# **Vitamin D Synergy**

### Vitamin D with added vitamin K

Vitamin D Synergy contains 2,000 IU of vitamin D3 as cholecalciferol, along with vitamin K, which assists in some of vitamin D's crucial functions. Evidence indicates that vitamin D3 is more effective than the D2 form, which is the form most commonly used in fortified foods.

Vitamin D plays a role in supporting the immune system and is a key player in bone health and calcium regulation in the body. When the body needs calcium, vitamin D stimulates the intestines to absorb more calcium from foods and reduces the amount of calcium the kidneys release into urine to be excreted. When blood levels of calcium are low, vitamin D triggers a natural hormonal process that allows calcium to be released from bones to restore proper blood levels.

Technically speaking, vitamin D is not an "essential" nutrient, because the human body can synthesize it: it's made in a biochemical reaction when UVB rays from sunlight interact with cholesterol stored in our skin. However, many people do not get adequate sunlight exposure, and many live at latitudes where the angle of the sun doesn't result in optimal natural vitamin D synthesis throughout most of the year.

#### Additional reasons to supplement with vitamin D

- Foods that are naturally rich in vitamin D—such as shellfish, fatty fish, and cod liver oil—are not regular parts of many people's diet.
- Several commonly used medications interfere with healthy digestion, and proper digestion and absorption of dietary fat is essential for assimilating vitamin D into the body.
- Since cholesterol is converted to vitamin D, those taking statin drugs, which reduce the body's internal synthesis of cholesterol, may have less "raw material" from which to generate vitamin D.
- Individuals with obesity tend to have much lower levels of vitamin D than people at lower weights, even when they supplement with the same amount or get the same degree of sun exposure.
- Aging skin has a natural reduced capacity for vitamin D synthesis. By age 75, vitamin D levels may be as much as 25% lower than in younger individuals.

#### Why add vitamin K?

Vitamin K is included in this formula because it acts like a "traffic cop" for calcium in the body. When vitamin D stimulates increased absorption and retention of calcium, vitamin K performs the important function of directing the calcium where to go: it helps deposit it where it's needed, such as in bones and teeth, and directs it away from undesirable destinations, such as building up in the joints, arteries, or forming stones in the kidneys. The form of vitamin K in this product is K1. While K2 is the form with higher activity for calcium trafficking, the body can convert K1 to K2.

**Recommended Use:** As a dietary supplement, take one capsule per day with a meal, or as directed by your health care practitioner.

## designs for health

\*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.