radical health

<u>supplementshelf</u>

The importance of plant-based antioxidants

he terms "antioxidants" and "free radicals" have become pretty common in recent years. Loosely defined, a free radical is a molecule that can bind to and damage a part of the body. Free radical or "oxidative" damage is what makes us age. Free radicals have also been shown to be responsible for the onset of many diseases including the two biggest killers of Americans—heart disease and cancer.

Antioxidants are compounds that help prevent this free radical damage. Antioxidant nutrients, such as betacarotene, selenium, vitamin E, and vitamin C, have been shown to help protect against conditions that have been linked to free radicals—basically all chronic degenerative diseases.

Different Actions

Based on extensive data, it appears that a combination of antioxidants provides greater protection than large dosages of any single antioxidant. The reason being is that nutrient antioxidants generally have a very narrow range of activity against a single type of free radical. That's why there are as many different types of antioxidants as there are musical instruments. The body uses these antioxidants in conjunction to



create a symphony. And an optimal performance requires plant-based antioxidants, which work in conjunction with nutrient antioxidants to fill out the orchestra.

To insure that you're getting complete antioxidant protection, start with a diet rich in plant foods and a high-potency multivitamin/multimineral. Then add some form of plant-based antioxidant,



Membrell
JOINThealth Plus
Antioxidants
This unique formula
combines the
joint-protecting
power of NEM with
the antioxidant
punch of boswellia,
turmeric, grape
seed and pine bark.



NOW Foods Super Antioxidants This potent blend of herb and fruit extracts provides a broad spectrum of flavonoids for antioxidant support. Includes ginkgo, hawthorn, green tea, and more.



Nature's Way
Masquelier's
Tru-OPCs
Featuring a patented
grape seed formula
isolated by Dr. Jack
Masquelier, Tru-OPCs
supports skin and
vascular health with
powerful antioxidant
protection.

among the most useful of which are flavonoid-rich extracts.

Flavonoids are plant pigments that are more potent and effective against a broader range of free radicals than antioxidant nutrients. Besides lending color to fruits and flowers, flavonoids are responsible for many of their medicinal properties. Flavonoids are sometimes called "nature's biological response modifiers" because of their anti-inflammatory, anti-allergy, antiviral, and anticancer properties.

Targeted Therapy

Because certain flavonoids tend to concentrate in specific tissues or cells, it's possible to take flavonoids that target specific health conditions. Among these are proanthocyanidins, especially those that are bound to other proanthocyanidins referred to as procyanidolic oligomers (PCOs) or oligomeric proanthocyanidins (OPCs). These molecules are found in high concentrations in grape seed and pine bark. Studies have shown that taking PCOs for six weeks at dosages of

150–300 mg improves the blood's total antioxidant capacity and oxygen radical absorbance capacity (ORAC) score.

I recommend either grape seed extract or pine bark extract for most people under the age of 50. Grape seed and/or pine bark extracts have also shown significant benefits for the following health conditions:

- Asthma
- Atherosclerosis, hypertension, and type 2 diabetes
- Attention Deficit Disorder
- Male Infertility
- Osteoarthritis
- Varicose veins, capillary fragility, and venous insufficiency
- Visual function, retinopathy, and macular degeneration

For people over age 50, ginkgo biloba is another option. If you have a family history of cancer, however, the best choice is green tea extract. The chart below can help identify which flavonoid-rich extracts might be appropriate for you, as well as how much to take.

Flavonoid-rich extract	Daily dose for antioxidant support	Indication
Bilberry extract (25% anthocyanidins)	80–160 mg	Best choice to protect the eyes.
Hawthorn extract (10% procyanidins)	150-300 mg	Best choice for heart disease or high blood pressure.
Ginkgo biloba extract (24% ginkgo flavonglycosides)	120-240 mg	Best choice for most people over the age of 50. Protects the brain and vascular lining.
Grape seed extract (95% procyanidolic oligomers) or pine bark extract	50–100 mg	Systemic antioxidant; best choice for most people under age 50. Also specific for the lungs, diabetes, varicose veins, and protection against heart disease.
Green tea extract (80-90% total polyphenols)	150-300 mg	Systemic antioxidant. May provide the best protection against cancer, and is the best choice if there is a family history of cancer. Also helps protect against cholesterol damage.
Milk thistle extract (70% silymarin)	100-300 mg	Best choice for additional antioxidant protection of liver or skin.

