## **BLOOD THINNERS & BLOOD THICKENERS**

There is only one "heart medication" that is commonly affected by nutrients and that is COUMADIN/WARFARIN. There are nutrients that potentiate the effects of Coumadin, and those that inhibit the effects of Coumadin.

Vitamin K opposes the anti-clotting effects of Warfarin (decreases prothrombin time). (Warfarin works by inhibiting Vitamin K-dependent coagulation factors.)

Alcohol tends to flocculate the blood.

Vitamin C in high doses can decrease prothrombin time.

Coenzyme Q10 will decrease prothrombin time.

St. John's Wort will decrease prothrombin time.

Ginseng will decrease prothrombin time.

Golden seal and mistletoe will decrease prothrombin time.

Work against Coumadin by thickening blood.

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Vitamin E increases prothrombin time (i.e., potentiates the effect of Warfarin).

Bromelaine will increase prothrombin time.

Garlic and onion will increase prothrombin time.

Ginko biloba, licorice, and dong quai will increase prothrombin time.

Alfalfa, celery, parsley, chamomile, dandelion, clover, horseradish, nettle, aloe gel, black cohosh, ginger, and clove will increase prothrombin time.

Work "with"
Coumadin
but may
cause
excessive
blood
thinning.

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The effect of Coumadin on Nutri-Spec tests appears variable. We look at the molecular structure of Coumadin and suspect that it would be anti-anaerobic and yet it is very similar in structure to vitamin K and certain bioflavenoids, which are actually anti-dysaerobic. We doubt that Coumadin has a big effect on the tests, but if it does, it is probably anti-dysaerobic.