DR. AUBURN'S ADVANCED NUTRITIONALS

REACTED SELENIUM

CLINICAL APPLICATIONS

- Boosts Antioxidant Reserve and Maintains Normal Inflammatory Balance
- Promotes Cardiovascular Health
- Supports Prostate Health

Reacted Selenium provides 200 mcg per serving of selenium, ideally formulated using the amino acid chelate form of selenium (selenium glycinate) for enhanced absorption, optimal utilization and gastrointestinal (GI) comfort. Maintaining optimal selenium levels helps support a positive mood, improves antioxidant status, and maintains normal inflammatory balance and heart health.

Overview

Selenium is a trace element and a constituent of more than 20 selenoproteins that play critical roles in supporting reproduction, thyroid hormone metabolism, DNA synthesis and antioxidant status.[1] Selenium exists in two forms: inorganic (selenate and selenite) and organic (selenomethionine and selenocysteine).[2] Most selenium found in human and animal tissues is in the organic form of selenomethionine, where it can be incorporated with amino acids. Skeletal muscle is the major site of selenium storage.[3]

Selenium has structural roles, as well as enzymatic functions. It is best-known as an antioxidant and catalyst in the production of active thyroid hormone. Selenium is essential in the balance and support of immune system function. Selenium promotes sperm motility, maintains positive mood, antioxidant status, normal inflammatory balance, and heart health. In the context of potential health effects, low selenium status is cause for concern.

Bioavailability†

The importance of bioavailability is obvious. If consuming a selenium supplement has little effect on improving the body's selenium balance, there is no reason to ingest it. Signs of inferior mineral supplements include the use of cheap, poorly absorbed, rock-salt minerals. Reacted Selenium, formulated in the superior amino acid chelate form, selenium glycinate complex, has a high level of stability, which helps it to avoid food and other minerals that compete for absorption in the gut. This stability allows for enhanced absorption in the GI system (See Figure 1).

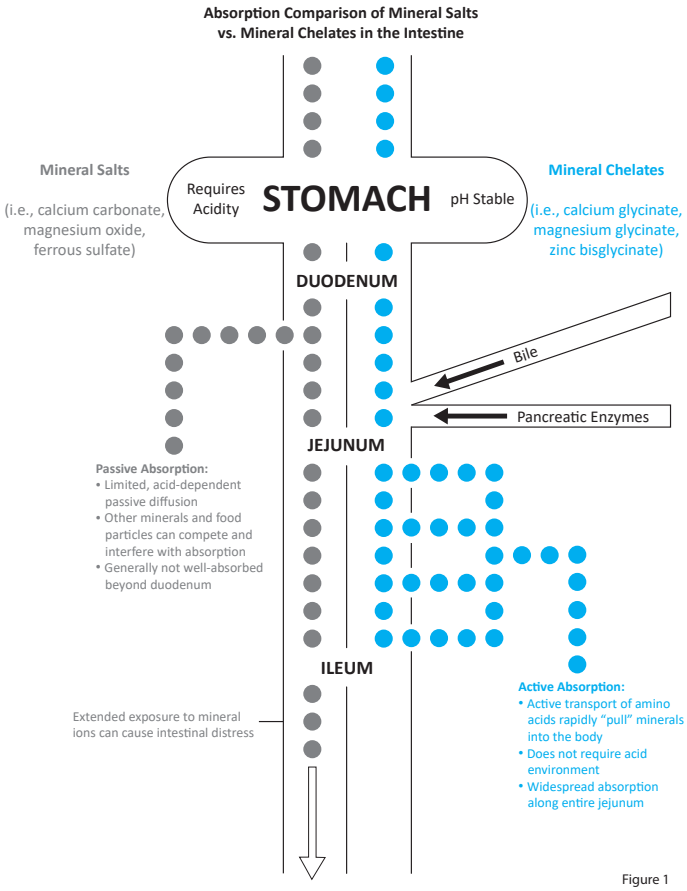

Figure 1

Heart Health†

Selenoproteins play a role in supporting oxidative modification of lipids, normal inflammatory balance and healthy blood flow.[5] For these reasons, experts have suggested that selenium supplements could impact heart health.

