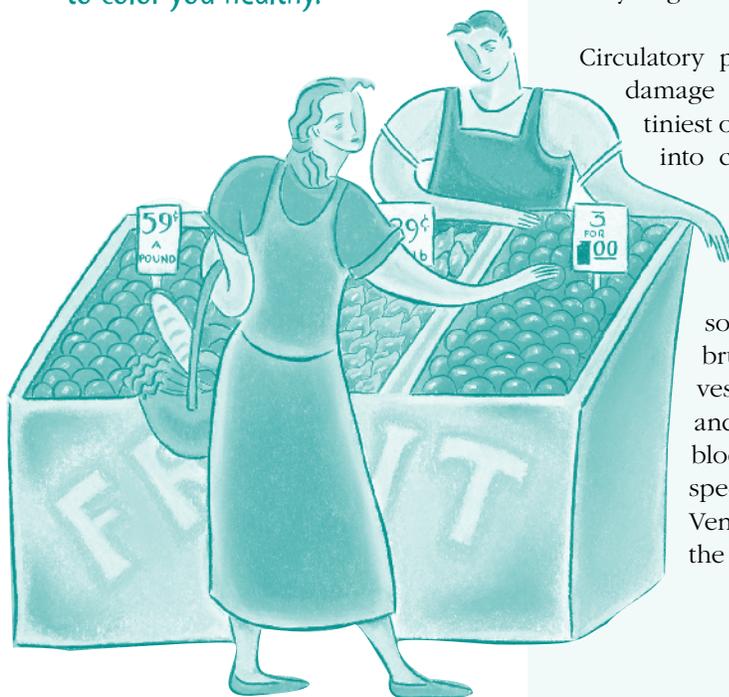


BIOFLAVONOIDS

by Margy Squires

You've read about French wine lowering cardiovascular risk, tomato sauce helping the prostate and how onions and garlic keep colds away. Cranberries have long been touted for urinary tract infections. What these foods have in common are a group of colorful agents known as bioflavonoids, a family of compounds found in plants, fruits, vegetables and certain tree bark. A virtual palette of pigments, these agents make grapes purple, onions and lemons yellow, tomatoes red and carrots orange. Much like an artist paints life onto a plain white canvas, bioflavonoids have the ability to color you healthy.



Color Yourself Healthy

A Hungarian scientist, Dr. Albert Szent-Gyorgy, first discovered bioflavonoids inside the pulpy rind of citrus fruits in 1936. Although he called them *Vitamin P*, the name was later changed because they were not found to be critical for sustaining life (as true vitamins do). Yet the powerful association between vitamin C and bioflavonoids kept these colorful nutrients in the “lime” light, proving that their health giving properties are more than skin deep.

Supporters & More

Natural vitamin C is critical to cellular immunity but also for the integrity of collagen, the component that holds the body together. Besides building tissues, bones and teeth, the healthy cross-linking of collagen is needed for repair following trauma. Bioflavonoids speed the absorption of vitamin C and prolong its life and function by protecting it against free radical damage. Plus, the anti-inflammatory properties of bioflavonoids increase vitamin C's effectiveness against the dual problems found in the connective tissues and joints of arthritis and gout.

Besides supporting vitamin C, the family of bioflavonoids carry their own merit badge as antioxidants and anti-inflammatory agents. Their ability to alleviate allergy and asthma symptoms, strengthen blood vessels, improve circulation and vision, lower cholesterol levels, fight infections and reduce inflammation are only beginning to surface.

Circulatory problems involve both inflammation and oxidative damage to blood vessels. For example, capillaries are the tiniest of blood vessels that branch out from the veins directly into cells and tissues. They also link arteries to veins.

When capillary permeability is optimal, oxygen and nutrients pass through the cell walls, delivering vital supplies and transporting back any waste products. When capillary health is compromised, so is its delivery system. Breakage, hemorrhage, bruising and clotting subsequently occur. Strong blood vessels are required for vision, normal blood pressure and heart health. Vision especially is impaired when blood vessels are damaged. The bioflavonoid lutein is specifically found in abundance in the retina of the eye. Venous insufficiency and phlebitis affect circulation in the legs; helpers are hawthorn berry and rutin.

Continued

Bioflavonoids

continued

While it's impossible to write about the more than 4000 known bioflavonoids, quercetin deserves a special word of mention as one of the most active. Quercetin inhibits the activation and release of inflammatory histamines which cause the sneezing, itching and stuffiness of allergic and asthma attacks. An open-trial study showed quercetin diminishes inflammation and symptoms of interstitial cystitis. Quercetin also interferes with the enzyme responsible for converting glucose to sorbitol. Left unchecked, an excess of sorbitol in the wrong places can cause the diabetic complications of retinopathy, cataracts and nerve damage. As an anti-viral, quercetin affects the ability of a virus to infect and replicate in herpes type 1, certain respiratory conditions and influenza—possibly even the common cold! Although there are no human studies, quercetin shows anti-tumor activity in animal and in-vitro studies against a wide range of cancers, including lung and breast cancers.



Other bioflavonoids that are well known include grapeseed extract, which is 50 times more powerful than vitamins C and E as an antioxidant, due to its positioning within the cell membrane and its ability to battle both water and fat soluble free radicals. Green tea is also making headlines as a cancer preventative, as well as lycopene from tomatoes. Ginkgo biloba increases circulation to the brain while offering antioxidant protection against inflammatory agents. No matter how you look at them, bioflavonoids are colors of healing.

Toxicity/Deficiency

Bioflavonoids are safe. While grapefruit juice can enhance certain drug activity, no other adverse effects are known. Since your body does not make bioflavonoids, a healthy diet of fresh fruits, especially citrus, provide an adequate daily supply. In the absence of a medical cause, easy bruising and bleeding may be signs of insufficient vitamin C and bioflavonoid levels.

Summary

Anti-inflammatory, anti-histamine, anti-viral, bioflavonoids naturally color you healthy whether for allergies, arthritis or connective tissue repair. Recent research even shows them promising as anti-cancer agents and for heart health. If you're not getting a variety of fruits and veggies daily, you can still reap the bioflavonoid benefits with supplements. For the best vitamin C, look for natural with added bioflavonoids. Individually, grapeseed or pine bark extract, lycopene, quercetin, garlic and hawthorn berry are the answer when your fruit and veggie bowl is empty. Get coloring!

Bioflavonoids as Supplements

(not a complete list)

Bilberry ♦ Cranberry Extract ♦ Eleuthero
Garlic ♦ Ginkgo Biloba ♦ Grapeseed Extract
Green Tea ♦ Hawthorn Berry ♦ Lycopene
Milk Thistle ♦ Pine Bark Extract ♦ Quercetin
Vitamin C w/Bioflavonoid Complex

Individual & Family Names

Catechin ♦ Citrin ♦ Flavones ♦ Hesperin
Polyphenols ♦ Proanthocyanidins
Quercetin ♦ Rutin

Helpful Reading

1. *Quercetin, A Medical Dictionary, Bibliography and Annotated Research Guide to Internet Resources*, Icon Health Pub. 2004
2. *The Flavonoid Revolution, Grapeseed Extract and other Flavonoids Against Disease*, by Michael Colgan, Apple Pub., 1997
3. *All About Bioflavonoids, FAQs*, by Daniel Gastelu, Avery Pub., 2002
4. *Vitamin C, Infectious Diseases and Toxins*, by Thomas Levy, Xylibris Corp, 2002
5. *The Green Tea Book*, by Nadine Taylor, Kensington Pub., 1998

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