

THERAQ7[®] VITAMIN K2
FOR HEALTHY BONES AND ARTERIES

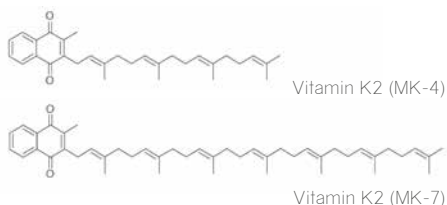
TheraQ7® VITAMIN K2 THE TRUSTED SOURCE OF NATURAL VITAMIN K2 (MK-7)

TheraQ7® Vitamin K2 is produced utilizing advanced fermentation technology exclusively from *Bacillus subtilis* natto. This is the only source of natural Vitamin K2 approved by the European Food Safety Authority (EFSA) for use in dietary supplements and ingredients. Scientific research has revealed that Vitamin K2 (MK-7) plays an important role for your bone and heart health.

- Active isomer of Vit K2 with the highest bioavailability and longest half-life in the blood
- Proprietary strain ensures purity and raw material safety
- High-yield strain uses advanced biotechnology for optimum production
- Solvent-free extraction technology

THE HIGHEST POTENCY OIL AND POWDER ON THE MARKET TODAY

WHAT IS VITAMIN K2?



Vitamin K2 is a sub-group of the Vitamin K family. The Vitamin K family can be subdivided into Vitamin K1, Vitamin K2 and Vitamin K3. Vitamin K2 consists of a series of structures known as menaquinones (abbreviated as MK-X. See Figure 1). Beyond its well-known role in blood clotting, recent research has revealed that Vitamin K2 also plays a vital role in maintaining healthy bones and arteries by keeping calcium in the bones and out of the arteries.

Figure 1. Chemical structures of Vitamin K2 (MK-4 and MK7).

TheraQ7® HIGH POTENCY VITAMIN K2 (MK-7)

Compared to vitamin K1, dietary contribution of Vitamin K2 is much less. Dietary sources of Vitamin K2 include chicken, egg yolk, dairy products, cow liver, and natto, a traditional Japanese food made from soybeans fermented with *Bacillus subtilis* var. natto.

Natto is by far the richest source of the form of Vitamin K2 known as MK-7 (which is the desired form due to its superior bioavailability) and is produced from the fermentation of soybean protein in the presence of Gram-positive bacterium *Bacillus subtilis* natto.

The *Bacillus subtilis* strain used to produce TheraQ7® is carefully selected and cultivated by advanced biological technology to ensure the specie is pure, safe, active, and high productive. By utilizing proprietary solvent-free extraction and concentration technologies, TheraQ7® is produced without contaminants and solvent residues, yielding a highly potent Vitamin K2 (MK-7) product.

PROTECTING BONE AND ARTERIAL HEALTH WITH TheraQ7®

Insufficient Vitamin K leads to two serious health concerns: decreased bone mineral density (a key factor in osteoporosis) and excess calcium in the arterial wall (which increases the risk of heart disease). In certain regions of Japan, the frequently-eaten staple dish called "natto" (made from fermented soybeans) is uniquely rich in Vitamin K2. Recent scientific research has identified that menaquinone-7 (MK-7) is the active ingredient in this popular Japanese dish and found that it has a supportive effect on bone quality during osteoporosis treatment. People living in the Japanese regions where this dish is eaten have several-fold greater blood levels of vitamin K2 (MK-7), accompanied by less osteoporosis and bone fractures. Scientific studies have revealed that Vitamin K2 supplementation helps promote bone health¹ and protect from cardiovascular events.²

1. Geleijnse, J. M. et al. *J. Nutra.* 2004, 134, 3100-3105

2. Knapen, M. H. et al. *Osteoporos. Int.* 2007, 18, 963-972.

HEALTH BENEFITS OF THERAQ7®

- Bone health
- Cardiovascular health
- Liver health

THERAQ7® VITAMIN K2 SNAPSHOT

- Natural Vitamin K2
- Active isomer of Vit K2 with the highest bioavailability and longest half-life in the blood
- Proprietary strain ensures purity and raw material safety
- High-yield strain uses advanced biotechnology for optimum production
- Solvent-free extraction technology

DOCUMENTATION

The following documents, studies and information are available upon request.

- MSDS
- Specification sheets
- CoAs
- Nutritional analysis
- Stability report

THERAQ7® PRODUCT RANGE

| FROM | SPECIFICATION (MK-7 CONTENT) | PACKAGE |
|---------------|---------------------------------|---|
| Powder | from 1,000 ppm to 20,000 ppm | 1 kg, 5 kg in LDPE bag inside, vacuum aluminum bag outside 5 kg, 10 kg, 25 kg in aluminum drum |
| Oil | from 1,500 ppm to 20,000 ppm | 5 kg, 25 kg in aluminum drum |

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