



# THE MISSING PIECE THAT MIGHT PUT YOUR HEART AT RISK

Early heart disease is characterized by the development of plaque formation in the actual vessels of the heart. The main mineral component of plaque is calcium. Calcified arteries cause heart attacks. This occurs when the arteries of the heart are clogged and hardened. Blood flow to a section of the heart is thus blocked, depriving that tissue of the necessary oxygen and nutrients needed to function. Waste removal also cannot occur, and the tissue dies. In some cases, this can happen to a small blood vessel and the heart can recover. In severe cases, it can be fatal or require specific procedures to restore it, if caught in time.

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Until recently, calcification of the arteries was believed to be an irreversible process and a consequence of aging. A recent breakthrough three-year study showed that subjects who received vitamin K2 prevented age-related stiffening of arteries and increased vascular elasticity as compared to the placebo group.<sup>1</sup> In order to keep calcium from depositing on the arterial walls, the body makes its own protein substance called Matrix Gla Protein (MGP). This protein needs vitamin K2 (Menaquinone-7) in order

to function. This is the most potent natural inhibitor of calcification presently known. Animals that do not make this protein live only a short time, because massive calcium deposits in their arteries totally block blood flow. MGP binds calcium and prevents it from crystallizing in the vessel walls of the heart, kidneys, lungs and cartilage. Studies have indicated that the majority of the western population is deficient in vitamin K2.

## WHAT DOES VITAMIN K2 DO?

The Rotterdam study (4,807 men and women, older than 55 years, 10-year follow-up) showed vitamin K2 (not K1) had a protective effect on reducing calcification in vessels, reducing risks of heart attacks and dying from such events. In addition, a study of 244 healthy post-menopausal Dutch women, 55 to 65 years old, showed less age-related stiffening of arteries. Their blood vessels also showed more elasticity after taking vitamin K2 compared to the placebo group.

Vitamin K2 helps:

- Maintain flexibility of blood vessels.
- Maintain bone health by the proper utilization of calcium as it binds to the mineral structure of bones to strengthen them.
- To reduce symptoms of metabolic syndrome.
- Blood to clot and repair damage.

## OMEGA+++ CONTAINS VITAMIN K2

Not only does OMEGA+++ contain omega-3 fatty acids for heart health and joint health, it acts as an anti-inflammatory and supports memory function. What is less focused on but of great importance



is that OMEGA+++ contains vitamin K2 in the active form of Menaquinone-7 to further support heart and blood vessel health. Since there are no clearly alarming symptoms for chronic vitamin K2 deficiency, people can be completely unaware of their own deficit. Keep in mind that a vitamin is classified as a "vital amine" which

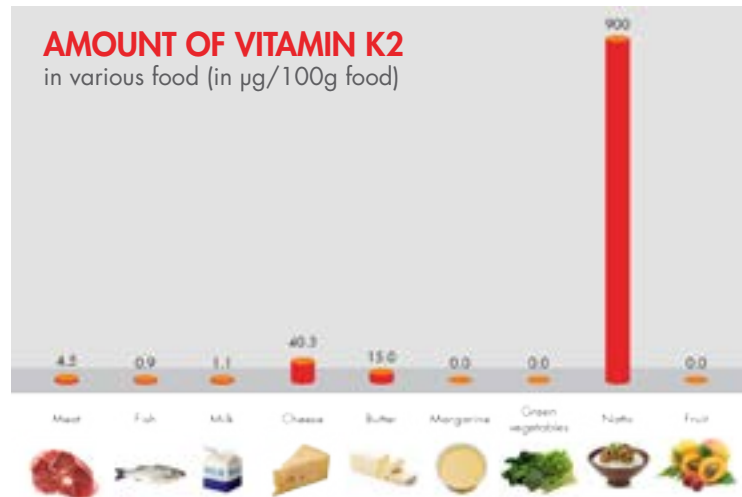
must be obtained from a dietary source. "Vitamins" are classified as "necessary" to maintain health in ways that other ingredients are not classified according to Health Agencies such as the U.S. Food and Drug Administration and the World Health Organization. Although vitamin K2 was discovered and isolated in 1929 it was not until the 1970s that vitamin K2 was identified as necessary for bone formation. In 2008 it was discovered that vitamin K2 was a cofactor necessary for reducing calcium deposits contributing to hardening of the arteries and heart attacks. In fact, studies have shown that



most Western diets are lacking in vitamin K2, and therefore most Americans are deficient in this important vitamin. Deficiency can result in impairment of bone and cardiovascular health, and you will not see the symptoms until later.

Four capsules of Omega-3 will provide 100 micrograms of vitamin K2. In the United States the recommended daily intake

(RDI) of vitamin K2 for adults is 120 micrograms/day for men and 90 micrograms/day for women. In the European Union, it is 1 µg/kg of body mass daily. Present RDI is not sufficient for adequate activation of all K2-dependent proteins like osteocalcin (helps bind calcium in bones) and MGP the protein that helps prevent plaque buildup.



Two to four OMEGA+++ supplements daily are recommended. Then eat a diet that includes fish, meat, cheese, butter, and fermented soy products, which also have vitamin K2 to ensure you receive the amount you need.

With OMEGA+++ , your basic vitamin K2 needs are covered. Please take note that if you, team members, family or friends are on any type of blood thinner therapy, a doctor must be consulted before supplementing with vitamin K2.



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.

### REFERENCES

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2. Shaw LJ, Raggi P, Berman DS., Callister TO. Coronary artery calcium as a measure of biologic age. *Atherosclerosis* 2006;188(1):112-119.
3. Ferland,G. The discovery of vitamin K and its clinical applications. *Ann Nutr Metab.* 2012;61(3):213-8. doi: 10.1159/000343108. Epub 2012 Nov 26.