

Health Facts for you

Warfarin (Coumadin[®], Jantoven[®])

Your Information

Your de	octor wants you to take Warfarin for	
	Your INR target range	
	Your warfarin manager is	
Name/Clinic:		
Phone number: _		

Table of Contents:

Topic	Page Number
Take home points	2
Patient dosing sheet for warfarin	3
Warfarin dosing and monitoring	4-5
Interactions with other medications	6
How lifestyle changes could affect the INR	6-7
How diet affects the INR	8
Vitamin K food content list	8-9
Signs of a blood clot and stroke	10
Stopping anticoagulation for procedures	10-11
References	11
Quiz questions	12
Emergency pocket card	13

Web Based Resources:

UW Health - Anticoagulation Services http://www.uwhealth.org/anticoagulation

Clot Care Online Resource http://www.clotcare.com

Anticoagulation Resource http://www.ptinr.com

National Blood Clot Alliance http://www.stoptheclot.org

Key Points

- Take your warfarin exactly as prescribed.
- Never double up on a dose if missed.
- Tell all of your health care team that you take a blood thinner.
- Know the signs and symptoms of bleeding and report them right away.
- Know the signs and symptoms of a blood clot and stroke and seek medical attention right away.
- Keep all scheduled INR checks or call to reschedule.

Seek Emergency Care if You:

- Fall and hit your head
- Cough up or vomit blood (bright red or looks like coffee grounds)
- See blood in your urine or stool (enough to color toilet water). Blood in stool may be bright red or black and tarry.
- Have a severe headache or stomach ache (worst in your life)
- Have an INR > 9.9
- Have chest pain or feel short of breath
- Have weakness on one side of your body or slurred speech

Tell Your Warfarin Manager if You Have:

- Changes in your diet
- Changes in medicines
- Missed or extra doses
- Unusual bruising or bleeding
- Upcoming procedures or trips

Patient Dosing Sheet for Warfarin

Warfarin Indication			Goal INR	
Start date	Stop Date	Tablet Strength	1	mg

Lab	INR	Su	Mo	Tu	We	Th	Fr	Sa
Draw					,,,,			
1/1	2.0	5 mg	3 mg	5 mg	3 mg	5 mg	3 mg	5 mg

What is warfarin?

Warfarin sodium (Coumadin[®], Jantoven[®]) is a medicine that is also known as a "blood thinner." It helps to stop blood clots from forming and can also stop an active clot from getting bigger.

Why do I need a blood thinner?

Common reasons people take warfarin:

- Stroke
- Atrial Fibrillation
- Heart Failure
- Heart Valve Replacement
- To treat or prevent a DVT (deep vein thrombosis)
- To treat or prevent a PE (pulmonary embolism)

What dose should I take?

There is no standard dose. The amount needed varies for each person. The dose is changed based on a blood test called the INR. It is a test that measures how much time it takes for your blood to clot.

*Note: The dose on your prescription bottle may not be correct dose if the dose has changed. If you do not know the dose you should take, call your clinic.

How can I tell what dose I am taking?

Both generic (warfarin) and brand (Coumadin[®], Jantoven[®]) use the same color theme, but tablets may be different shapes and sizes.

Dose	Color	Dose	Color
1 mg	Pink	5 mg	Peach
2 mg	Purple	6 mg	Dark Green
2.5 mg	Light Green	7.5 mg	Yellow
3 mg	Brown	10 mg	White
4 mg	Blue		

What is my target INR range?

Your target INR range depends on why you need to take warfarin. Most people on blood thinners have a target INR range of 2-3 or 2.5-3.5. Your doctor will tell you your INR range.

How often is my INR checked?

You need to be tested 2-3 times per week when you first start. Once your INR and dose are more constant, you may be able to test less often (about once per month). Your warfarin manager tells you how often to have your blood tested.

When should I take my warfarin?

Warfarin is taken once a day. Take your dose exactly as prescribed and at the same time every day. Most people are told to take their dose in the evening.

What happens if I miss a dose?

If you miss a dose and remember within 12 hours, you may take your dose. If it has been more than 12 hours do **NOT** take your missed dose. Take your scheduled dose for the current day and call your clinic. Be sure to report the missed dose to your warfarin manager. Never double your dose to make up for a missed dose. Never change your dose unless your warfarin manager has told you to do so.

What does a warfarin manager do?

The person who manages your warfarin determines your warfarin dose. To find the dose that is right for you, they ask you questions about your other medicines and lifestyle choices that can impact your INR. Based on your answers and your INR level, they tell you what warfarin dose to take and when to have your INR checked again.

