WHAT IS VITAMIN C?

Vitamin C, also known as **L-ascorbic acid**, ascorbic acid or **L-ascorbate** is a vital nutrient for many animals, including humans. It is an antioxidant which protects the body against oxidative stress. An antioxidant is a molecule that can inhibit the oxidation of other molecules. Oxidation reactions produce free radicals which can start chain reactions that damage cells. It is also a cofactor in 8 enzymatic reactions.

Vitamin C is found principally in vegetables and fruit. We need vitamin C to maintain and form bones, skin and blood vessels.

An organic compound - vitamin C is an organic compound, so are the other vitamins. This means it contains the elements carbon and oxygen and is a substance that exists in living things.

Collagen - vitamin C is involved in the production of collagen. Collagen is the main component of connective tissue and the most abundant protein in mammals. Experts say that 1% to 2% of muscle tissue is collagen. Collagen is a vital and abundant component of fibrous tissues, such as tendon, ligament, skin, cornea, cartilage, bone, the gut, and blood vessels.

Healing - vitamin C plays a significant role in the healing of wounds, cuts and grazes.

Infections - individuals with adequate levels of vitamin C are better able to fight off infections compared to people with vitamin C deficiency.

Cancer protection - vitamin C slows down the conversion of irritants into cancer-causing substances. Examples of irritants include tobacco smoke, smog, and some substances found in foods.

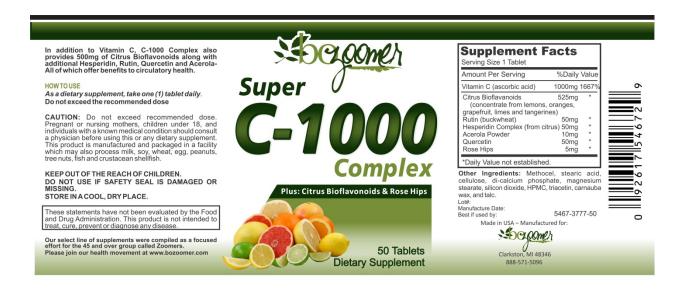
Cardiovascular benefits - experts believe vitamin C widens the blood vessels, protecting us from developing hypertension (high blood pressure) and heart disease.

Cholesterol - individuals with adequate levels of vitamin C have better cholesterol level control compared to others.

Scurvy - if you consume plenty of vitamin C you will not get scurvy, a disease that causes swollen joints, bleeding gums, loose teeth, anemia and tiredness. Scurvy used to be a problem among ship crews many years ago because of a lack of fruit and vegetable consumption. Today scurvy is uncommon.

Eyes - vitamin C lowers the risk of cataracts.

Diabetes patients - individuals with diabetes who eat plenty of vitamin C rich fruit and vegetables are less likely to experience deterioration of the kidneys, eyes and nerves.



Rutin, also called **rutoside**, **quercetin-3-O-rutinoside** and **sophorin**, is a citrus flavonoid glycoside found in buckwheat, the leaves and petioles of *Rheum* species, and asparagus. Rutin is also found in the fruit of the fava d'anta tree (from Brazil), fruits and flowers of the pagoda tree, fruits and fruit rinds (especially citrus fruits (orange, grapefruit, lemon, lime)) and berries such as mulberry, ash tree fruits and cranberries. Its name comes from the name of *Ruta graveolens*, a plant that also contains rutin. It is sometimes referred to as vitamin P.

Hesperidin is a flavanone glycoside found abundantly in citrus fruits. Its aglycone form is called hesperetin. Its name is derived from the Hesperides nymphs of Greek mythology. Hesperidin is believed to play a role in plant defense. It acts as an antioxidant according to *in vitro* studies. Various preliminary studies reveal novel pharmaceutical properties; Hesperidin reduced cholesterol and blood pressure in rats. In a mouse study, large doses of hesperidin decreased bone density loss. Another animal study showed protective effects against sepsis. In vitro and in laboratory research, hesperidin has anti-inflammatory effects. Hesperidin is also a potential sedative, possibly acting through opioid or adenosine receptors. Hesperidin exhibited pronounced anticancer activity against some selected human carcinoma cell lines.

Acerola *Malpighia emarginata* is a tropical fruit-bearing shrub or small tree in the family Malpighiaceae. Acerola is native from Southern Mexico, Central and South America, but now being also grown as far north as Texas and in subtropical areas – Asia and India. It is known for being extremely rich in vitamin C although it also contains vitamins A, B1, B2 and B3 as well as carotenoids and bioflavonoids which provide very important nutritive value and have possible antioxidant uses. This vitamin C produced by the fruit is better absorbed by human organisms than synthetic ascorbic acid.

Quercetin is a flavonoid widely distributed in nature. Foods rich in quercetin include black and green capers, lovage, apples, onion, especially red onion, red grapes, citrus fruit, tomato, broccoli and other leafy green vegetables, and a number of berries,

including raspberry, whortleberry, lingonberry, cranberry, chokeberry, sweet rowan, rowanberry, sea buckthorn berry, crowberry, and the fruit of the prickly pear cactus. A recent study found that organically grown tomatoes had 79% more quercetin than "conventionally grown". A study by the University of Queensland, Australia has also indicated the presence of quercetin in varieties of honey, including honey derived from eucalyptus and tea tree flowers.

