



E Asta Sel

Bioactive Synergistic Vitamin Supplement

A powerful, naturally derived antioxidant formula blending Vitamin E, Astaxanthin (from algae) & Selenium.

Contains Vitamin E isomers, 4 x Tocopherols (rapeseed & sunflower seed oil) & 4 x Tocotrienols from annatto & palm (non-GMO, sustainable).

Nutritional Therapy

Bioactive Bioavailable Quality Ingredients



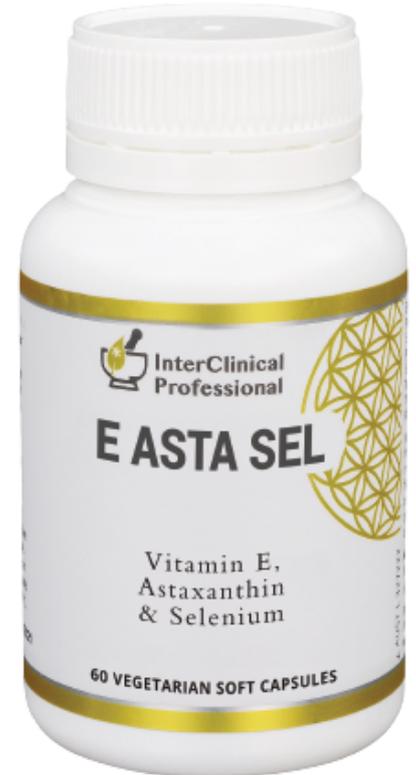
A blend of low and high-alpha type tocopherols from sunflower and rapeseed oil, tocotrienols from palm fruits (non-GMO, sustainable) and Annatto seeds (*Bixa orellana*), with Selenium and Astaxanthin esters from *Haematococcus pluvialis* (algae). Delivered with MCT Oil in a vegan, non-synthetic, soft capsule.

Maintains immune system health, thyroid gland function and supports reproductive health and preconception health in healthy males.

What you need to know about this supplement

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- Antioxidant/Reduce free radicals formed in the body (Vitamin E, Selenium)
- Support healthy thyroid gland function. (Selenium)
- Maintains healthy thyroid hormones and assists in thyroid hormone production (Selenium)
- Supports immune system health (Vitamin E)
- Supports healthy immune system function (Astaxanthin)
- Support preconception health in healthy males (Selenium)
- Maintains reproductive system health in males (Selenium)
- Supports sperm production; and sperm health and motility in healthy males (Selenium)
- Supports wound healing (Vitamin E)
- Maintains general health and wellbeing (Astaxanthin)



For Practitioner Dispensing Only

Specifications



60 Vegetarian Soft Capsules

6mm | 13mm



Description: Soft vegan capsule

Dosage Adults: 1 capsule twice daily, or as directed by your healthcare professional.

Vegan friendly

Blended, tableted and packaged in Australia



Allergen & Free From

Ingredients in this product have been formulated without gluten, wheat, yeast, soy, egg, gelatin, fish, molluscs, crustaceans, milk products, peanuts, tree nuts, sesame, bee products, artificial preservatives, colours or flavours.

Each Soft Capsule Contains:

Mixed (high-alpha type) tocopherols concentrate	37.8 mg
Equiv. d-alpha-tocopherol (from sunflower oil)	36.2 mg
Mixed (low-alpha type) tocopherols concentrate	82.7 mg
Equiv. d-alpha-tocopherol (from rapeseed oil)	30.7 mg
Palm tocotrienols complex	19.9 mg
Equiv. mixed tocotrienols	5.9 mg
Equiv. mixed tocopherols	11.6 mg
Equiv. d-alpha-tocopherol	6.7 mg
<i>Bixa orellana</i> (Annatto) seed distillate concentrate	32.5 mg
Equiv. mixed tocotrienols (high-delta type)	22.8 mg
Derived from seed dry	10.8 g
TOTAL d-alpha-tocopherol (Vitamin E 110 IU)	73.7 mg
TOTAL tocopherols	132.1 mg
TOTAL tocotrienols	28.7 mg
Astaxanthin esters extracted from <i>Haematococcus pluvialis</i>	20 mg
Equiv. Astaxanthin	2 mg
Selenium (from Selenomethionine)	50 mcg

Excipients: Calcium hydrogen phosphate, glycerol, MCT (medium chain triglycerides), palm fruit oil, PEG-35 castor oil, purified water, sunflower oil, vegan gel

Warnings

This medicine contains selenium which is toxic in high doses. A daily dose of 150 micrograms for adults of selenium from dietary supplements should not be exceeded. Vitamins and minerals can only be of assistance if dietary intake is inadequate.

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PEER NOTES

FOR PROFESSIONAL REFERENCE ONLY

Natural sources of vitamin E are found in two forms, tocopherols and tocotrienols, which in turn have four isoforms each. Tocopherols and tocotrienols have different biological properties and both perform important and complex antioxidant functions in the body. (1, 2)

Tocotrienols are more readily transported and incorporated into cell membranes than tocopherols because their unsaturated bonds allow better penetration. Current research indicates that tocotrienols have even greater antioxidant potential than tocopherols in humans. (2, 3) Recent studies show that supplementing with a mixture of the vitamin E isoforms results in a significant increase in the concentration of tocotrienols in the tissues. (2)

VITAMIN E - ANTIOXIDANT and IMMUNE ENHANCING FUNCTIONS

Vitamin E enhances immune system function by scavenging reactive oxygen species (ROS) and reducing oxidative stress. It also regulates the maturation and function of dendritic cells which connect the innate and adaptive immune systems to coordinate the immune response. (2) Vitamin E protects against oxidation of polyunsaturated fatty acids which are enriched in membranes of immune cells, making them prone to oxidative damage resulting from their high metabolic activity and their normal role in defence against pathogens. (2,4) In this way vitamin E assists in the maintenance of membrane integrity and signal transduction, and in the production of key proteins that directly affect immune cell function. Prolonged and unresolved immune system activation leads to long-term low-grade inflammation, which is a feature of many chronic metabolic conditions. (4)

VITAMIN E - WOUND HEALING The antioxidant and anti-inflammatory qualities of vitamin E maintains the integrity and stability of intracellular membranes in wound healing, and it has been found to reduce local bacterial growth when applied externally. (5, 6)

ASTAXANTHIN Astaxanthin is a carotenoid with the strongest antioxidant activity of any natural product and as such it supports the cellular protective and immune-enhancing activities of vitamin E. (7) The naturally astaxanthin-rich algae *Haematococcus pluvialis* is the source of astaxanthin in E Asta Sel. (8)

SELENIUM

A daily intake of selenium is critical for the maintenance of normal metabolism and homeostasis. It is essential for the activity of many important enzymes. Glutathione peroxidase (GPX) is the major selenoprotein present in the body. It helps control the excessive production of free radicals at sites of inflammation. (9) Selenoproteins have multiple biological roles in thyroid function including regulating thyroid hormone metabolism and protecting against oxidative DNA damage and inflammation. (9, 10) The thyroid gland has the highest selenium content of all the endocrine organs. (10) Inadequate thyroid hormone synthesis is associated with diminished fertility in humans. The GPX family play a critical role in many redox responses involved in male fertility. They protect sperm from oxidative stress during maturation and increase spermatogenesis, sperm quality, and motility. (10) Selenium deficiency has been associated with increased susceptibility to viral infections and supplementing humans with selenium has been shown to improve immune responses and viral resistance. (11) The selenomethionine in E Asta Sel is the natural dietary form of selenium ingested in food. (12)