

ANTICOAGULANTS - IMPORTANT HANDOUT

Vitamin K in Your Diet and Coumadin

The main dietary concern of taking Coumadin has to do with the amount of vitamin K in your diet. Vitamin K changes the way warfarin affects the blood. When you eat foods that are high in vitamin K, you can decrease the effect of coumadin. Likewise, eating less vitamin K can increase the effect of the medication.

The key is to try to eat a similar amount of foods that contain vitamin K each day. Don't make any major changes to your diet without speaking with your doctor. If you want to lose weight, eat a lower fat diet or become a vegetarian, your doctor would want to know about these changes to help manage your Coumadin.

Leafy green vegetables tend to contain higher amounts of vitamin K and one rule of thumb is to suspect that green veggies, cabbages and lettuces are high in Vitamin K. Also certain legumes like peanuts and peas might cause problems. Certain vegetable oils have high amounts of vitamin K. Foods that are low in vitamin K include potatoes, carrots, some fruits and fruit juices. Cereals, grains and other milled products are also low in vitamin K. Keep in mind that the amounts of foods you eat with vitamin K add up. So if you eat more foods that contain medium amounts of vitamin K in a particular day, your vitamin K intake will be high for that day.

Do you want to know more about vitamin K?

Green leafy vegetables are among the best food sources of vitamin K. The average intake of vitamin K for most adults in the U.S. is 70 to 80 micrograms (mcg) per day. The Daily Value for vitamin K, an estimate of daily need, is 80 micrograms. The Percent Daily Values (%DV), listed on the tables below, help consumers determine if a food contains a little or a lot of a specific nutrient. As indicated below, it is important to limit intake of foods that provide more than 60% of the Daily Value for vitamin K to help keep INR / PT in the desired range.

Dietary supplements and herbal medications

Many dietary supplements can alter the INR/ PT. Dietary supplements known to affect the INR/PT include: arnica, bilberry, butchers broom, cat's claw, dong quai, feverfew, forskolin, garlic, ginger, ginkgo, horse chestnut, inositol hexaphosphate, licorice, melilot (sweet clover) pau d'arco, red clover, St. John's wort, sweet woodruff, turmeric, willow bark, and wheat grass. Much is unknown about dietary supplements. The safest policy is for individuals on Coumadin to avoid all dietary supplements unless their physicians approve. This includes any vitamin/mineral supplements that list vitamin K on the label. If they are taken regularly on a daily basis, they pose less of a problem than if taken off and on.

What about alcohol?

You should avoid drinking alcohol while taking warfarin because alcohol can change the way your body responds to the medicine. Alcohol intake greater than 3 drinks daily can increase the effect of Coumadin. However, some medical doctors advise those taking Coumadin to avoid all alcoholic beverages. Check with your doctor about this issue. One drink = 5 ounces wine or 12 ounces beer or 1 1/2 ounces liquor. Talk with your doctor about this. He or she may tell you that it's fine to drink alcohol but may want you to have a similar amount of alcohol each day so that your blood levels of warfarin remain stable.

Coumadin Diet Restriction

Warfarin (Coumadin) is a blood thinner. It helps prevent clots from forming in blood vessels and in the heart. It is very important to take warfarin exactly as directed by your physician. Too much warfarin can cause bleeding, and not enough warfarin can allow dangerous blood clots to form.

- Warfarin should be taken at about the same time every day, preferably in the evening.
- Never skip a pill and never double up on pills if you have missed a dose. Notify your physician if you have missed any pills.
- **Notify all your physicians, your dentist, and pharmacists that you are taking warfarin.** You may want to wear a Medic Alert bracelet.
- **Never take any medication, including over the counter (nonprescription) medications without informing your doctor.**
- You will need to have your blood tested regularly, because the correct dose of warfarin for you can change over time. The most common blood test is known as the PT/INR. Your physician will inform you when these tests need to be done.
 - The blood test should be completed as ordered by your doctor. Call your doctor's office for the results within 24-48 hours.

- Pregnancy requires special restrictions and management of warfarin. Warfarin must not be used between the 6th and 12th weeks of pregnancy. Notify your physician immediately if you become pregnant while on warfarin.

Diet

Diet and medications can alter the effect of warfarin on the blood. Foods which are high in Vitamin K decrease the effectiveness of warfarin.

High Vitamin K foods include:

- cauliflower
- scallions (green onions)
- peas
- garbanzo beans (chick peas)
- asparagus
- green/herbal teas, coffee
- liverwurst, beef liver
- soybean and canola oil
- spinach
- kale
- turnip greens, collard greens, mustard greens
- broccoli
- cabbage
- lettuce, parsley, watercress and endive
- brussel sprouts

You may eat these foods, but try to eat about the same amount of them each week. Limit your alcohol intake to one or two drinks only per day.

Medications

Some medications can interact and/or interfere with warfarin causing serious side effects. You should avoid:

- **Aspirin or any aspirin-containing products (acetylsalicylic acid). Many cold remedies contain aspirin.**
- Vitamin K, Vitamin C, Vitamin E, or other high potency vitamins
- laxatives such as mineral oil or Ex Lax
- antacids such as Maalox, Mylanta, or Gelusil with or just before taking warfarin

You can use:

- Low dose acetaminophen (Tylenol). Note: The amount of acetaminophen should be as low as possible and monitored carefully. High doses of acetaminophen can prolong the INR.
- Milk of Magnesia or Colace
- A general multivitamin that does not contain more than 100% RDA of various components and does not contain Vitamin K

Side Effects

The primary side effect of warfarin is excessive bleeding. Notify your physician if you develop:

- red, dark, or cloudy urine
- bloody stools or black, tarry stools
- bleeding from gums or nose
- unexpected bruising
- excessive bleeding from minor cuts (bleeding doesn't stop after 10 to 15 minutes)
- excessive menstrual bleeding
- vomiting blood or "coffee ground" like material
- coughing up blood
- visual changes or loss of vision
- weakness or loss of sensation

Foods High in Vitamin K:

Eat no more than ½ cup serving per day

Kale	Mustard, collard and turnip greens	Lettuce
Spinach	Cabbage	Broccoli
Red leaf lettuce	Coleslaw	Sauerkraut

Food Moderately High in Vitamin K:

Eat no more than 1 ½ cup servings per day

Green peas	Green Beans
Asparagus	Cucumber (dill pickle)

Foods Low in Vitamin K:

Try not to consume a combination of more than 5 servings of these foods per day

Apple and applesauce	Orange	Potato
Peach	Strawberry and blueberries	Oats
Banana	Tomato	Bread
Raisin	Carrot	Rice

References:

1 Cushman M et al., The association of vitamin K status with warfarin sensitivity at the onset of treatment, Br. J Haematol, 2001; 112:572.

You can receive additional information and discover a more detailed list of Vitamin K containing food items by logging on to http://www.coumadin.com/consumer/INT_VitaminK1.asp.