Keep reading to see how medicines, lifestyle, and diet can impact your INR.

Side effects

Bleeding is the most common side effect. Minor bleeding can occur even if your INR is within your target range.

Minor Bleeding

- Gums that bleed while you brush your teeth
- Bruising more than usual
- Broken blood vessel in your eye that do not cause pain or vision changes
- Occasional nose bleeds
- Prolonged menstrual bleeding (heavier than normal)
- Prolonged bleeding after minor cuts

You may notice these side effects at times. If you have any concerns about your bleeding, call your warfarin manager.

Major Bleeding

- Any bleeding that lasts more than 10 minutes
- Coughing up blood
- Vomiting blood
- Frequent nose bleeds, gums that bleed, or unusual bleeding
- Unexplained bruising
- Red or dark brown urine
- Red, black, or tarry stool
- Severe headache
- Severe stomach ache

If you have a major fall, hit your head, or if you have any of these major bleeding side effects call your doctor or go to the Emergency Department right away.

Interactions with Other Medicines

Prescription drugs, over-the-counter (OTC) products, herbal products and supplements can affect how your blood thinner works. Any time you start or stop a new medicine, herb, or vitamin you must tell your warfarin manager.

Listed below are some of the medicines that can increase your INR, decrease your INR or put you at an increased risk for bleeding. These are **NOT** complete lists.

Medicines and other products that can **INCREASE** your INR:

- Amiodarone (Pacerone[®])
- Alcohol (acute ingestion)
- Ciprofloxacin (Cipro®)
- Fluconazole (Diflucan®)
- Feverfew
- Fenugreek

- Ginkgo
- Metronidazole (Flagyl®)
- Moxifloxacin (Avelox®)
- TMP/Sulfa (Bactrim®)
- Voriconazole (Vfend®)

If you start any antibiotic call your warfarin manager

Medicines and other products that can **DECREASE** your INR:

- Carbamazepine (Tegretol®)
- Cholestyramine (Questran®)
- Co-Enzyme Q10
- Dicloxacillin (Dynapen®)
- Ginseng
- Green Tea
- Multivitamin

- Nafcillin (Nafcil®)
- Nutritional Drinks (some)
- Phenytoin (Dilantin®)
- Rifampin (Rifadin®)
- St. John's Wort
- Tube feeds

Medicines and other products that can **INCREASE** your risk of BLEEDING:

- Aspirin
- Celecoxib (Celebrex[®])
- Clopidogrel (Plavix[®])
- Echinacea
- Fish Oil (omega-3 fatty acid)
- Ibuprofen (Motrin®)

- Indomethacin (Indocin®)
- Naproxen (Aleve[®])
- Prasugrel (Effient®)
- Prednisone (Deltasone®)
- Ticagrelor (Brillinta®)
- Vitamin E

To help prevent interactions, tell your doctors and pharmacists that you take warfarin. Also, try to fill all of your medicines at the same pharmacy. Your pharmacist helps to screen for interactions.

What lifestyle changes could affect my INR? Exercise/Sports

A change in activity level can affect your INR. Tell your warfarin manager if you increase or decrease your activity level. Avoid activities that may place you at risk for injury, such as contact sports. Do not play contact sports without talking to your doctor first. You may engage in low risk physical activities, such as walking, jogging, or swimming.

Travel

If you plan to travel, tell your warfarin manager before your trip. You may need to make plans for INR checks. Be sure to carry your medicines with you at all times. Luggage may get lost and medicines left in cars may get damaged in extreme heat or cold.

Illness

Acute illness can change your response to warfarin. Tell your doctor or clinic if you have any of the symptoms listed below:

- Nausea or vomiting
- Diarrhea
- Severe flu-like symptoms
- If you have stopped eating or if your intake of food has changed due to illness
- Started on an antibiotic

Alcohol

Limit alcohol to no more than 1 drink per day, or no more than 1 to 2 drinks on a special occasion. Drinking more can greatly increase your risk for bleeding. Tell your warfarin manager about any amount of alcohol you drink.

Surgical, Dental, or Other Medical Procedures

Tell all members of your health care team (surgeons, dentist, etc.) that you take a blood thinner. You may need to stop taking it before certain procedures. Tell your warfarin manager if you were told to stop or hold your warfarin. They may need to change you to another type of blood thinner before your procedure. See page 10 for more information.

If you are placed on a type of blood thinner that you inject, often called "bridging," keep taking this until your warfarin manager tells you to stop.

Pregnancy

If you think you are or may become pregnant, tell your doctor right away. Taking blood thinners while you are pregnant may cause harm to your unborn baby. You should use a form of birth control. If you become pregnant your doctor will talk with you about other treatment options.