†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.

Cognitive Health†

Serum selenium concentrations decline with age. Sufficient selenium concentrations might play a role in supporting brain function throughout the lifespan, possibly due to selenium's antioxidant activity.[6-7]

Researchers have evaluated whether taking an antioxidant supplement including selenium impacts cognitive health in elderly people. An analysis of data from the Supplémentation en Vitamines et Minéraux Antioxydants (SU.VI.MAX) in France study on 4,447 participants aged 45 to 60 years found that, compared with placebo, daily supplementation with 120 mg ascorbic acid, 30 mg vitamin E, 6 mg beta-carotene, 100 mcg selenium, and 20 mg zinc for eight years was associated with cognitive health - even six years after the study ended.[8]

Thyroid Health†

Selenium concentration is higher in the thyroid gland than in any other organ in the body. Selenium, like iodine, has a significant supporting role in thyroid hormone synthesis and metabolism.

Epidemiological evidence supporting a relationship between selenium levels and thyroid gland function includes an analysis of data on 1,900 participants in the SU.VI.MAX study indicating an inverse relationship between serum selenium concentrations and thyroid health.[9] A cross-sectional study in 805 adults in Denmark with mild iodine deficiency also found a significant inverse association between serum selenium concentration and thyroid volume in women.[10]

Directions

1 or more capsules per day or as recommended by your health care professional.

Does Not Contain

Gluten, yeast, artificial colors and flavors.

Cautions

If you are pregnant or nursing, consult your physician before taking this product.

Supplement Facts V1

Serving Size 1 Capsule
Servings Per Container 90

1 capsule contains	Amount Per Serving	% Daily Value
Selenium (as Selenium Glycinate Complex)	200 mcg	364%

References

1. Sunde RA. Selenium. In: Ross AC, Caballero B, Cousins RJ, Tucker KL, Ziegler TR, eds. Modern Nutrition in Health and Disease. 11th ed. Philadelphia, PA: Lippincott Williams & Wilkins; 2012:225-37.
2. Sunde RA. Selenium. In: Bowman B, Russell R, eds. Present Knowledge in Nutrition. 9th ed. Washington, DC: International Life Sciences Institute; 2006:480-97.
3. Terry EN, Diamond AM. Selenium. In: Erdman JW, Macdonald IA, Zeisel SH, eds. Present Knowledge in Nutrition. 10th ed. Washington, DC: Wiley-Blackwell; 2012:568-87.
4. Institute of Medicine, Food and Nutrition Board. Dietary Reference Intakes: Vitamin C, Vitamin E, Selenium, and Carotenoids. National Academy Press, Washington, DC, 2000.
5. Rayman MP. Selenium and human health. *Lancet* 2012;379:1256-68.
6. Akbaraly TN, Hininger-Favier I, Carriere I, Arnaud J, Gourlet V, Roussel AM, et al. Plasma selenium over time and cognitive decline in the elderly. *Epidemiology* 2007;18:52-8.
7. Shahar A, Patel KV, Semba RD, Bandinelli S, Shahar DR, Ferrucci L, et al. Plasma selenium is positively related to performance in neurological tasks assessing coordination and motor speed. *Mov Disord* 2010;25:1909-15.
8. Kesse-Guyot E, Fezeu L, Jeandel C, Ferry M, Andreeva V, Amieva H, et al. French adults' cognitive performance after daily supplementation with antioxidant vitamins and minerals at nutritional doses: a post hoc analysis of the Supplementation in Vitamins and Mineral Antioxidants (SU.VI.MAX) trial. *Am J Clin Nutr* 2011;94:892-9.
9. Derumeaux H, Valeix P, Castetbon K, Bensimon M, Boutron-Ruault MC, Arnaud J, Hercberg S. Association of selenium with thyroid volume and echostructure in 35- to 60-year-old French adults. *Eur J Endocrinol* 2003;148(3):309-15.
10. Rasmussen LB, Schomburg L, Kohrle J, Pedersen IB, Hollenbach B, Hog A, et al. Selenium status, thyroid volume, and multiple nodule formation in an area with mild iodine deficiency. *Eur J Endocrinol* 2011;164:585-90.