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 promotes 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. Selenium exists in two forms: inorganic (selenate and selenite) and organic (selenomethionine and selenocysteine). 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.

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, supports positive mood, antioxidant status, inflammation 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.

Absorption Comparison of Mineral Salts vs. Mineral Chelates in the Intestine

Mineral Salts
- Requires Acidity
- pH Stable
- STOMACH
  - Requires Acidity
- Passive Absorption:
  - Limited, Acid-dependent passive diffusion
  - Other minerals and food particles can compete and interfere with absorption
  - Generally not well absorbed beyond duodenum
- DUODENUM
  - Requires Acidity
- JEJENUM
  - Requires Acidity
- ILEUM
  - Requires Acidity

Mineral Chelates
- STOMACH
  - pH Stable
- DUODENUM
  - Requires Acidity
- JEJENUM
  - Requires Acidity
- ILEUM
  - Requires Acidity

Extended exposure to mineral ions can cause intestinal distress

Active Absorption:
- Active transport of amino acids rapidly “pull” minerals into the body
- Does not require acid environment
- Widespread absorption along entire Jejenum

Passive Absorption:
- Limited, Acid-dependent passive diffusion
- Other minerals and food particles can compete and interfere with absorption
- Generally not well absorbed beyond duodenum

Figure 1

1 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.
Heart Health†
Selenoproteins play a role in supporting oxidative modification of lipids, inflammation balance and healthy blood flow. For these reasons, experts have suggested that selenium supplements could impact heart health.

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. 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.

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. 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.

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

Does Not Contain
Gluten, corn, yeast, artificial colors and flavors.

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

Supplement Facts

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>% Daily Value</th>
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<tbody>
<tr>
<td>200 mcg Selenium (as Selenium Glycinate Complex)</td>
<td>364%</td>
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References