



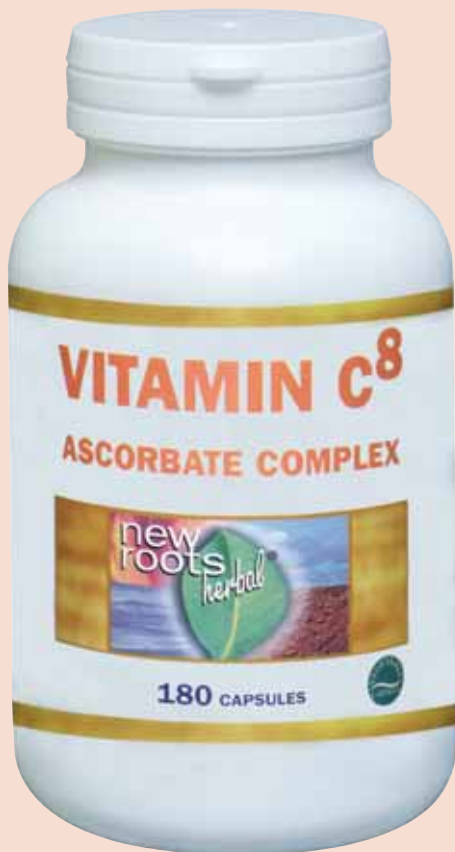
# VITAMIN C<sup>8</sup>

## ASCORBATE COMPLEX



- 8 forms of Vitamin C
- Buffered forms of Vitamin C
- A good source of Electrolytes
- Charge up before and after sports/activities
- Rebuilds energy
- Enhances immune functions
- 30mg of 75% EGCG/capsule, equals approximately 3 cups of green tea

# VITAMIN C<sup>8</sup>



## *The Ultimate Antioxidant Formula*

Vitamin C is an antioxidant that comes in many different forms and claims regarding its effectiveness and bioavailability. Bioavailability refers to the degree to which a nutrient is absorbed in body tissue after it has been orally administered.

Mineral salts of Vitamin C (mineral ascorbates) is Vitamin C buffered with minerals which makes it less acidic and ideal for gastrointestinal challenges. Therefore, mineral ascorbates are commonly recommended for people who experience gastrointestinal problems (upset stomach) with regular Vitamin C. When mineral salts of ascorbic acid are taken, both the ascorbic acid and the mineral appear to be better absorbed in unison, so it is important to consider the dose of minerals accompanying the ascorbic acid when taking larger doses of mineral ascorbates. New Roots Vitamin C<sup>8</sup> is formulated with the optimal concentrations of minerals to keep your body nourished with minerals in their proper ratios. The types of mineral ascorbates in New Roots Vitamin C<sup>8</sup> are as follows:

### Calcium Ascorbate:

is a natural form of Vitamin C, which is much more readily absorbed in the blood stream than other forms of calcium. Importantly, calcium is coupled with Vitamin C to deliver the benefits of both calcium and Vitamin C. Pure calcium ascorbate is 11% calcium.

### Magnesium Ascorbate:

Magnesium Ascorbate, which provides both Magnesium and Ascorbic acid (Vitamin C) appears to be a unique and promising product, in that both the components have the potential to reduce the risk of cardiovascular disease. Magnesium is the fourth most abundant mineral in the body. It is essential to build the bones and teeth and numerous metabolic functions. Magnesium Ascorbate is a neutral salt having significantly higher gastrointestinal tolerance and therefore is effective in Magnesium therapy.

### Potassium Ascorbate:

Potassium is an essential dietary mineral that is also known as an electrolyte. The term electrolyte refers to a substance that dissociates into ions (charged particles) in solution making it capable of conducting electricity. The normal functioning of our bodies depends on the tight regulation of potassium concentrations both inside and outside of cells.

### Zinc Ascorbate:

Zinc is a component of the enzymes involved in most major metabolic pathways in human and animal nutrition with a wide range of biological roles. Zinc plays catalytic, structural and regulatory roles in more than 200 zinc metalloenzymes that have been identified in biological systems. These enzymes are involved in nucleic acid and protein metabolism and the production of energy among other things. Zinc plays structural roles in so-called Zinc fingers. Zinc fingers are exploited by transcription factors for interacting with DNA and regulating the activity of genes. Another structural role of zinc is in the maintenance of the integrity of biological membranes resulting in their protection against oxidative injury.

### Manganese Ascorbate:

Manganese is important in the breakdown of amino acids and the production of energy. It activates various enzymes for proper digestion and utilization of foods. Manganese also helps nourish the nerves and brain and is necessary for normal skeletal development.

### Sodium Ascorbate:

Sodium Ascorbate is buffered (non-acidic) and will not contribute to gastric irritation in acid-sensitive persons. Sodium Ascorbate is synthesized from a combination of



Sodium Bicarbonate and Ascorbic Acid to form Sodium Ascorbate. Along with sodium, Vitamin C<sup>8</sup> has the ratio of 2:1 calcium/magnesium, potassium and manganese which all play an important role since a constant blood value of these minerals is required for a normal rhythmic heartbeat, healthy nerve transmission, and strong muscle contractions. Once a muscle contracts, calcium leaves and only then, magnesium replaces it, then the muscle can return to a relaxed state. Potassium and sodium are present not only as an electrolyte but also as an antioxidant. A deficiency of manganese can lead to excess perspiration that contributes to premature electrolyte depletion.