Rose hips, or **rose haw**, is the fruit of the rose plant that typically is red-to-orange, but ranges from dark purple to black in some species. Rose hips begin to form in spring, and ripen in late summer through autumn.

Rose hips are used for herbal tea, jam, jelly, syrup, soup, beverages, pies, bread, wine, and marmalade. They can also be eaten raw, like a berry, if care is used to avoid the hairs inside the fruit. A few rose species are sometimes grown for the ornamental value of their hips, such as *Rosa moyesii*, which has prominent large red bottle-shaped fruits.

Rose hips have recently become popular as a healthy treat for pet chinchillas and guinea pigs. These small rodents are unable to manufacture their own vitamin C and are unable to digest many vitamin-C rich foods. Rose hips provide a sugarless, safe way to increase their vitamin C intake. Rose hips are also fed to horses. The dried and powdered form can be fed at a maximum of 1 tablespoon per day to improve coat condition and new hoof growth.

bozoomer Vitamin C-1000 Complex other ingredients

What is Methocel? This product also contains methocel. Methocel is a cellulose derivative polymer. Basically, it is the coating on the tablets that allows this supplement to be a controlled-release tablet.

What is Stearic Acid? Purified Stearic acid is the common name for octadecanoic acid, which is a saturated fatty acid. It is a waxy substance that is odorless and often takes the form of white or yellow waxy flakes. When it is heated, it becomes a clear liquid. Stearic acid is one of the most commonly occurring fatty acids and is found in a number of animal fats and vegetable oils, including beef fat and cocoa butter. It is often used in the production of margarine, shortening, spreads, and baking products..

What is Cellulose? It is a fibrous carbohydrate, but it's a carb VERY different form starch. Cellulose is a straight chain polymer: unlike starch, no coiling occurs, and the molecule adopts an extended rod-like conformation that's why you'll find that plant cell walls are made of cellulose. This strength is important in cell walls, where they are meshed into a carbohydrate matrix, helping keep plant cells rigid.

So although it is technically a carbohydrate, it's so fibrous in nature that the bonds prevent it from acting like other carbohydrates.

If you're inquiring regarding its glycemic index values, I would categorize it as very low, unlike many other carbs. You can have it even if you can't have sugar, because cellulose is the slowest carb you can consume, since it's digested as strictly fiber. It's actually the healthiest "carb" possible.

What is dicalcium phosphate? Dicalcium phosphate, or DCP, is a calcium supplement that is commonly found in prepared breakfast cereals, enriched flour, noodle products, poultry feed and dog treats. It is also used in pharmaceuticals as an ingredient to bind tablets, and in products meant to eliminate body odor. Dicalcium phosphate is also used as a tartar control agent in toothpastes. Dicalcium phosphate can be used as a dietary supplement for both calcium and phosphates. These two chemicals work together for basic health and are useful in humans, dogs, and horses to increase calcium and phosphate levels, especially during stress, growth, and after injury. Adding calcium and phosphates together increases the effect of both chemicals in the body.

What is magnesium stearate? Magnesium stearate is a white substance, solid at room temperature, used in the manufacture of pharmaceutical and supplement tablets and capsules. The primary role of magnesium stearate in supplements is to act as a lubricant to prevent tablet and capsule contents from sticking to the machinery that process them. The magnesium stearate we use is vegetable based and batch tested for purity by government standards.

What is silicon dioxide? Silicon dioxide is found in many multivitamin and mineral supplements because silicon is necessary for good health. As a necessary nutrient for the health of your skin, hair, nails and bones, dietary silicon may also help to prevent arthritis and osteoporosis. But silicon dioxide also works as an anti-caking agent, and is added as an ingredient in foods to help keep your processed foods appetizing. Silicon is the second most common element on Earth, and the eighth most abundant element in the universe. Silicon makes up nearly 28 percent of the Earth's crust by weight. But in nature, it doesn't occur by itself. Instead, it usually takes the form of an oxide, meaning that the silicon atom combines with one or more oxygen atoms. Silicon has been known to be an essential nutrient in human health for some time. Silicon contributes to the health of your bones and arteries, and may also help your body by maintaining a healthy blood pressure level.

What is HPMC? Several materials have been examined as a substitute for the gelatin in two-piece hard capsules. Hydroxypropylmethyl cellulose (HPMC) has become a successful alternative material for two-piece capsules and is actually on the market in the world. HPMC is also being adopted as a film coating or a sustained-release tablet material in the pharmaceutical field. HPMC capsules have been developed for both pharmaceutical products and dietary supplements. They are preservative free, allergen free, starch free, gluten free, non-animal: suitable for vegetarians and vegetarian minded users.

What is triacetin? triacetin is a chemical compound, commonly used as food additive.

What is carnauba wax? Carnauba wax is secreted from the leaves of the Brazilian fan palm Copornica cerifera. Carnauba wax is used as glazing agent for confectionery including chocolate, small products of fine bakery wares coated with chocolate, snacks, dietary food supplements, fresh citrus fruits, melons, apples, pears, peaches and pineapples.

What is talc? While not an herb, talc is nevertheless an oft-used ingredient in herbal remedies and some forms of traditional Chinese medicine. Talc is a mineral, composed of magnesium, silicon, hydrogen and other elements, and found worldwide. Talc is used to help in the molding of pills, and facilitates the ingestion of solid drugs.

Please contact us at www.bozoomer.com for our complete family of supplements. Thank You!