

**MOUNT NITTANY MEDICAL CENTER
PHARMACY ANTICOAGULATION (AC) CLINIC**

PHONE: 814.234.6180 FAX: 814.234.6775

EMAIL: ACCLINIC@MOUNTNITTANY.ORG

What is Coumadin (warfarin)?

Coumadin (also called warfarin or Jantoven) is an anticoagulant or blood thinner. Coumadin makes the blood clot more slowly.

Why do I need Coumadin?

People take Coumadin to prevent blood clots from forming in their body where they are not needed. Abnormal blood clots can cause serious, life-threatening problems such as a stroke. Blood clots that form in the legs can travel to the lungs causing a pulmonary embolism (PE). Many people taking Coumadin have had:

- ◆ a blood clot in their leg or arm (deep vein thrombosis or DVT) or lungs (PE)
- ◆ atrial fibrillation – a rapid, irregular heart beat that can cause a stroke
- ◆ a mechanical heart valve
- ◆ recent surgery (Coumadin may be given to prevent blood clots)

How does Coumadin work?

Your blood contains clotting factors that act to form a blood clot when you are bleeding. Vitamin-K is needed for these factors to be made. Coumadin works by blocking the production of these Vitamin-K dependent clotting factors. Coumadin begins to reduce the clotting factors 24 hours after it is taken, but the full effect is not seen for 10-14 days.

Why do I need blood tests?

Patients on Coumadin will need to have their blood tested at times during their therapy. This is to make sure that their dose is correct. One advantage Coumadin has over some other blood thinners is that we can measure its effect and tell how thin the blood is. How often your blood needs to be tested depends on how stable your INR is.

What is the INR?

We test the effect of Coumadin with a blood test called the INR. People who are not on any blood thinners have an INR of 1. If you are on Coumadin, your blood should clot 2 to 3 times more slowly than a normal person's, so we want your INR to be between 2 and 3 (although some people may have an INR range of 2.5 to 3.5). When blood clots more slowly, it is less likely to form an abnormal clot. An INR of 2 to 3 has been shown to prevent abnormal blood clots and is the safest for not causing bleeding side effects.

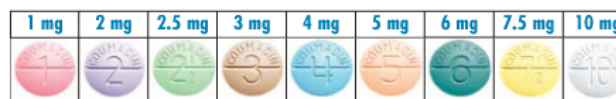
Why does my dose change?

We work with our patients to find the best dose for each person. Each time you come to the Anticoagulation Clinic, we will ask you about diet, medicines, and other lifestyle factors that can affect your INR. We work with our patients to customize their dose in order to keep them safe.

Why are there different tablet strengths?

Patients may need different tablet strengths in order to find the right combination to give a particular dose. Coumadin tablets come in different strengths that are tinted with different colors. You should always check the dose you are taking with the number on the tablet (not just the color of the pill).

COUMADIN® (warfarin sodium)



Pills do not reflect actual size.

If you miss a dose of Coumadin or take the wrong dose, call the clinic as soon as you notice the problem.

Can other things affect the INR?

A number of things can change how warfarin affects your INR. You should be aware of the following interactions:

- ◆ Diet - foods that are rich in Vitamin-K can interfere with warfarin and cause the INR to go ↓↓. Be aware of unexpected sources of Vitamin-K such as green tea, vegetable drinks and organ meats (liver).
- ◆ Alcohol can cause the INR to go ↑↑ or go ↓↓.
- ◆ Other medicines, especially steroids (such as prednisone), antibiotics, statins (for cholesterol) and seizure medicines have **variable effects on the INR**.
- ◆ Vomiting or diarrhea can cause the INR to go ↑↑.
- ◆ Herbal and other nutritional supplements (these are not FDA regulated) have **variable effects on the INR**.
- ◆ Grapefruit and cranberry juices can cause the INR to go ↑↑ and should be consumed in moderation.
- ◆ Multivitamins, supplement drinks, or diet shakes have varying amounts of Vitamin-K.

If these effect the INR, does this mean I can't have them again?

The answer to this question is **NO!** Vitamin-K containing foods are good for us. Alcohol, which should always be consumed in moderation, does not have to be eliminated entirely. Other prescribed medicines are necessary for our overall health and well-being. The staff of the anticoagulation clinic will work around your individual lifestyle to find a Coumadin dose that is right for you. The key to this success is **CONSISTENCY** in your diet and lifestyle habits!

Always contact the clinic if your medicines change.

What if I am bleeding?

Bleeding is a possible side effect of any blood thinner. It may take longer to stop the bleeding from a small cut or wound. Menstrual periods may become heavier.

Hemorrhoids may bleed more.

