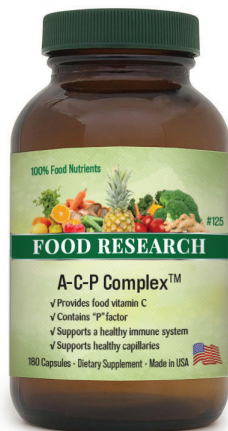




FOOD RESEARCH

Nutrition from food, what a concept!



A-C-P COMPLEX™

A-C-P Complex™ combines vitamin complex of A and C with the bioflavonoid complex sometimes called Vitamin P. Bioflavonoids support the healthy function of capillaries, connective tissues and the immune system.

- ✓ Provides food vitamin C
- ✓ Supports a healthy immune system
- ✓ Contains "P" factor
- ✓ Supports healthy capillaries

Vitamins A, C, and P are among the most reached-for nutrients for immune, respiratory, gum, and capillary support.

A-C-P Complex is most frequently used for general immune support, particularly for people who feel run-down or want nutritional support during the fall and winter seasons. It supports recovery and serves as a reliable go-to during those times. It also supports healthy lymphatic function, healthy respiratory tissue and mucous membranes, healthy gums and oral tissue, and the body's normal antioxidant and inflammatory balance.

A-C-P Complex differs from a standard A and C and P product in that it has food-source vitamins A and C, plus vitamin P (bioflavonoid rutin) content. Rutin supports capillary and blood-vessel integrity and helps maintain the strength and normal permeability of the small vessels and connective tissue. This combination is used for capillary strength, vascular integrity, and reduced bruising, as well as for healthy skin and connective tissue. It also supports healthy circulation and cardiovascular health, healthy cholesterol levels, normal tissue repair, and healthy kidney and urinary function, including fluid balance and normal urination.

To better support human health, **A-C-P Complex** contains only food sources for vitamins than isolated vitamins combined with foods

» **Acerola Cherries** (*Malpighia emarginata* DC) are one of the richest natural sources of vitamin C and contain phytonutrients like carotenoids phenolics, anthocyanins, and flavonoids [1]. **"The vitamin C produced by acerola is better absorbed by the human organism than synthetic ascorbic acid"** [2]. The presence of functional phytochemicals in acerola has been shown to influence the intestinal epithelial cells to increase the cellular uptake of vitamin C as opposed to vitamin C alone [3]. "Acerola...contains bioflavonoids" [4], anthocyanins, and quercetin [5]. An animal study found that "acerola juice reduces low-grade inflammation" [6].

» **Alfalfa** supplies chlorophyll and rutin (vitamin P) and has antioxidant properties [7].

» **Beets** have long been used to support the liver and aspects of the immune system [8].

» **Bovine** tissues support numerous body systems. Adrenal glandulars support the adrenals which are involved in stress and pain management support [9,10]. Bone marrow supports the immune system as well as the blood [11]. Bone meal provides nutrients and appears to support immune system homeostasis [12]. Bovine kidneys support the kidneys, fluid balance, and healthy urination [13].

» **Brown rice** supplies B vitamins and other nutrients [14].

» **Carrots** supply carotenoids such as betacarotene [15], a vitamin A precursor, and are the source of betacarotene in A-C-P Complex.

» **Echinacea** was discovered by Native Americans who used it as a remedy for snakebites and other skin wounds. Echinacea has been used for centuries for people with skin eruptions. Herbalists also believe it has immune supporting and blood-purifying properties. Echinacea is believed by herbalists to help the body maintain its line of defense against unwanted invaders and swollen lymph glands. Echinacea has been used by people with respiratory concerns. Although it contains echinacoside and isobutylamides, recent studies suggest that echinacea's polysaccharides are responsible for its anti-inflammatory and immunostimulating properties. Its polysaccharide arabinogalactan appears to activate macrophages to destroy certain negative cells [16].

