

**BIOSPEC**  
SPECIFIC BIOLOGICAL FORMULAS

# Bone and Cardiovascular Health: Consider K!

Several vitamin K-dependent proteins serve essential roles in bone and cardiovascular health.<sup>4</sup> Vitamin K1 and K2 are needed as cofactors to activate these proteins, which vitamin D promote.<sup>3</sup> Vitamin K2 subtypes, menaquinone-4 (Mk-4) and menaquinone-7 (Mk-7), are required for proteins involved in bone mineralization and preventing soft tissue calcification (e.g. arteries, kidneys), which essentially lowers the risk of fractures and coronary artery disease.<sup>3</sup>

## Summary of Physiological Roles in the Body

### Vitamin D

- Regulate calcium absorption and blood calcium levels
- Bone mineralization
- Immune function
- Inflammation modulation
- Neuromuscular function
- Cell growth modulation
- Modulation of key genes for physiologic processes

### Vitamin K

- Bone formation
- Blood clotting
- Arterial calcification prevention
- Glucose metabolism and insulin sensitivity regulation
- Optimizes sex hormones

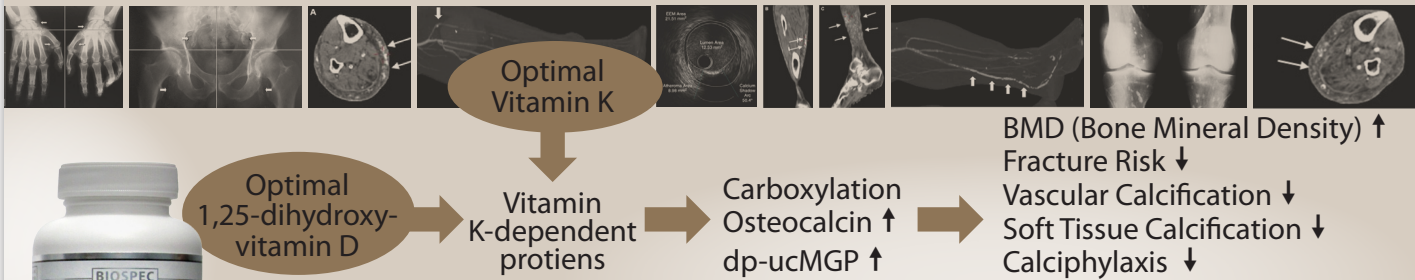
## Vitamin D deficiency

impeded growth, bowing and softening of long bones, scoliosis, osteopenia/osteomalacia, autoimmunity, inflammation, insulin resistance, suppressed immune function, frequent upper respiratory tract infection, and cancer<sup>1,2</sup>

## Vitamin K deficiency

anemia, bruising, bleeding gums/nose, heavy menses, osteoporosis, coronary heart disease, aortic calcification

## Synergistic Effects of Vitamins D & K for Bone and Cardiovascular Health



## Bio D/K Plus An Essential Combination

### Vitamin D & K Synergy

When supplementing vitamin D at doses needed to raise blood levels to an optimal range<sup>‡</sup>, it is prudent to include vitamin K2 as this combination has shown to improve bone mineral density, cardiovascular health, blood sugar stabilization and insulin sensitivity compared to vitamin D supplementation alone.<sup>3</sup>

**\*Vitamin D Optimal Blood Levels - Adults: 50-65 ng/mL**

**\*Vitamin D Optimal Blood Levels - Autoimmune / Inflammatory Disorders : 80-90 ng/mL**

**Caution:** Those taking a statin or bisphosphonate (osteoporosis medication) are at a higher risk of Vitamin K deficiency. If someone is taking a blood thinner, they should seek medical advice from their doctor before beginning Vitamin K supplementation.

#### References

- 1) [academic.oup.com/jcem/article/96/7/1911/2833671](http://academic.oup.com/jcem/article/96/7/1911/2833671)
- 2) [academic.oup.com/edrv/article/33/3/456/2354950](http://academic.oup.com/edrv/article/33/3/456/2354950)
- 3) [www.ncbi.nlm.nih.gov/pmc/articles/PMC5613455](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC5613455)
- 4) [www.ncbi.nlm.nih.gov/pmc/articles/PMC6059683](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC6059683)

**Directions:** As a nutritional supplement for adults, 1 or 2 capsules daily or as directed by your Healthcare Professional.

### SUPPLEMENT FACTS

| Serving Size: 2 Capsules      |                    | Servings Per Container: 30 |  |
|-------------------------------|--------------------|----------------------------|--|
|                               | Amount Per Serving | %DV                        |  |
| Vitamin D-3                   | 5000 IU            | 1250%                      |  |
| Vitamin K2 (MK-4)             | 800 mcg            | 1000%                      |  |
| Vitamin K2 (MK-7)             | 200 mcg            | 250%                       |  |
| * Daily Value not established |                    |                            |  |

**Other Ingredients:** Sunflower Lecithin, MCT Oil, Vegetable Cellulose, Carboxymethyl Cellulose, Candelilla Wax and Maltodextrin.

**\*\*Unique Oil-Emulsified Delayed Release Capsules** enhance absorption. Suitable for Most Vegetarians.

**Caution:** Do not exceed 2 capsules daily unless directed by your Healthcare Professional.

**FORM: 60 'Oil-Emulsified' DR Veggie Caps**  
**PRODUCT: 138**

Manufactured in the USA  
under strict cGMP guidelines



\*These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure or prevent any disease.

Bio D/K Plus | Supports Bone, Immune and Vascular Health\*