## Vitamin **E**



**Vitamin E (Alpha-Tocopherol)** is a group of 8 fat-soluble compounds that include 4 tocopherols and 4 tocotrienols. Alpha-tocopherol is the only one used by the human body. The method used for determination of vitamin E is HPLC with FLD detection.



## Functions/Health effect:

Alpha-tocopherol, one of the eight isoforms of vitamin E, is the most potent fat-soluble antioxidant known in nature. Its main role is to act as an antioxidant, scavenging loose electrons—so-called "free radicals"— that can damage cells. It also enhances immune function and prevents clots from forming in heart arteries.

## Sources:

Vitamin E is an important nutrient found in plant-based oils, nuts, seeds, fruits, and vegetables. Cereals, meat, poultry, and eggs are good sources of vitamin E too. The amount that should be consumed daily is called the recommended dietary allowance (RDA) measured in IU (international unit). The RDA for natural vitamin E (RRR-alpha-tocopherol) in adults is usually set at 15 mg (22 IU).

## Did you know that?

Various forms of vitamin E are common food additives in oily food, used to deter rancidity caused by peroxidation. Those with an E number include:

- E306 Tocopherol-rich extract (mixed, natural, can include tocotrienol)
- E307 Alpha-tocopherol (synthetic)
- E308 Gamma-tocopherol (synthetic)
- E309 Delta-tocopherol (synthetic)

Their safety assessment and approval are the responsibility of the European Food Safety Authority.

Although vitamin E supplements do not seem to prevent Alzheimer disease from developing, for people who already have Alzheimer disease, taking vitamin E along with some anti-Alzheimer medicines might slow down memory loss.

Some studies suggest taking vitamin E may reduce anxiety, craving, and depression in some people with PMS (premenstrual syndrome).







