
Bioflavonoids add punch to the power of vitamin C

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Bioflavonoids Add Punch To the Power of Vitamin C

Bioflavonoids are compounds which accompany vitamin C in foods and some supplements. Research has suggested this group of compounds may strengthen and improve vitamin C's already formidable powers.

Research on the bioflavonoids began in the 1930s, when Albert Szent-Gyorgyi, Ph.D., then living in Hungary, isolated a substance from citrus which he called citrin. In 1937, he won the Nobel Prize for his research on vitamin C. During that time, vitamin C and the bioflavonoids were studied for their possible treatment of a wide range of conditions, among them fragile capillaries, nosebleeds, skin disorders, postpartum bleeding, diabetes retinitis and bleeding gums.

In a study reported in *The Vitamin C Controversy: Questions and Answers*, Emanuel Cheraskin, M.D., reported that volunteers who received natural vitamin C together with bioflavonoids experienced a 63 percent reduction in loosened teeth and damaged gums, while those who received synthetic vitamin C with bioflavonoids, or synthetic vitamin C alone showed less improvement. Placebo patients showed no such improvement.

"Within the limits of this study, the evidence suggests that adding the water-soluble bioflavonoids to vitamin C enhances the efficacy of the treatment," Dr. Cheraskin wrote. "There is also some data to suggest that the natural vitamin C may be more efficacious than the synthetic vitamin C with water-soluble bioflavonoids."

In 1955, Charles E. Brambel, M.D., of Mercy Hospital, Baltimore, conducted a study of 2,000 patients who were being given anticoagulant medicines, according to *The Complete Book of Vitamins*. Since 5 percent of them had developed bleeding complications, he decided to try a natural therapy.

One hundred milligrams each of the bioflavonoid hesperidin and vitamin C were administered four times daily. The hemorrhage areas cleared rapidly. The combination of hesperidin and vitamin C accomplished what neither one alone could, according to Dr. Brambel.

Vitamin C and bioflavonoids were used successfully to treat the common cold, according to The Complete Book of Vitamins. At the Creighton University School of Medicine, Omaha, Neb., a group of nurses was given tablets containing the two substances. The nurses were checked for one year, as was another group which received a placebo. The nurses receiving the vitamin C and bioflavonoids had 55 percent fewer colds than the placebo group, and their infections lasted an average of 3.9 days, compared to 6.7 days for the placebo group.

In the American Journal of Digestive Diseases Morton S. Biskind and W.C. Martin reported that 20 of 22 patients with respiratory infections of varying intensity recovered in an 8- to 48-hour period after treatment with bioflavonoids and vitamin C. The patients received 600 mg of each of the two substances every day. Vitamin C alone or the bioflavonoids alone did not produce results, but together they did, Biskind and Martin reported.

As an antioxidant and antihistamine, quercetin, another bioflavonoid, protects vitamin C from oxidation inside the body, according to Robert C. Atkins M.D., in Dr. Atkins' Health Revolution. Dr. Atkins said quercetin is the most effective nutritional antihistamine he has seen. The substance inhibits the release of histamine and other inflammatory mediators, he said.

"Quercetin benefits those with hypertension and has been found to reduce small strokes [transient ischemic attacks, or TIAs]" Dr. Atkins said. "Quercetin also reduces capillary permeability and capillary fragility."

The oral administration of quercetin may prevent diabetic cataracts, according to Jeffrey Bland, Ph.D., in Bioflavonoids. In laboratory animals, quercetin, a known inhibitor of aldose reductase, delays the onset of cataract if the bioflavonoid therapy is continued, he said.

"The level of bioflavonoid (in one study) was very high, in human equivalents approximately 3,000 to 7,000 mg per day," Dr. Bland wrote. "The firm conclusion investigators made from their animals studies was that aldose reductase initiates the formation of cataract in diabetics and that the bioflavonoid aldose reductase inhibitor when given orally may be an effective preventive agent for cataract."

Quercetin is a potent agent against inflammation, as are vitamin C, bromelain and proteolytic enzymes, according to Patrick M. Donovan, R.N., John Bastyr College of Naturopathic Medicine, Seattle, Wash., in the Townsend Letter for Doctors. Quercetin is closely associated with rutin and the anti-allergic drug cromolyn, and has proved to be an effective anti-inflammatory agent, he said.

Some European studies have found that bioflavonoids slow bacterial, fungal and viral infections, according to Patrick Quillin, Ph.D., R.D., in Healing Nutrients.

"Rheumatoid arthritis is characterized by substantially increased numbers of mast cells in synovial [lubricating] membranes and fluids," wrote Melvyn R. Werbach, M.D., assistant clinical professor of the UCLA School of Medicine, in Nutritional Influences on Illness. "Degranulation of these mast cells are believed to be a major factor in the tissue destruction. Quercetin is a potential inhibitor of mast cell degranulation."

Quercetin was effective against herpes simplex Type I, polio virus Type 1, parainfluenzal virus Type 3 and respiratory syncytial virus, according to the Journal of Medical Virology. The bioflavonoid seems to inhibit the infectiousness and/or replication of both RNA and DNA viruses.

In a report in Chicago Medicine, bioflavonoids (hesperidin and another hesperidin compound) were more effective than sub-therapeutic doses of estrogen and two other treatments for menopausal symptoms.

Another study found that 200 mg of vitamin C and bioflavonoids, three times daily, reduced the symptoms of menorrhagia (heavy menstrual bleeding) in 14 of 16 patients, according to J.D. Cohen and colleagues. Of the two failing to respond, one had endometriosis and the other metrorrhagia (irregular bleeding from the uterus).

A wealth of information shows that bioflavonoids, especially when combined with vitamin C, can be useful in treating a variety of disorders.

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