blood tested (INR test) as often as directed
- ✓ At every visit, remind your healthcare provider(s) that you take warfarin
- ✓ Tell the doctor who manages your warfarin about all medications and over-the-counter products, including vitamins and supplements that you use
- ✓ Tell the doctor who manages your warfarin about any changes in the dosage of your medicine(s)
- ✓ Always maintain your diet by making healthy food choices. Tell your doctor about any major changes you make in your diet
- ✓ Consider buying and wearing a medical alert bracelet or necklace that states you take warfarin
- ✓ Report any increases in bleeding to your doctor
- ✓ Seek immediate medical attention for serious bleeding, bruising, or any major changes in how you feel
- ✓ Warfarin, Coumadin®, and Jantoven® are different names for the same medication **A**

calendar to track your warfarin usage. This will help prevent missed doses or taking double doses. Keeping track can be very simple. Just write down the strength of the medicine and the date you took it. You should also write down any international normalized ratio (INR) tests that are scheduled and the results. This will help you and your healthcare providers better manage your warfarin

- Tell all of your doctors and your dentists that you take warfarin well in advance of any surgical or dental procedures. Depending on the situation, your doctor may choose to change how you take your warfarin before **and** after the procedure



A diary or calendar is a great way to keep track of your warfarin usage.

Q: How does warfarin work?

A: The formation of a blood clot is a complex process that involves many substances called “clotting factors.” Warfarin disrupts the clotting process by blocking the availability of Vitamin K. Vitamin K is needed to make clotting factors. Because warfarin makes less Vitamin K available, it takes longer for clots to form.

Q: When should warfarin be taken?

A: Warfarin should be taken at the same time every day. You should never adjust your dose of warfarin or skip doses without being instructed to do so by your doctor. Always take your warfarin exactly as prescribed. Missing one or more doses can affect your health, so it is important to ask your doctor if he/she has specific instructions for handling a missed dose(s) of warfarin. The table on the next page offers some examples of what to do if you miss a dose.

Q: How does my doctor know what dose is right for me?

A: Warfarin doses vary from patient to patient and can vary from day to day. This is because everyone’s body reacts to the medication a little differently. To make sure you are on the right dose of warfarin, your doctor will do frequent blood tests called prothrombin time (PT) and international normalized ratio (INR).

Q: What are PT and INR tests?

A: PT and INR are blood tests that measure how fast your blood clots. (PT is the time, in seconds, it takes your blood to clot; INR is the numeric value that your doctor will report to you.)

These tests are used to monitor how well your warfarin is working and help your doctor decide if he or she needs to change your warfarin dose. When the INR number is too high, there is an increased chance of bleeding; when the INR number is too low, harmful blood clots may not be prevented. Blood tests will be needed for as long as you are on warfarin. Generally, you should have an INR test at least once a month when your INR is in the target range. Your doctor will decide what INR range is ideal for you.

Q: Is it all right to take other medications with my warfarin?

A: Many medications can affect how well warfarin works. Some medications will increase the effects of warfarin, making the risk of bleeding higher. Other medications can decrease the effects of warfarin, increasing the risk of blood clots. Even medications that you buy without a prescription can affect your warfarin. It is impossible for you to know how a medication will affect you and your INR value.

It is very important to let the doctor who manages your warfarin know about all the medications you are taking (prescription drugs or over-the-counter products including vitamins or supplements). You also need to let all of your healthcare providers (including other doctors, pharmacists, and nurses) know that you are taking warfarin.

Common prescription drugs known to affect warfarin include:

- Antibiotics (commonly used to fight bacterial infections)

Examples of what to do when you miss a dose(s) of warfarin:*

What if...	Then do this...
You forget to take one dose, and realize it later the same day.	<ul style="list-style-type: none"> • Take your warfarin as soon as you remember • Call your doctor, if you have been instructed to do so
You forget to take one dose, and don’t realize it until the next day.	<ul style="list-style-type: none"> • Skip the missed dose and take your next scheduled dose as directed • Never take a double dose to make up for a missed dose. Doubling the dose can be dangerous • Call your doctor, if you have been instructed to do so • Record the date and dose missed in your medication diary or on your calendar
You miss two or more warfarin doses.	<ul style="list-style-type: none"> • Call your doctor for instructions • Record the date and dose missed in your medication diary or on your calendar
You miss a dose(s) for a specific reason: <ul style="list-style-type: none"> • Illness (e.g., vomiting) • Money (e.g., too expensive) • Can’t get to the pharmacy (e.g., no transportation) 	<ul style="list-style-type: none"> • Talk to your doctor and pharmacist about why you are missing doses so they can help you

*For general information only. Ask your doctor for specific instructions.

- Anti-fungals (commonly used to fight fungus infections)
- Some heart medications

Common over-the-counter (non-prescription) medications known to affect warfarin include:

- Pain relievers (e.g., aspirin, ibuprofen, [Advil[®], Motrin[®]]; naproxen [Aleve[®], Naprosyn[®]])
- Herbal products (e.g., fish oils, ginseng, ginkgo, glucosamine, and St. John’s Wort)
- Certain stomach acid-reducing products (e.g., cimetidine, [Tagamet[®]])
- Multivitamins

It is very important to check with your healthcare provider before taking any over-the-counter product.

Certain drugs, when used with warfarin, can increase your bleeding risk even if your PT/INR has not changed. Drugs like aspirin, Plavix[®], and many pain relievers (ibuprofen, naproxen) alone can cause bleeding. When used with warfarin, this risk is increased, even if your PT/INR is within the desired range.

Some people need to be on low-dose aspirin or Plavix[®] along with their warfarin to treat a specific medical condition. These people should be monitored extra closely for signs of bleeding. **If you need a pain reliever, do not start or stop one without first consulting your physician.**

Q: Do I need to avoid any certain foods/ vitamins while taking warfarin?

A: The Vitamin K that you get from food and multivitamins helps your blood clot, but warfarin does just the opposite. Warfarin works against Vitamin K to keep the blood from clotting. Too much Vitamin K can make warfarin less effective.

You can still eat healthy foods that contain Vitamin K. The most important thing is to keep your diet the same, as you should try to eat about the same amount of these types of food each day. You should let your doctors know if you have any major changes to your diet or appetite for any reason, including illness.