

Complete your E with NuTriene[™] tocotrienols

Tocotrienols: what are they?

Tocotrienols are members of the vitamin E family of antioxidants. Eight different compounds make up the vitamin E family. Food sources contain all eight compounds. But most supplements contain only one: alpha-tocopherol.

The vitamin E family

Tocopherols	Tocotrienols
alpha-tocopherol (vitamin E)	alpha-tocotrienol
beta-tocopherol	beta-tocotrienol
gamma-tocopherol	gamma-tocotrienol
delta-tocopherol	delta-tocotrienol

The value of teamwork

All eight members of the vitamin E family function as antioxidants and can work synergistically in our body. In addition to supporting the established benefits of vitamin E, individual members offer other important functions. Researchers are just now discovering the combined potential of tocopherols and tocotrienols to contribute to overall well-being:

- An ongoing 5-year clinical trial suggests that supplementation with a tocotrienol-rich vitamin E product may slow narrowing of the carotid artery. More importantly, the study suggests that it may have a positive impact on atherosclerosis.
- New results from the clinical trial suggest that the same product may have beneficial effects in maintaining healthy cholesterol.
- Tocotrienols appear to slow down the activity of a key liver enzyme in the synthesis of cholesterol.

- Research suggests that tocotrienols in combination with tocopherols provide a wider spectrum of support to the skin to help it cope with UV radiation and environmental pollutants.
- In vitro tests suggest tocotrienols may have a beneficial impact on the rate of growth of breast cancer cells.
- Research suggests that gamma-tocopherol may be effective at fighting nitrogen radicals. Some scientists believe that these radicals may contribute to the development of arthritis, multiple sclerosis (MS) and diseases of the brain, such as Alzheimer's.
- A metabolic product of gamma-tocopherol appears to have natriuretic effects that may play an important role in supporting healthy blood pressure, as well as a healthy heart and liver.

Tocotrienols and vitamin E

Tocotrienols and vitamin E have unique functions in the body. So, while tocotrienols do not replace the suggested RDI for vitamin E, alpha-tocopherol alone can't fulfill the myriad of potential health benefits supplied by the tocotrienol family. Just as nature provides a mixture of antioxidants in plants and food sources, it seems logical to imitate that blend of antioxidants in the dietary supplements we take.

Tocotrienol dosages

Individuals participating in a human clinical study have been given approximately 300–360 mg mixed tocotrienols daily. Those interested in enhancing their antioxidant intake as part of a long-term nutrition plan should consider more moderate levels. Commercial products currently offer daily supplements of mixed tocotrienols ranging from 25 to 60 mg.



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Eastman background

With more than 50 years of experience in supplying natural vitamin E, Eastman has long provided top-quality ingredients for the dietary supplement industry. Eastman NuTriene™ tocotrienols are a mixture of naturally occurring tocotrienols and tocopherols extracted and concentrated from rice bran oil, a common cooking oil in many Asian countries. NuTriene tocotrienols are used as a dietary supplement and are suitable for incorporation into many dietary supplement formulations.

For more information on where to find Eastman NuTriene™ tocotrienols or the research presented here, call 1-800 EASTMAN, (327-8626), x1759 or 1-423-229-1759 or visit www.nutriene.com.

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