

**E-400 Dry Caps (Natural)**  
**Antioxidant protection**

**DESCRIPTION**

E-400 Dry Caps (Natural), provided by Douglas Laboratories®, contain a vitamin E formula of natural d-alpha tocopheryl succinate which assures superior antioxidant protection.

**FUNCTIONS**

Vitamin E is one of the body's most important antioxidant nutrients. Antioxidants protect healthy cells from oxidative and free radical damage. Free radicals are unstable chemicals formed in the body during metabolism and from exposure to environmental sources, such as air pollution and cigarette smoke. Free radicals are necessary for energy metabolism and immune function, but when an excessive number of free radicals are formed, they can attack healthy cells, especially their membrane lipids, proteins, and nucleic acid. This, in turn, is thought to degrade the structure and function of healthy cellular components.

Vitamin E is an especially valuable antioxidant in the cell membranes, where it prevents oxidation of unsaturated fatty acids by trapping free radicals. This helps stabilize and protect cell membranes, especially red blood cells and tissues sensitive to oxidation, such as the lungs, eyes, and arteries. Vitamin E also protects the liver and other tissues from the free-radical damage of toxicants, such as mercury, lead, ozone, nitrous oxide, carbon tetrachloride, benzene, cresol, and various drugs. Related to its antioxidant properties, vitamin E is important for normal immune function, and many studies show that it prevents lipid peroxidation of blood lipoproteins, such as LDL-cholesterol.

Vitamin E is the collective term for those eight compounds that have varying levels of vitamin E biological activity. These eight fat soluble compounds include the alpha, beta, gamma, and delta forms of tocopherol and tocotrienol. The most biologically active of this group is alpha tocopherol. Eight structural isomers of alpha tocopherol are possible, but only the d-alpha tocopherol (RRR-alpha tocopherol) occurs in nature. The other seven isomers have less nutritional activity, and are present only in synthetic vitamin E (dl-alpha tocopherol). Douglas Laboratories' E-400 Dry Caps (Natural) contains only the succinate esterified form of the natural d-alpha tocopherol isomer of vitamin E.

Intestinal absorption of vitamin E is associated with fat absorption. Some dietary fat must be present for efficient vitamin E absorption to occur. Studies show that natural d alpha tocopherol is more efficiently absorbed and has significantly higher bioavailability than synthetic dl-alpha tocopherol. Once absorbed, vitamin E is transported into the circulatory system via chylomicrons, and then transferred to VLDL, LDL and HDL particles. Tissues slowly accumulate vitamin E from these plasma lipoproteins. Liver and adipose tissues have the highest concentrations, but muscle also accounts for a large proportion of vitamin E stores in the body.

**INDICATIONS**

E-400 Dry Caps (Natural) may be a useful dietary supplement for those who wish to increase their daily intake of vitamin E in its potent, natural form.

**FORMULA (#80400)**

Each Capsule Contains:

Vitamin E, Natural ..... 400I.U.  
 (d-alpha Tocopheryl Succinate)

**SUGGESTED USE**

Adults take 1 capsule daily or as directed by physician.

## E-400 Dry Caps (Natural)

Antioxidant protection

### SIDE EFFECTS

No adverse side effects have been reported.

### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

### REFERENCES

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**For more information on E-400 Dry Caps (Natural) visit [douglaslabs.com](http://douglaslabs.com)**

† These statements have not been evaluated by the Food and Drug Administration.  
This product is not intended to diagnose, treat, cure, or prevent any disease.

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**You trust Douglas Laboratories.  
Your patients trust you.**