

Vitamin E

Strong Antioxidant

Vitamin E is a very effective chain-breaking, fat-soluble antioxidant present in the membrane of all cells. It is particularly enriched in the membrane of immune cells, which protects them from oxidative damage related to high metabolic activity.^[1] The natural form of vitamin E is called d-Alpha tocopherol, while the most commonly used form of vitamin E is the synthetic form called dl-Alpha tocopherol.

Protect Cell Membranes

As a supplement, vitamin E has a variety of health benefits to the body. Free radicals from the environment or generated within the body can cause cell damage that may accelerate aging and lead to the development of oxidative stress-related diseases.^[2] Vitamin E resides mainly in biomembranes, allowing it to effectively protect against oxidative membrane damage and resultant age-related deterioration, thus keeping our skin, heart and circulation, nerves, brain, muscles and red blood cells healthy.^[3-8]

Promote Healthy Vision

The lens in the eye must be clear for the retina to receive a sharp image. A cataract is a clouding of the lens that affects vision.^[9] Most cataracts are related to aging, increasing the risk of disability and blindness in older people. Antioxidants may delay cataract progression.^[10] Studies have shown that lens clarity and visual acuity are better in regular users of vitamin E supplements.^[8]

Protect the Skin from UV

Intracellular and extracellular oxidative stress initiated by reactive oxygen species (ROS) advance skin aging, which is characterized by wrinkles and atypical pigmentation.^[4] Ultraviolet (UV) radiation accelerates ROS generation in cells. Researches revealed that vitamin E can scavenge ROS also suppress melanogenesis, i.e. dark pigment production.^[4] Compared to topical sunscreens which require reapplication and have localized effects, supply antioxidants through dietary methods are thought to provide continual whole body protection.^[11]

Supplement for Low Fat Intake

As a fat-soluble vitamin, vitamin E requires fat in order for the digestive system to absorb it. Malabsorption of fat due to certain diseases or having a low-fat diet would reduce the amount of vitamin E acquired from diet.^[12] Taking vitamin E supplement could compensate for insufficient intake from food.

Deficiency of Vitamin E

Vitamin E deficiency is likely to occur under certain specific situations where fat is not properly digested or absorbed. Vitamin E deficiency is usually characterized by neurological problems and muscle damage characterized by sensory loss, muscle weakness, loss of body control and vision problems.^[12,13] A number of animal and human studies have indicated that vitamin E deficiency impairs immune functions.^[14] Supplementation above the recommended levels, especially in the aged, has been shown to increase resistance against certain pathogens.^[14]

Recommended daily dose:

Adults take 1 softgel capsule daily or as recommended by physicians.

References:

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