» **Lecithin** has protective properties that support cognition [17] and aspects of the immune system [18].

» **Maitake** is a type of polypore mushroom. It is also known as *Grifola frondosa*, ram's head, hen of the woods, and sheep's head. Clinically, it tends to be used for immune system support [16].

» **"Sophora japonica** flower, rich in rutin, is a homology of medicine and food that can be used as an anti-inflammatory agent" [19]. **Rutin is also known as vitamin P. *Sophora japonica*** is in the pea family. It "has shown potential cognitive benefits {memory} in preclinical studies through neuroprotective and anti-inflammatory properties" [20]. The concentration of rutin in *Sophora japonica* is between 2 - 4x higher than is found in buckwheat.

Supplement Facts

Serving Size 1 Capsule Servings per Container 180

Amount per Serving		% Daily Value ▼	
Vitamin A (Betacarotene)	(in 25 mg food)	375 rae	41%
Vitamin C	(in 120 mg food)	30 mg	33%
Vitamin E	(in 6 mg food)	1.50 mg	10%
Calcium	(in 15 mg food)	.75 mg	*
Acerola Cherry	<i>Malpighia Glabra</i>	120 mg	**
Organic Beet Root	<i>Beta Vulgaris</i>	85 mg	**
Rutin	<i>Sophora Japonica</i>	50 mg	**
Maitake Mushroom	<i>Grifola Frondosa</i>	50 mg	**
Organic Carrot Root	<i>Daucus Carota</i>	40 mg	**
Alfalfa Whole Plant	<i>Medicago Sativa</i>	30 mg	**
Bovine Adrenal Cytotrophin		30 mg	**
Bovine Kidney Cytotrophin		25 mg	**
Echinacea Purpurea Root	<i>Echinacea Purpurea</i>	20 mg	**
Organic Brown Rice	<i>Oryza Sativa</i>	20 mg	**
Sunflower Lecithin	<i>Helianthus Annuus</i>	10 mg	**
Wheat Germ (Defatted)	<i>Triticum Aestivum</i>	10 mg	**
Bovine Bone Marrow		5 mg	**

* Contains less than 2% of the RDI ** Recommended Daily Intake has not been established

Other ingredients: Non-GMO *Elaeis Guineensis* Extract, Silica, Vegetarian (HPMC) Capsule.

Suggested use: Serving size or as recommended by your health care professional. Adjust usage according to nutritional lifestyle requirements.

No Dairy • No Preservatives • No Synthetic Nutrients

- » **Vitamin A/Beta-carotene:** Vitamin A naturally exists in foods, but not as a single compound. Vitamin A primarily exists in the form of retinyl esters, and not retinol and beta-carotene is always in the presence of mixed carotenoids with chlorophyll [21]. Synthetic beta-carotene is "prepared from condensing aldehyde (from acetone) with acetylene" [22]; "not much natural beta-carotene is available due to the high costs of production" [22]. Natural beta-carotene, as found in foods, is composed of both all-trans and 9-cis isomers, while synthetic beta-carotene is all-trans isomers [23]. There are safety concerns about USP betacarotene that do not exist with betacarotene in carrots [24]. Plus, food betacarotene reportedly is over 50% better absorbed in the blood [25].

Vitamin A and beta-carotene support skin health and wound healing [26]. Beta-carotene looks to exhibit anti-inflammatory [27] and immunomodulatory activities [8]. Furthermore, β -Carotene can contribute to vitamin A production in lung cells, potentially supporting normal lung and respiratory tissue function [28]. Beta-carotene in foods, as well as in combination with vitamins C and E, seems to support gum and dental health. [29,30].

