



FAT SOLUABLE VITAMINS



Vitamin A



Beta - Carotene



Vitamin D



Vitamin E



Vitamin K

SOURCES OF VITAMIN E

Food	Amount	Milligrams
Wheat germ oil	1 tablespoon	37.2
Sunflower seeds	1/4 cup	26.8
Wheat germ, raw	1/4 cup	12.8
Almonds	1/4 cup	12.7
Pecan, halves	1/4 cup	12.5
Safflower oil	1 tablespoon	7.9
Peanuts	1/4 cup	4.9
Corn oil	1 tablespoon	4.8
Peanut butter	2 tablespoons	3.8
Soybean oil	1 tablespoon	3.5
Cod-liver-oil	1 tablespoon	3
Lobster	3 ounces	2.3
Salmon, fillet	3 ounces	0.6

SOURCES OF VITAMIN K

Foods with higher contents listed first

Food	Amount	Micrograms
Turnip greens, raw	1/2 cup	182
Spinach, frozen	1/2 cup	131
Liver, beef	3 ounces	104
Cauliflower, raw	1/2 cup	96
Soybean oil	1 tablespoon	76
Broccoli, raw	1/2 cup	58
Green cabbage, raw	1/2 cup	52
Tomato	1 medium	28
Egg yolk	1 large	25
Milk	1 cup	10
Corn oil	1 tablespoon	8

Vitamin E

A major anti-oxidant. Acts as a free radical scavenger to help prevent the byproducts of chemical-cell interaction to cause cell damage. Major dietary sources include vegetable oils, wheat germ, whole-grain cereals, legumes, nuts, seeds, green leafy vegetables and eggs.

SPECIAL NOTE: There are several types of Vitamin E available.

D-Alpha Tocopherol (100% Natural) is 4 times more potent in biological activity than d1-Alpha Tocopherol (Synthetic) Vitamin E.

For example; 100 I.U. of d-Alpha (100% Natural) Vitamin E is equal to 400 I.U. d1-Alpha Tocopherol (Synthetic) Vitamin E in biological activity.

Natural Vitamin E is derived from soybeans and synthetic Vitamin E is a petroleum by-product.

Vitamin E is a fat soluble vitamin composed of compounds called tocopherols.

The most active form of Vitamin E, alpha-tocopherol, is also the most widely distributed in nature.

Beneficial Properties:

- Thought to protect against some of the toxicity of ionizing radiation
- May help to decrease the toxicity of certain chemotherapy drugs
- May decrease some of the harmful effects of solar radiation on the skin
- Works well in conjunction with beta carotene
- Appears to have stabilizing effect on the vascular system
- Useful in decreasing leg cramps occurring especially at night
- Can be used in lotions or creams to protect the skin or to treat for burns
- Important for cell health
- Helps in the proper functioning of the immune system
- Prevents oxidation of fat

Deficiency Indicators:

- May lead to a rupture of red blood cells
- Loss of reproductive powers
- Lack of sexual vitality
- Abnormal fat deposits in muscles
- Degenerative changes in the changes in the heart and other muscles
- Dry skin
- Hemolytic anemia (death of red blood cells)

Excessive Intake and Toxicity Symptoms:

May interfere with Vitamin K activity leading to prolonged clotting and bleeding time.

RDA

Adults 8-10 mg

SOURCES OF VITAMIN E

Vitamin K

Major dietary sources include green leafy vegetables, liver, tomatoes, egg yolks, and vegetable oils. Vitamin K can be formed naturally by bacteria in the intestines. However, bacterial synthesis alone does not provide enough Vitamin K, dietary sources are needed.

Beneficial Properties:

- Essential for the formation of prothrombin, a blood-clotting compound

Deficiency Indicators:

- Decreased ability to clot blood

Excessive Intake and Toxicity Symptoms:

- Hemolytic anemia (death of red blood cells)
- Jaundice in infants

RDA

Adults 60-80 micrograms

SOURCES OF VITAMIN K

