

## Liquid D and K Supports Bone and Cardiovascular Health†

### DESCRIPTION

Liquid D and K, provided by Douglas Laboratories®, is a unique great tasting liquid supplying significant amounts of vitamins K1 and K2 as well as vitamin D3 to support bone and cardiovascular health. †

### FUNCTIONS

#### Vitamin K

A growing body of literature supports the concept that increased intake of vitamin K both from food as well as supplements can have a beneficial impact on bone and cardiovascular health. † While the term “vitamin K” may imply a single molecule, vitamin K is actually a group of similar molecular forms including K1 (phylloquinone) and K2 (menaquinone).

Vitamin K1 is the most abundant form of vitamin K in the diet and is most often found in green vegetables such as spinach, lettuce and broccoli. Often this source of vitamin K is difficult to obtain in sufficient amounts from the diet, as the molecule can be bound tightly to the chloroplast membrane in the plant. Vitamin K1 is well regarded for the important roles it plays in the body’s normal blood clotting mechanisms. †

Vitamin K2 is not commonly found in the diet; as only a few products including meats and certain fermented foods provide this relatively rare form of the vitamin. Vitamin K2 is actually comprised of a group of several different molecules, abbreviated as MK-n, where n represents a number. MK-4, found in some animal meats and liver, and MK-7, found in fermented cheeses and soy products (Natto) are two of the most studied forms of vitamin K2. Supplementation with this vitamin is important as most people do not receive enough vitamin K2 from diet alone.

Human studies show that vitamin K plays important roles in bone and cardiovascular health. New research indicates vitamin K2 is the molecular form needed to activate osteocalcin (carboxylated), which functions to take calcium out of the vessels and deposit it into the bones. Therefore, consuming sufficient amounts of dietary calcium is not enough for bone and cardiovascular health; the body needs to distribute and utilize the calcium properly with aid of Vitamin K.

#### Vitamin D3

Vitamin D, also known as the “sunshine vitamin” is an essential vitamin that plays many important roles in the proper functioning of the body. Though classified as a vitamin, vitamin D is actually a key regulatory hormone for calcium and bone metabolism. Besides bone support, vitamin D has many other roles in the body, including modulation of cell growth, neuromuscular and immune function and regulatory support. † Vitamin D helps to facilitate calcium absorption and transport. Vitamin D can increase the expression of osteocalcin and other important compounds from osteoblasts to help support bone formation; it can also help to break down bone and mobilize calcium to other tissues in the body. Numerous scientists now feel that supplementation with vitamin D at levels greater than previously thought necessary is critical to helping maintain healthy bone remodeling and healthy vitamin D plasma levels.†

### INDICATIONS

Liquid D and K may be a useful dietary supplement for those who wish to increase their daily intake of the nutritionally important vitamins D and K.

### FORMULA (#57302)

1 Dropper (1ml) Contains:

Vitamin D-3 .....1,000 IU

(cholecalciferol)

Vitamin K ..... 1,545 mcg

as

Vitamin K-2..... 1 mg (1,000 mcg)

(MK-4)

## Liquid D and K

### Supports Bone and Cardiovascular Health†

Vitamin K-1 .....500 mcg  
Vitamin K-2.....45 mcg  
(from soy)

Other Ingredients: Water, medium chain triglycerides, sunflower oil, cellulose, natural vanilla flavor, xanthan gum, potassium sorbate, and stevia.

### SUGGESTED USE

Adults take 1 dropper (1 ml) daily or as directed by a healthcare professional.

### SIDE EFFECTS

No adverse side effects have been reported.

### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

### REFERENCES

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† These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured by  
Douglas Laboratories  
600 Boyce Road  
Pittsburgh, PA 15205  
800-245-4440  
[douglaslabs.com](http://douglaslabs.com)

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