

Vitamin E Powder (synthetic)

300 grams

Item Catalog Number: 00062

The term “vitamin E” refers to a family of eight related, lipid-soluble, antioxidant compounds widely distributed in plants. The tocopherol and tocotrienol subfamilies are each composed of alpha, beta, gamma, and delta vitamers having unique biological effects. Different ratios of these compounds are found in anatomically different parts of a plant. For example, the green parts of a plant contain mostly alpha-tocopherol and the seed germ and bran contain mostly tocotrienols. Along with other nutrients tocopherols and tocotrienols are concentrated in the bran layers of the rye grain, and are only present at low levels in the flour endosperm. Tocopherols are also present in algae, mint teas, and other food stuff.⁸⁷⁻⁹³

When this family of compounds was first discovered and determined to be essential for health, a standardized test for its activity was devised for which the members of the family were rated for their biological activity. In one test, alpha tocopherol scored highest and was rated 100% with all others having lower ratings. In accordance with this rating, alpha-tocopherol was deemed to be the essential compound and was called vitamin E. One International Unit (IU) of vitamin E activity is the activity under this rating of one mg of the plant-derived form of alpha-tocopherol.⁹⁴

Since the original rating method was established, many additional important biological effects of these compounds have been discovered and many nutritional scientists now consider that rating method to be incomplete. For example, by the original rating, gamma-tocopherol was only 10% to 30% as strong as alpha-tocopherol, yet more recent studies have shown it to be essential for maintaining the health of cell membranes, especially if alpha-tocopherol is being supplemented. New studies continue to elucidate the unique benefits of individual members of the vitamin E family. For these and other reasons, the original definition of vitamin E has been enhanced to include all eight family members and the related compounds that convert to them in the body.⁹⁴

Vitamin E compounds are usually produced and made available in esterified form as alpha-tocopheryl acetate or alpha-tocopheryl succinate. Neither of these forms has any antioxidant activity until converted to alpha-tocopherol in the body, but they are much more stable with respect to storage time and temperature than the unesterified forms. Moreover, while the acetate form is rapidly activated within the body, activation of the succinate form is slower. The succinate form appears to access and benefit areas of the tissues that are unavailable to the other forms. For this reason, there is a tendency to regard alpha-tocopherol succinate as a distinctly different and beneficial compound. Alpha-tocopherol succinate appears to have longer half-life in the body, and does not interfere with vitamin A or K absorption.⁹⁵⁻⁹⁸

Serious vitamin takers prefer cold-water dispersible dry powder vitamin E supplements in the form of alpha-tocopheryl succinate or acetate because the cold-water dispersible forms are efficiently absorbed even when taken on an empty stomach or with a low-fat meal. The non-cold water dispersible (oil) forms of vitamin E may be poorly absorbed unless taken with several grams of fats or oils.

Cold-water dispersible vitamin E is more efficiently absorbed than some other forms. Both “acetate” and “succinate” vitamin E can come from natural sources. The importance to the consumer is how well the vitamin E absorbs into the bloodstream. Cold-water dispersible vitamin E, whether in a succinate or acetate form, always comes in a white dry powder, while non-cold water dispersible natural and synthetic acetate forms of vitamin E are always in a thick brown oil.

- One or more members of the vitamin E family may:
- Maintain cell membrane integrity and reduce cellular aging^{99-102*}
- Act as a free radical scavenger of lipids^{103,104*}
- Maintain healthy platelet aggregation^{105-108*}
- Protect nervous system and retina^{109-113*}
- Delay cognitive decline^{114-118*}
- Enhance immune function^{119-125*}

Vitamin E acetate is a dry, powder form of vitamin E that has no antioxidant power until the acetate is removed in the intestine as it is absorbed, but is very stable in storage.

References

Supplement Facts

Serving Size 1 level teaspoon (approx 2.3 grams)

Amount Per Serving

Vitamin E (as dl-alpha tocopheryl acetate, 500 IU per gram)

1150 IU

Other ingredients: maltodextrin, starch, silicon dioxide.

Contains corn. This product contains NO milk, egg, fish, peanuts, crustacean shellfish (lobster, crab, shrimp), soybeans, tree nuts, wheat, yeast, gluten, or rice. Contains NO sugar, and no artificial sweeteners, flavors, colors, or preservatives.

Dosage and Use

- Take one level teaspoon daily with or without food, or as recommended by a healthcare practitioner.

Caution

Because vitamin E inhibits blood clotting, consult your healthcare practitioner if you are taking anticoagulant drugs or have a bleeding disorder.

Warnings

- Keep out of reach of children.
- Do not exceed recommended dose.
- Do not purchase if outer seal is broken or damaged.
- If you have a bad reaction to product discontinue use immediately.
- When using nutritional supplements, please consult with your physician if you are undergoing treatment for a medical condition or if you are pregnant or lactating.

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