

# VITAMIN K

Eating well is a form of self-respect.

## Vitamin K - Basics

- Fat soluble vitamin, requires dietary fat for absorption.
- Vitamin K1 (phylloquinone) found in green leafy vegetables, plays role in blood clotting. The absorption from food is extremely low (10%).
- Vitamin K2 (menaquinone) found in fermented foods and animal products (eggs, meat, dairy, liver, soft and hard cheeses, such as Brie and Gouda). K2 is also produced by gut bacteria. However, taking antibiotics can ↓ vitamin K production in the gut by nearly 74% !

K2 plays role in bone and heart health, and in hormone production.

- MK-4: Role in testosterone production, cancer prevention
- MK-7: Decreases inflammation (↓CRP), reduces risk of bone fractures, improves exercise performance



## Role of vitamin K in health

- Vitamin K2 prevents calcium from being deposited in blood vessels, thus inhibits arterial calcification, improves arterial flexibility, and reduces risk of atherosclerosis.
- Supplementation with vitamin K2 helps slow calcification of blood vessels, and lowers risk of developing cardiovascular disease.
- Vitamin K2 activates bone hormone osteocalcin which binds calcium and carries it into bones, thus helps prevent osteoporosis.
- Vitamin K2 plays a key role in oral health; specifically, it remineralizes teeth, thus protects against tooth decay.
- Vitamin K1 and K2 inhibit NF-κB (nuclear factor kappa-B) reducing systemic inflammation.