Call the Anticoagulation Clinic if you have:

- ◆ An unprovoked nosebleed
- ◆ Bruising that cannot be explained
- ◆ Bleeding from your gums when brushing your teeth

Call your primary care provider (PCP) if you have:

- ◆ Blood in your urine or bowel movement

Seek emergency attention if you have:

- ◆ A nosebleed that will not stop
- ◆ A cut that will not stop bleeding
- ◆ A large amount of blood in your stool
- ◆ Vomiting blood or coughing up blood

It is VERY IMPORTANT that if you have any type of injury or trauma to your head or neck that you seek emergency attention as soon as possible. You may consider wearing a medical alert bracelet.

What other things should I know?

- ◆ Swelling, pain, redness, and/or heat are signs of a blood clot. Call your PCP or go to the Emergency Department immediately.
- ◆ Chest pain and shortness of breath can be signs of a blood clot in the lungs. They can also be signs of a heart attack. Get emergency attention immediately.
- ◆ Weakness in your face, arm, or leg; trouble speaking or walking; dizziness or severe headache can be signs of a stroke. Call 911 if you think you might be having a stroke.
- ◆ **Coumadin can cause severe birth defects. If you are a woman, you MUST NOT become pregnant while taking Coumadin.**
- ◆ **Some medical procedures require you to come off Coumadin. Tell your provider that you take Coumadin. Call the clinic if you learn of any upcoming surgeries, dental, or other interventional procedures.**

Foods, servings and Vitamin-K content (ug)

Kale, cooked	1 cup	1062
Collards, cooked	1 cup	1059
Spinach, cooked	1 cup	1027
Spinach, canned	1 cup	988
Spinach, cooked	1 cup	889
Turnip greens, cooked	1 cup	851
Mustard greens, cooked	1 cup	830
Collards, cooked	1 cup	773
Beet greens, cooked	1 cup	697
Turnip greens, cooked	1 cup	529
Brussels sprouts, cooked	1 cup	300
Broccoli, cooked	1 cup	220
Spinach soufflé	1 cup	172
Lettuce, butterhead (includes boston and bibb) raw	1 head	167
Cabbage, cooked	1 cup	163
Broccoli, cooked	1 cup	162
Noodles, spinach egg	1 cup	162
Spinach, raw	1 cup	145
Asparagus, cooked	1 cup	144
Lettuce, iceberg or crisphead	1 head	130
Endive, raw	1 cup	116
Coleslaw	3/4 cup	102
Broccoli, raw	1 cup	89
Okra, cooked	1 cup	88
Prunes, stewed	1 cup	65
Peas, green, canned	1 cup	64
Cowpeas (blackeyes) boiled	1 cup	63
Beans, snap, green, canned	1 cup	60
Pie crust, graham cracker	1 shell	59
Cabbage, Chinese, cooked	1 cup	58
Pickles, cucumber, dill	1 cup	56
Bread crumbs, dry seasoned	1 cup	55
Cabbage, raw	1 cup	53
Broccoli, cooked	1 spear	52
Rhubarb, cooked	1 cup	51
Cucumber, with peel, raw	1 large	49
Lettuce, romaine, raw	1 cup	48
Peas, edible-pod, cooked	1 cup	48

Spinach, raw	1 leaf	48
Cabbage, savoy, raw	1 cup	48
Asparagus, cooked	4 sprs	48
Lettuce, green leaf, raw	1 cup	46
Vegetables, mixed, cooked	1 cup	43
Blueberries, frozen	1 cup	41
Pumpkin, canned	1 cup	39
Peas, green, cooked	1 cup	38
Fish, tuna, light, in oil, drained	3 oz	37
Carrot juice	1 cup	37
Sauce, spaghetti/marinara	1 cup	37
Onions, spring or scallions (includes tops & bulb), raw	1 whole	31
Sauerkraut, canned	1 cup	31
Celery, raw	1 cup	30
Blackberries, raw	1 cup	29
Kiwifruit, green, raw	1 med	28
Blueberries, raw	1 cup	28
Cabbage, red, raw	1 cup	27
Pie crust, baked	1 shell	27
Leeks, cooked	1 cup	26
Muffins, blueberry	1 muffin	26
Artichokes, cooked	1 cup	25
Soup, cream of mushroom	1 cup	24
Salad dressing, mayonnaise	1 tbsp	23
Grapes, red or green	1 cup	22
Cauliflower, cooked	1 cup	21
Carrots, cooked	1 cup	21
Beans, snap, green or yellow	1 cup	20
Soup, vegetable, canned	1 cup	19
French dressing	1 tbsp	19
Cake, chocolate	1 piece	19
Cauliflower, cooked	1 cup	17
Raspberries, red	1 cup	16
Salad dressing, vinegar and oil	1 tbsp	16
Nuts, pine nuts, dried	1 oz	15
Beans, kidney, cooked	1 cup	15
Carrots, raw	1 cup	15
Taco (beef, cheese and lettuce)	1 taco	11

The recommended daily allowance (RDA) for Vitamin K is 90 micrograms (ug).