

Seleno-Methionine

DESCRIPTION

Seleno-Methionine, provided by Douglas Laboratories, contains 200 mcg of bioavailable selenium per capsule.

FUNCTIONS

Selenomethionine is an amino acid containing selenium. Selenium is a nutritionally essential trace element for humans and animals. The National Research Council's Recommended Dietary Allowance for selenium in adults ranges from 55 to 75 mcg per day depending on age and gender. In American adults, intakes typically range from 80 to 165 mcg/d. Selenium is a cofactor to about 10 selenoproteins in the body; the most important of these appears to be glutathione peroxidase (GPX). GPX uses glutathione to reduce hydrogen peroxide and thus protect cells and plasma against free radical injury. GPX activity depends on an adequate supply of dietary selenium. Recently, selenium as selenocysteine has been identified in the active center of type 1 and 3 iodothyronine deiodinases, two important enzymes regulating the formation and degradation of the active thyroid hormone, triiodothyronine (T3). Another important selenoprotein appears to be selenoprotein P, but its functions remain unclear. Selenium and vitamin E appear to have synergistic effects, since some signs of vitamin E deficiency in animals can be alleviated by dietary selenium. Dietary selenium is generally well absorbed and utilized in the body. The richest food sources of selenium are seafood and organ meats, followed by muscle meats, cereals and grains, and dairy products. Fruits and vegetables are typically low in selenium, and low selenium status has been reported in vegetarians.

INDICATIONS

Seleno-Methionine may be a useful dietary adjunct for individuals wishing to supplement with this important trace mineral.

FORMULA (#7422)

1 Gelatin Capsule Contains:

Selenium 200 mcg
(from seleno-methionine)

SUGGESTED USE

Adults take 1 capsule daily or as directed by a health care professional.

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.

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REFERENCES

Kadrabová J, Madaric A, Kováčiková Z, Ginter E. Selenium status, plasma zinc, copper, and magnesium in vegetarians. *Biol Trace Elem Res* 1995;50:13-24.

Larsen PR, Berry MJ. Nutritional and hormonal regulation of thyroid hormone deiodinases. *Annu Rev Nutr* 1995;15:323-352.

Lehr D. A possible beneficial effect of selenium administration in antiarrhythmic therapy. *J Am Coll Nutr* 1994;13:496-498.

Olmsted L, Schrauzer GN, Flores-Arce M, Dowd J. Selenium supplementation of symptomatic human immunodeficiency virus infected patients. *Biol Trace Elem Res* 1989;20:59-65.

Roy M, Kiremidjian-Schumacher L, Wishe HI, Cohen MW, Stotzky G. Supplementation with selenium restores age-related decline in immune cell function. *Proc Soc Exp Biol Med* 1995;209:369-375.

Sun E, Xu H, Liu Q, Zhou J, Zuo P, Wang J. The mechanism for the effect of selenium supplementation on immunity. *Biol Trace Elem Res* 1995;48:231-238.

Gerhard N, Schrauzer . Selenomethionine: A Review of Its Nutritional Significance, Metabolism and Toxicity1 *Journal of Nutrition*. 2000;130:1653-1656.

Yiming Xia, Kristina E Hill, Ping Li, Jiayuan Xu, Dingyou Zhou, Amy K Motley, Li Wang, Daniel W Byrne and Raymond F Burk. Optimization of selenoprotein P and other plasma selenium biomarkers for the assessment of the selenium nutritional requirement: a placebo-controlled double-blind study of selenomethionine supplementation in selenium-deficient Chinese subjects. *Am J Clin Nutr* doi:10.3945/ajcn.2010.29642

For more information on Seleno-Methionine visit 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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Your patients trust you.**