Vitamin K2
Menaquinone-7

DESCRIPTION
Vitamin K2, provided by Douglas Laboratories®, supplies a significant amount of biologically active vitamin K in the form of menaquinone-7 (MK-7).

Douglas Labs' Vitamin K2 as menaquinone-7 is soy-free and derived from geraniol and farnesol. Geraniol is the primary part of rose oil, palmarosa oil, and citronella oil. Farnesol is present in many essential oils such as citronella, lemon grass, rose, and musk. This nature-identical form of menaquinone-7 has been extensively tested for molecular identity and bioequivalence when compared to menaquinone-7 from fermented soybeans (natto). It is the all-trans form, thus providing a pure, biologically active form.

FUNCTIONS
Vitamin K was originally discovered as the anti-hemorrhagic factor, but it now encompasses a variety of physiological processes. The major source of vitamin K in most diets is phylloquinone (vitamin K1), which is present in green leafy vegetables such as spinach, broccoli, and kale. Vitamin K2 is present in small amounts in fermented foods, milk products, cheese, and meat, and is synthesized by various human gut microbiota. It is well documented that the Western population obtains insufficient vitamin K from their regular diets, possibly related to poor absorption from these foods.
Beyond blood clotting, the role of vitamin K in bone and cardiovascular conditions is related to calcium utilization. Scientific studies have revealed that vitamin K plays a crucial role in building and maintaining bone health, which is influenced by osteoblasts, osteoclasts, hormones, cytokines and nutritional factors, including vitamin K intake. Inadequate calcium metabolism can result in cardiovascular and bone health problems. The deposition of calcium into arteries is an organized, regulated process similar to bone formation that occurs when other factors are present. Proteins like osteocalcin and matrix Gla protein, which are actively involved in the transport of calcium out of vessel walls, are suspected to have key roles in coronary calcium deposition. The greater the amount of calcification, the greater the likelihood one may develop suboptimal coronary health. Additionally, research shows undercarboxylated osteocalcin and low vitamin K intakes are risk factors for fractures in women. Vitamin K is needed to activate osteocalcin (carboxylated), which functions to take calcium out of the vessels and deposit them 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 K2 (as MK-7) is more bioactive and has proven more effective than vitamin K1 and other menaquinones. MK-7 showed eight times the half-life of vitamin K1 in a 24-hour serum concentration level after 1 mg of each form was ingested. Thus, MK-7 can be administered in low dosages only once a day, typically 1/1000 that of a MK-4 dose. Furthermore, the study showed better utilization and improved osteocalcin carboxylation for MK-7 after 6 weeks. Numerous studies reveal long-chain menaquinones, such as MK-7 are more effective in supporting arterial health than vitamin K1 menaquinones. †

INDICATIONS
Vitamin K2 may be a useful dietary supplement for individuals who wish to increase their intake of Vitamin K and support bone and cardiovascular health.

FORMULA (#200913)
Each capsule contains:
Vitamin K2 (as menaquinone-7).....90 mcg

Vitamin K2
Menaquinone-7

SUGGESTED USE
Adults take one capsule daily with meals or as directed by a healthcare professional.

SIDE EFFECTS
Warning: This product contains Vitamin K, which interferes with the prescription drug Coumadin (Warfarin) and blood thinners. Consult your physician before taking this product.

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.

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Your patients trust you.

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