Medical Alert Information

In case of an emergency or accident you will want to wear a medical-alert bracelet or necklace or carry an identification card. This alerts the health care team that you take a blood thinner. Ask your local pharmacy or doctor how you can obtain these.

How Diet Effects Warfarin

Some foods and other factors can change the way your warfarin works. These include:

- Foods that have Vitamin K in them (see table),
- Some nutritional drinks or tube feedings,
- Changes in how much food you eat.

Vitamin K

Vitamin K is common in many foods, like green leafy vegetables. They can lessen the effects of warfarin if you eat them in large amounts. You can still eat food with Vitamin K, but you should eat the same amount of these foods from week to week. Be aware of how many times per week and how many servings of food high in vitamin K that you eat.

Foods high in Vitamin K (serving size ½ cup cooked or 1 cup raw) If these foods are a part of your diet, continue eating the same amounts		
Kale	Cabbage	
Spinach	Broccoli	
Collards	Watercress	
Green Tea	Endive lettuce	
Swiss chard	Romaine lettuce	
Brussels sprouts	Green leaf lettuce	
Turnip and Mustard Greens	Soy Beans/Edamame	

Other vegetables, fruits, cereals, dairy products, eggs, and meat contain smaller amounts. See page 12 for more information

Remember

- Eat the same amount of Vitamin K foods from week to week.
- Note: Usual serving size ½ cup cooked or 1 cup raw

Nutritional Drinks, Meal Replacement Shakes, and Weight Loss Shakes:

Meal replacement, weight loss, nutritional drinks or shakes may have high amounts of vitamin K per serving If you start to use one of these products, tell your warfarin manager. The following drinks have vitamin K. This is **NOT** a complete list.

• Boost®

- Glucerna®
- Carnation Breakfast Essentials®
- Slim Fast®

• Ensure®

If how much food you eat decreases due to illness or if you plan to change your diet either short or long term, tell your warfarin manager. They may watch your INR more closely.

Vitamin K Content in Food M = Medium H = High

Food	Serving Size	Vitamin K content (in mcgs)	
Fats and Dressings		` 3,	
Margarine	1 Tbsp	M (10)	
Mayonnaise	1 Tbsp	M (5)	
Soybean, canola, and salad oils	1 Tbsp	M (20)	
Olive oil	1 Tbsp	M (10)	
Fruits			
Blueberries	1 cup	M (25)	
Grapes	1 cup	M (20)	
Vegetables			
Asparagus	5 spears	M (40)	
Avocado	1 small	M (30)	
Broccoli	1 cup	H (220)	
Brussels sprouts	5 sprouts	H (200)	
Cabbage	1 cup	M (40)	
Cabbage, red	1 cup	M (30)	
Collard greens	1 cup	H (840)	
Endive (raw)	1 cup	H (115)	
Green Beans	1 cup	M (15)	
Green scallion (raw)	1 cup	H (200)	
Kale leaf (raw)	1 cup	H (550)	
Lettuce, bib, red leaf, romaine (raw)	1 cup	H (65)	
Lettuce, iceberg (raw)	2 cups	M (30)	
Mustard greens (raw)	1 cup	H (280)	
Parsley	1/4 cup	H (245)	
Peas, green (cooked)	2/3 cup	M (40)	
Soybeans	1 cup	H (90)	
Swiss chard	1 cup	H (300)	
Spinach leaf (raw)	1cup	H (145)	
Spinach (cooked)	1 cup	H (900)	
Turnip greens (raw)	1 cup	H (140)	
Watercress (raw)	1 cup	H (85)	
Condiments			
Dill pickle	1 cup	M (25)	
Other			
Cashews	1 cup	M (45)	

For more information $\underline{www.ptinr.com} - vitamin K registry$

Signs and Symptoms of Blood Clots or Stroke

Warfarin is commonly used to stop or treat blood clots or to prevent a stroke. Below are common signs and symptoms of each.

Deep Vein Thrombosis (DVT) – A blood clot commonly in the leg or arm

- Pain or tenderness in limb
- Swelling or redness in limb
- Skin warm to touch

Pulmonary Embolism (PE) – A blood clot in the lung

- Chest pain
- Feeling short of breath
- Cough (with or without blood)
- Fast breathing
- Fast heart rate
- Low grade fever or mild sweating

If you have any of these above signs or symptoms of a blood clot this could be a medical emergency and you should **go to the nearest emergency department right away.**

Stroke – A sudden onset of:

- A headache (described as the worst headache you ever had)
- Changes in vision
- Feeling weak on one side of the body
- Slurred speech or difficulty speaking words
- Feeling confused

If you have any of these above signs or symptoms of stroke, this is a **medical emergency and** you should call 911 right away.