- » **Vitamin C** "occurs in the body in the form of ascorbate, known for its strong antioxidant and anti-inflammatory properties ... A deficiency of ascorbate is associated with numerous disorders, such as general weakness, fatigue, muscle and joint pain" [31]. Ascorbate and dehydroascorbate are the two biologically active forms that are found in food [32-34]. Both "have similar biological activity as antivirals but" dehydroascorbate "also has neuroprotective effects" [35]. Some of the many functions that vitamin C is involved in include collagen formation, carnitine biosynthesis, neurotransmitter synthesis, enhancement of iron absorption, immunocompetence, antioxidant defense, possible anticarcinogenic effects, protection of folate and vitamin E from oxidation, and cholesterol catabolism [32].

Although foods generally contain two biologically active forms of vitamin C [32,36], most synthetic vitamin C only contains isolated ascorbic acid [37,38]. One study found that that after 24 hours, food source vitamin C was over 2 ½ times better retained than isolated ascorbic acid [39]. A human study found food vitamin C was 5.01 times more absorbed into blood after 2 hours, 5.86 more after 4 hours, 7.88 times more after 8 hours, and 18.37 times more after 12 hours compared to USP ascorbic acid [40]. Hence, those interested in their bodies retaining vitamin C should consume it from high vitamin C food sources.

- » **Vitamin E** acts to detoxify oxidizing radicals, can stabilize cell membranes, and even protects vitamin A from oxidation [32]. By weight, natural RRR-alpha-tocopherol has 1.7 - 4.0 times the free radical scavenging strength of the other tocopherols; RRR-alpha tocopherol has 3 times the biological activity of the alpha-tocotrienol form; and synthetic vitamin E may have as little as 2% of the biological activity of RRR-alpha-tocopherol [32]. A human urinary excretion study by Traber (et al) concluded that natural vitamin E was 2.7 times better absorbed than synthetic vitamin E; this study suggests that the body may want to rid itself of the synthetic [41]. Vitamin E has a protective role in the cardiovascular system, mortality, and supports aspects of the immune system [8]

- » **Vitamin P.** Though no longer called a vitamin, bioflavonoids in general (and rutin in particular) were once called vitamin P [16]. Bioflavonoids are stored in the skins and bitter components of fruits and vegetables. There are at least 61 known bioflavonoids, many of which are used commercially as preservatives. Bioflavonoids have been historically used to support the activity of vitamin C, prevent platelet clotting, prevent capillary fragility, reduce bruising, and to strengthen immune response. Some bioflavonoids are believed to act as diuretics, antioxidants, or even as anti-inflammatories. Bioflavonoids have been found to inhibit mast cell histamine. Vitamin C containing foods can contain as many as sixteen truly organic bioflavonoids such as flavanone glycosides, naringin, neorocitrin, neohesperidin, hesperidin, flavone glycosides, rhoifolin, luteolin, neodiosmin, flavon aglycones, tetra-o-methylisoscutelellarin, sinensetin, isosinensetin, tangeritin, nobiletin, and 5-O-desmethylnobiletin.

Clinically, some have found that bioflavonoids reduce bruising and/or frequent bloody noses in some people. They are also good for skin in general.

Wheat Germ provides B vitamins [42]. **A-C-P Complex** only contains 10mg of defatted wheat germ which is an extremely small quantity to minimize potential gluten concerns.

Clinical Considerations

It has been claimed that combinations of these nutrients and foods, supports healthy gums and cholesterol levels, "and facilitates blood flow through the arteries. Helps strengthen the integrity of blood vessels and connective tissues" [43]. Others have listed symptoms such as bladder irritation, polyuria, lymph node congestion, and skin disorders [44].

Many users describe the combination of such foods and vitamins as a "go-to" when not feeling well, saying they felt it supports recovery. This combination is frequently used for gum support.

Additionally, ome holistic sources promote it for vascular integrity, bruising, inflammation, healthy skin, and/or cardiovascular support.

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Some of these studies (or citations) may not conform to peer review standards, therefore, the results are not conclusive. Professionals can, and often do, come to different conclusions when reviewing scientific data. None of these statements have been reviewed by the FDA.



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Biblically Kosher Compliant And Contains No Pork Or Shellfish



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