

**Some Herbal Products That May Interfere
With the Effects of COUMADIN® (Warfarin
Sodium Tablets, USP) Crystalline***

Increases the Effects of COUMADIN®

Angelica (Dong Quai)	Dandelion	Parsley
Aniseed	Danshen	Passion Flower
Arnica	Fenugreek	Poplar
Asafoetida	Feverfew	Quassia
Bogbean	Garlic	Red Clover
Bromelains	Ginger	Sweet Clover (Melilot)
Capsicum	Ginkgo Biloba	Sweet Woodruff
Celery	Ginseng (<i>Panax</i>)	Tonka Beans
Chamomile	Horse Chestnut	Willow Bark
Clove	Licorice	
Cranberry Juice	Meadowsweet	
	Onion	

Decreases the Effects of COUMADIN®

Coenzyme Q10	Green Tea	Yarrow
Goldenseal	St. John's Wart	

**Always talk to your doctor, pharmacist, or
nurse before taking any herbal products.**

Numerous factors, alone or in combination, including travel, changes in diet, environment, physical state and medication (including botanicals) may influence response of patients to anticoagulants.

Caution should be exercised when botanical medications are taken together with COUMADIN.


This is only a partial list of herbal products that are known to have an effect on warfarin. Other herbs may have an effect as well. Most herbs have not been adequately studied. Many herbal products have several common names and scientific names. The most widely recognized herbal product names are listed.

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AND IMPORTANT SAFETY INFORMATION ON PAGE 3.**

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Patient Information

The Role of Vitamin K and COUMADIN® Use

Herbal Products and COUMADIN® Use



**PLEASE SEE ACCOMPANYING FULL PRESCRIBING INFORMATION
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Different foods contain different amounts of vitamin K. But how do you know how much vitamin K you're getting in your daily diet?

This brochure contains the vitamin K content in different food and beverage groups.* Use it to help you keep the right amount of vitamin K in your diet. The brochure also lists important information about the impact of herbal products and COUMADIN® (Warfarin Sodium Tablets, USP) Crystalline use.

Foods*	Vitamin K, Content
BEVERAGES	
Coffee <i>caffeinated, brewed, decaffeinated, instant</i>	L
Cola <i>regular and diet</i>	L
Fruit juices <i>assorted types</i>	L
Milk	L
Tea <i>black, brewed; green, brewed[†]</i>	L
Water <i>tap</i>	L
DAIRY PRODUCTS/EGGS	
Butter	L
Cheddar cheese	L
Eggs	L
Sour cream	L
Yogurt	L
GRAIN PRODUCTS	
Bagel <i>plain</i>	L
Bread <i>assorted types</i>	L
Cereal <i>assorted types</i>	L
Flour <i>assorted types</i>	L
Oatmeal <i>instant, dry</i>	L
Rice <i>white</i>	L
Spaghetti <i>dry</i>	L

H=High M=Medium L=Low

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See inside of back cover for footnote descriptions.

Foods*

Vitamin K₁ Content

FRUITS

Apple (except peel of green apple)	L
Banana	L
Blueberries	L
Cantaloupe	L
Grapes	L
Grapefruit	L
Lemon	L
Orange	L
Peach	L

MEAT

Beef	L
Chicken	L
Ham	L
Mackerel	L
Pork	L
Shrimp	L
Tuna	L
Turkey	L

Foods*

Portion Size†

Vitamin K₁ Content

FATS AND DRESSINGS

Margarine	7 Tbsp	M
Mayonnaise	7 Tbsp	H
Oils		
Canola	7 Tbsp	H
Salad	7 Tbsp	H
Soybean	7 Tbsp	H
Olive	7 Tbsp	M
Corn	7 Tbsp	L
Peanut	7 Tbsp	L
Safflower	7 Tbsp	L
Sesame	7 Tbsp	L
Sunflower	7 Tbsp	L