Stopping Warfarin Therapy for Procedures or Surgery

If you have work done that may lead to bleeding, you may need n to stop taking this medicine. This may include: a dental visit, biopsy, minor or major surgery.

Ask the doctor or dentist if you need to stop this blood thinner and for how long it should be stopped. **If they want you to stop taking your warfarin, please tell them to call the clinic that manages your warfarin.** You should also call the clinic that manages your warfarin to tell them you need to stop it for a short time.

Before you stop warfarin for a procedure or surgery, your doctor considers the following:

- Why you take warfarin
- Your individual risk for a clot or stroke
- The clotting and bleeding risk of the procedure
- How long you need to be off the warfarin

Please know that there are some procedures where the bleeding risk is low. In these cases, you may continue to take your warfarin. These are:

- Cataract surgery
- Simple dental procedures including extractions
- Minor skin surgeries

If you need to stop warfarin, your doctor may start you on a different anticoagulant that you inject into the skin. Follow the directions closely on when to give this new medicine and when stop and restart your warfarin. There may be times when you take both the warfarin and use the injection until your INR returns to goal range.

References

- 1. Ageno W, Gallus AS, Wittkowsky A, et al. Oral Anticoagulant Therapy: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed. American College of Chest Physicians Evidence Based Clinical Practice Guidelines. *CHEST*. 2012;141:e44s-88s.
- 2. Holbrook A, Schulman S, Witt D, et al. Evidence Based Management of Anticoagulant Therapy: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed. American College of Chest Physicians Evidence Based Clinical Practice Guidelines. *CHEST*. 2012;141:e152s-184s.
- 3. Holbrook AM, et al. Systematic overview of warfarin and its drug and food interactions. *Arch Intern Med.* 2005; 165:1095-1106.
- 4. Wittkowsky AK. Drug interactions update: drug, herbs and oral anticoagulation. *J Thromb Thrombolysis*. 2001; 12:67-71.
- 5. Warfarin [package insert]. Princeton, NJ: Bristol-Meyers Squibb Pharma Company; revised Jan 2009.

Warfarin Quiz

Select the best answer for each question.

- 1. What is the name of the blood test used to monitor warfarin levels?
 - a. INR
 - b. Platelet count
 - c. Red blood cell count
- 2. How often do you need a blood test?
 - a. Once a year
 - b. At regular intervals, decided on by my doctor or clinic
 - c. Only after a dose changes
- 3. If your INR is high, you may be at risk for:
 - a. Clotting
 - b. Serious bleeding
 - c. Heart attack
- 4. What should you do if you miss a dose of warfarin?
 - a. Take my dose as soon as I remember on the same day. If it is the next day, I will just resume my normal dosing and tell my healthcare provider.
 - b. Nothing- it is okay to skip one dose
 - c. Take an extra pill to "catch up"
- 5. What should you do if you want to take an over-the-counter medicine or supplement?
 - a. I can't take any over-the-counter medicines or vitamins while on warfarin
 - b. Go ahead and start the new medicines, your provider does not need to know.
 - c. Call my provider and ask if the new item will be safe with warfarin.
- 6. What should you do if you really enjoy eating spinach or other green, leafy vegetables?
 - a. Stop eating them altogether
 - b. Only eat them if INR is high
 - c. Be constant with the amount that I eat
 - d. Just eat 1 big bowl per month
- 7. Who should you tell that you take warfarin?
 - a. All my doctors
 - b. My dentist
 - c. My pharmacist
 - d. All of the above

Quiz Answers

- 1. A
- 2. B
- 3. B
- 4. A
- 5. C
- 6. C
- 7. D

Warfarin Emergency Pocket Card

Keep this card in your wallet or purse in case of emergencies. It allows emergency personnel to know that you are on warfarin.

I am using Warfarin, an anticoagulant.		
Please tell this immediately to anyone providing medical care to me.		
Name:		
Birth date:	Weight:	Blood Type:
On warfarin for:		
Medical Conditions:		
In an emergency, ple	ease notify:	
Name:		
Relationship:		
Address:		
Phone: ()		
Doctor's Name:		
Doctor's Phone: ()	

Your health care team may have given you this information as part of your care. If so, please use it and call if you have any questions. If this information was not given to you as part of your care, please check with your doctor. This is not medical advice. This is not to be used for diagnosis or treatment of any medical condition. Because each person's health needs are different, you should talk with your doctor or others on your health care team when using this information. If you have an emergency, please call 911. Copyright © 1/2018 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#6900