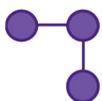


Vitamin E



ADVANCED BIOIDENTICAL
HORMONE THERAPY

Clinical Applications

- Provide General Antioxidant Support*
- Support Selenium and Vitamin E Intake in Conjunction with Other Dietary Sources*
- Support Protection of Body Proteins from Radiation Damage*
- Support Synthesis of Glutathione Peroxidase*

Vitamin E provides elemental selenium (in the form of selenomethionine, the form that can be incorporated into body proteins), along with vitamin E, a well-documented antioxidant.

All Advanced Bioidentical Hormone Therapy Formulas Meet or Exceed cGMP Quality Standards

Discussion

The need for selenium is well recognized in human and animal nutrition. Although it was believed, in the 1930's, to be the toxic portion of seleniferous plants, many decades of research on the occurrence, metabolism, and toxicity of selenomethionine (the natural organic food form of selenium) ultimately led to selenium's acceptance as a dietary supplement.^[1]

Selenomethionine cannot be synthesized by higher animals. Select strains of yeast and bacteria that are grown in selenium-rich media incorporate selenium as selenomethionine and synthesize it analogously with methionine.^[2] The selenomethionine in Vitamin E is synthesized by brewer's yeast.

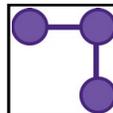
Unlike the selenite or selenate forms of selenium, only selenomethionine is incorporated into body proteins.^[3] After absorption in the small intestine, any amount not immediately needed is stored in organs with a high rate of protein synthesis, such as the brain. Selenomethionine is released into plasma albumin from storage tissue when needed.^[4,5] The content in skeletal muscle reflects dietary intake.^[6] Selenomethionine's half-life is about one-and-a-half times that of selenite.^[7] In nursing mothers supplementing with selenomethionine (compared to mothers consuming a selenite form of supplementation), significantly more selenium appeared in the milk.^[8]

Compared to selenite or selenate, selenomethionine has a differential effect on lymphocyte proliferation and other immunological biomarkers.^[9] A 1991 study demonstrated, for the first time, the immunostimulatory properties of selenium-enriched yeast in elderly humans.^[10] Selenomethionine has been shown to protect amino acids and proteins from radiation damage and, in mice, against UV-induced skin damage.^[11]

Both selenium and methionine are needed for glutathione peroxidase synthesis. In an individual with adequate methionine, selenomethionine supplementation causes tissue levels of selenium to increase proportionate to the dosage. Thereafter, a steady state is established. This takes about six weeks of supplementation in the erythrocytes.

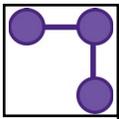
Typical dietary selenium intakes in the US range from 80 to 165 mcg/day. The current total daily amount of selenium considered safe for an American on a "normal" diet is 200 mcg.

***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.**



Advanced Bioidentical Hormone Therapy
1808 Barak Lane, Suite 100
Bryan, TX 77802
(979) 485-9926

Vitamin E



Supplement Facts

Serving Size: 1 Softgel
Servings Per Container: 60

	Amount Per Serving	%Daily Value
Vitamin E (as d-alpha-tocopherol)	400 IU	1333%
Selenium (as selenium yeast)	50 mcg	71%

Other Ingredients: Softgel (gelatin, vegetable glycerin, and purified water), soybean oil, yellow beeswax, and soy lecithin.

Contains: Soy (lecithin)

Directions

Take one softgel daily, or as directed by your healthcare practitioner.

Consult your healthcare practitioner before use. Do not use if tamper seal is damaged.

References

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2. Guo X, Wu L. Distribution of free seleno-amino acids in plant tissue of *Melilotus indica* L. grown in selenium-laden soils. *Ecotoxicol. Environ. Safety* 1998;39:207-214[Medline]
3. Schrauzer GN. Selenomethionine and selenium yeast: appropriate forms of selenium for use in infant formulas and nutritional supplements. *J. Med. Foods* 1998;1:201-206
4. Vendeland SC, et al. Uptake of selenite, selenomethionine and selenate by brush border membrane vesicles isolated from rat small intestine. *Biomaterials* 1994;7:305-312[Medline]
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6. Oster O, Schmiedel G, Prellwitz W. The organ distribution of selenium in German adults. *Biol. Trace Elem. Res.* 1988;15:23-45[Medline]
7. Patterson B, Levander O, Helzsouer K, McAdam P, Lewis S, Taylor P, Veillon C, Zech LA. Human selenite metabolism. A kinetic model. *Am. J. Physiol.* 1989;257:R556-R567
8. McGuire MK, et al. Selenium status of lactating women is affected by the form of selenium consumed. *Am. J. Clin. Nutr.* 1993;58:649-652
9. Borella P, et al. Chemical form of selenium greatly affects metal uptake and responses by cultured human lymphocytes. *Biol. Trace Elem. Res.* 1995;51:43-54
10. Peretz A, et al. Lymphocyte response is enhanced by supplementation of elderly subjects with selenium-enriched yeast. *Am. J. Clin. Nutr.* 1991;53:1323-1328
11. Burke KE, et al. The effects of topical and oral L-selenomethionine on pigmentation and skin cancer induced by ultraviolet irradiation. *Nutr. Cancer* 1992;17:123-137
12. Shimazu F, Tappel AL. Selenoamino acids decrease radiation damage to amino acids and proteins. *Science* (Washington DC) 1964;143:369-371

Does Not Contain

Wheat, gluten, dairy products, fish, shellfish, peanuts, egg, artificial colors, artificial sweeteners, or preservatives.

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