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Foods*	Portion Size†	Vitamin K ₁ Content
VEGETABLES		
Asparagus	7 spears	M
Avocado	1 small	M
Beans <i>green</i>	3/4 cup	L
Broccoli	1/2 cup	H
Brussel sprouts	5 sprouts	H
Cabbage	1 1/2 cups	H
Cabbage <i>red</i>	1 1/2 cups	M
Carrot	2/3 cup	L
Cauliflower	1 cup	L
Celery	2 1/2 stalks	L
Collard greens	1/2 cup	H
Corn	2/3 cup	L
Cucumber <i>peel removed</i>	1 cup	L
Eggplant	1 1/4 cups	L
Endive <i>raw</i>	2 cups	H
Green scallion <i>raw</i>	2/3 cup	H
Kale <i>raw leaf</i>	3/4 cup	H
Lettuce <i>raw</i>	1 3/4 cups	H
<i>bibb</i>		
<i>red leaf</i>		
Lettuce <i>iceberg, raw</i>	5 leaves	M
Mushroom	1 1/2 cups	L
Mustard greens <i>raw</i>	1 1/2 cups	H
Onion		L
Parsley	1 1/2 cups chopped	H
Peas <i>green, cooked</i>	2/3 cup	M
Pepper <i>green, raw</i>		L
Potato		L
Pumpkin		L
Sauerkraut <i>canned</i>	1/2 cup	L
Spinach <i>raw leaf</i>	1 1/2 cups	H
Tomato		L
Turnip greens <i>raw</i>	1 1/2 cups chopped	H
Watercress <i>raw</i>	3 cups chopped	H

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Foods*	Portion Size†	Vitamin K ₁ Content
CONDIMENTS AND SWEETENERS		
Honey		L
Jell-O® Gelatin‡		L
Peanut butter		L
Pickle <i>dill</i>	1 medium	M
Sugar <i>white, granulated</i>		L

*List is a partial listing of foods. For more complete information, see references 1 and 2.

†Although dried tea leaves are high in vitamin K content, brewed tea is not a significant source of vitamin K.

‡Portions in chart for foods of medium and high vitamin K content were calculated from estimated portions provided in reference 4. Portion sizes for foods low in vitamin K content apply to 3.5 ounces for beverages and meats, medium-sized whole fruits, and 1 cup or less for other foods listed unless otherwise stated.

§The brand listed is the registered trademark of its respective owner and is not a trademark of Bristol-Myers Squibb Company.

REFERENCES: 1. Booth SL, Sadowski JA, Pennington JAT. Phylloquinone (Vitamin K1) content of foods in the U.S. Food and Drug Administration's total Diet Study. *J Agric Food Chem.* 1995;43:1574-1579. 2. Booth SL, Sadowski JA, Wehrauch JL, Ferland G. Vitamin K1 (phylloquinone) content of foods: a provisional table. *J Food Comp Anal.* 1993;6:109-120. 3. National Research Council. *Recommended Daily Allowances*, 10th ed; National Academy Press: Washington DC, 1989. 4. Pennington JA, Church HN. *Food Values of Portions Commonly Used*, 16th JP Lippincott Company, 1994. 5. Booth SL, Madabushi HT, Davidson KW, Sadowski JA. Tea and coffee brews are not dietary sources of vitamin K1 (phylloquinone). *J Am Diet Assoc.* 1995;95:82-83. 6. Heck AM, Dewitt BA, Lukas AI. Potential interactions between alternative therapies and warfarin. *Am J Health Syst Pharm.* 2000;57:1221-1227. 7. Stenton SB, Bungard TJ, Ackman ML. Interactions between warfarin and herbal products, minerals, and vitamins: a pharmacist's guide. *Can J Hosp Pharm.* 2001;54:186-192. 8. Hogan RP. Hemorrhagic diathesis caused by drinking an herbal tea. *JAMA.* 1983;299:2679-2680. 9. MHRA Web site. Current problems in pharmacovigilance. Available at: <http://medicines.mhra.gov.uk/ourwork/monitorsafeequalmed/currentproblems.htm>. Accessed September 2003.

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