### Ascorbyl Palmitate:

Ascorbyl palmitate is a fat-soluble antioxidant. It is actually both water and fat soluble allowing it to be incorporated into cell membranes. When incorporated into the cell membranes of human red blood cells, ascorbyl palmitate has been found to protect them from oxidative damage and to protect vitamin E (another fat-soluble antioxidant) from oxidation by free radicals. When taking ascorbyl palmitate orally, it becomes hydrolyzed and broken apart into palmitate and ascorbic acid in the human digestive tract before it is absorbed. The presence of ascorbyl palmitate in Vitamin C<sup>8</sup> contributes to the ascorbic acid content and helps protect lipid-soluble antioxidants during storage.



### **Nutraceuticals:**

New Roots Vitamin C<sup>8</sup> provides additional antioxidant protection with the inclusion of nutraceutical extracts. These natural food sources exist in harmony with the whole foods they are derived from. While isolated sources of antioxidants offer increased potency, whole food sources offer natural balance and synergy and provide us with a whole host of natural forms of minerals, antioxidants, anti-bacterial and cancer fighting agents.

### **Green Tea 75% EGCG:**

Studies in laboratories have suggested that flavonoid polyphenol type antioxidants may lower the risk of cancer developing or spreading. In these studies, the chemicals in green tea slowed the growth of blood vessels that fed tumors. They also limited the amount of estrogen that might fuel the growth of some breast cancer cells. EGCG inhibits 5-alpha reductase. Inhibitors of 5AR may be effective in the treatment of 5 alpha dihydrotestosterone-dependent abnormalities. The EGCG in green tea prevents, inhibits, attacks or induces death in prostate, breast, lung, mouth, stomach and colon cancer cells.

### **Multi-Anthocyanidins 20%, Bilberry 25%, Grape seed extract 95% & Cranberry 107X Extracts:**

Proanthocyanidins, anthocyanidins and cyanidins are a group of bioflavonoids that have powerful antioxidant properties. These flavonoids in Vitamin C<sup>8</sup> are derived from multiple fruit sources, including strawberry, bilberry,

blueberry, grape, cherry, cranberry and elderberry. All of them serve a slightly different role in added antioxidant protection and are also included for scavenging free radicals.

### **Citrus Bioflavonoids:**

Bioflavonoids are a class of water-soluble plant pigments. Vitamin C-rich fruits and vegetables, especially citrus fruits, are often rich sources of bioflavonoids as well. The effect of bioflavonoids on the bioavailability of ascorbic acid has been examined in two small published studies. In one study, ascorbic acid given in a natural citrus extract containing bioflavonoids (in the ratio of bioflavonoids to ascorbic acid of 4:1), proteins, and carbohydrates, was more slowly absorbed and 35% more bioavailable than ascorbic acid alone, based on plasma levels of ascorbate over time and 24-hour urinary excretion of ascorbate.

### **Quercetin and Rutin:**

Quercetin is a flavonoid that forms the "backbone" for many other flavonoids, including the citrus flavonoids rutin, hesperidin, naringin and tangeritin. Quercetin & rutin have many health promoting effects, including improvement of cardiovascular health, reducing risk for cancer. They have anti-inflammatory and anti-allergic effects and help the absorption and retention of vitamin C. All these activities are caused by their strong antioxidant action. They will help to combat free radical molecules which can damage cells.

# MAGNESIUM CITRATE & L-TAURINE

DID YOU KNOW THAT MAGNESIUM?...



- Is essential for the metabolism of fat, carbohydrates and amino acids
- Activates enzymes for essential body functions
- Supports healthy teeth and maintains bone density
- Regulates normal blood pressure and heart rate
- Supports emotional well being during menstruation
- Helps transmit neuromuscular impulses across nerves and muscles

## Black Pepper 95% extract:

The active ingredient in both black pepper and long pepper is the alkaloid, piperine. Experiments carried out to evaluate the scientific basis for the use of peppers have shown that piperine significantly enhances bioavailability when consumed with other substances and increases the absorption of other nutraceuticals. For this reason, piperine has been formulated to increase absorption of Vitamin C<sup>8</sup>.

## Proteolytic Enzymes:

Bromelain from pineapple and papain from papaya are proteolytic enzymes that are essential for the digestion of proteins. They work through mechanism by which they break down peptide bonds of the extracellular matrix molecules holding the cells together, which in this case help to increase the bioavailability of this ascorbate-nutraceutical matrix. They are both potent digestants that resist the degradation from the conditions that prevail in the human digestive tract. Through its prostaglandin regulating properties, bromelain can moderate inflammatory symptoms, shorten recovery time and ameliorate excessive clotting which is attributed to inflammation.

Ascorbic Acid Value Per Capsule . . . . .435 mg

### Elemental Value Per Capsule:

Calcium . . . . .	28 mg
Magnesium . . . . .	14 mg
Potassium . . . . .	10.5 mg
Zinc . . . . .	10.5 mg
Manganese . . . . .	1.5 mg
Sodium . . . . .	2.2 mg



# PREVENT

Each capsule equals 44 cups of green tea



- Annually 149,000 new cases of cancer will occur in Canada
- Weekly 1,346 deaths will occur in Canada in 2006
- Contains 375mg of the medicinal isolate EGCG
- Prevents, inhibits, attacks or induces death in breast, prostate, lung, mouth, stomach and colon cancer cells



[www.newrootsherbal.com](http://www.newrootsherbal.com)

PREVENTION & CURE