



GRAPESEEDRICH™ SUPER STRENGTH GRAPE SEED CONCENTRATE

Antioxidant protection / Non-GMO

GRAPE SEED EXTRACT PROVIDES POWERFUL HEALTH BENEFITS

Grape seed extract is a rich source of polyphenols – powerful plant compounds that help the body fight the damaging and aging effects of free radicals. Free radicals are unstable molecules caused by internal and external toxins, tobacco smoke, auto exhaust, poor nutrition, and stress. They set off chain reactions within the body, causing severe damage to its tissues, and have been linked to the aging process. Grape seed extract also provides a concentrated source of one of the most beneficial groups of plant flavonoids – proanthocyanidins (also called oligomeric proanthocyanidins or OPCs). These flavonoids exert many health-promoting effects, mainly due to their anti-inflammatory and antioxidative actions. Although polyphenols and OPCs exist in many plants, as well as red wine, grape seed extract is one of the preferred sources because of the high naturally-occurring levels of these compounds, as well as the supporting research available.

GrapeSeedRich Super Strength Grape Seed Concentrate from Natural Factors is a 100:1 concentrate guaranteed to contain a minimum of 95% polyphenols and 80% proanthocyanidins. Unlike some grape seed products, GrapeSeedRich is not made from oven- or sun-dried seeds. It is made exclusively from fresh, non-GMO grape seeds separated during juice production. This method produces a high ratio of the key polyphenols. The extraction process uses water and ultrafiltration; not organic or alcohol solvents. The result is a 100:1 concentrate of pure, potent polyphenols.

HOW GRAPE SEED EXTRACT WORKS

Free radical molecules are unstable because they are missing an electron. Proanthocyanidins neutralize harmful free radicals by “donating” an electron. The proanthocyanidin molecule then redistributes its remaining electrons in order to remain stable.

Proanthocyanidins also reduce oxidative stress by inhibiting enzymes that promote oxidation. These oxygenase and oxidase enzymes require a metal cofactor such as iron or copper. These metals are harmless when they are bound to proteins, but when they are free they can be picked up by enzymes to catalyze destructive oxidation reactions. Proanthocyanidins are able to chelate these metals, inhibiting the enzyme oxidation process and preventing cellular damage.

THE BENEFITS OF GRAPE SEED EXTRACT

Grape seed extract supports and improves health by:

- Reducing the risk of cardiovascular diseases by strengthening capillaries and protecting vascular cells from oxidative stress

- Neutralizing free radicals more effectively than vitamins C and E, and enhancing the antioxidant effect of those vitamins, potentially reducing genetic mutations that may cause cancer and degenerative diseases
- Improving night vision and reducing eye strain for people who work on computers
- Improving mental acuity and decreasing the risk of stroke, due to its ability to cross the blood-brain barrier to reduce free radical damage in the blood vessels of the brain
- Reducing histamine production to prevent or ease allergies, asthma, emphysema, and sinusitis
- Inhibiting enzymes that break down collagen, and helping repair collagen for smooth, supple, wrinkle-free skin

CAPILLARY AND VEIN PROTECTION

Human tissue studies show that grape seed extract protects the endothelial cells that line the inside of capillaries and other blood vessels. These cells can be damaged by advanced glycation end products (AGEs). AGEs are a by-product of sugar metabolism. When AGEs bind to endothelial cells they contribute to chronic inflammatory diseases including atherosclerosis (hardening of the arteries), asthma, arthritis, retinopathy, and neuropathy. Grape seed extract selectively inhibits the receptors on endothelial cells so that AGEs cannot bind to them. Larger doses of grape seed extract produced greater protection (Ma, *et al*).

Grape seed extract has been shown to strengthen capillaries by reducing their fragility and permeability. This enhances circulation and reduces microangiopermeability or leaky capillaries (Robert, *et al*). This is especially important for people with compromised circulatory systems, including stroke victims, people with diabetes and arthritis, smokers, and women using oral contraceptives. Post-operative recovery times can also be shortened thanks to the improved integrity of blood vessels (Baruch).

In one clinical trial grape seed extract was tested on patients with venous insufficiency, an underlying cause of varicose veins. The proanthocyanidins in grape seed were shown to significantly improve the structural integrity of veins (Royer, *et al*). They can also help prevent hemorrhoids by inhibiting the collagenase enzyme that causes damage to blood vessels in the anus.

In addition to strengthening blood vessels, grape seed extract improves cardiovascular health by neutralizing free radicals that contribute to the development of cardiovascular diseases (congestive heart failure, valvular heart disease, cardiomyopathy, hypertrophy, atherosclerosis, and ischemic heart disease).

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In a study involving patients with high cholesterol, supplementation with grape seed extract significantly inhibited the oxidation of LDL or “bad” cholesterol, a biomarker for cardiovascular diseases (Bagchi, *et al.*).

ANTIOXIDANT PROTECTION

Free radical damage contributes to a host of degenerative diseases including cardiovascular diseases, Alzheimer’s, Parkinson’s, arthritis, gastrointestinal dysfunctions, and AIDS. Damaged DNA molecules may mutate into cancerous tumours. In one study, administering grape seed extract to human cells prior to exposure to chemical toxins significantly reduced DNA damage. The researchers concluded that grape seed extract may protect multiple organ systems from toxins (Ray, *et al.*).

A study using *in vitro* and *in vivo* models found that grape seed proanthocyanidins are highly bioavailable and provide significantly greater protection than vitamins C, E, and beta carotene. Proanthocyanidins inhibited free radical damage to cell membranes and DNA. Grape seed extract was also found to attack cancer cells, demonstrating cytotoxicity towards human breast, lung, and gastric adenocarcinoma cells, while promoting the growth of normal gastric mucosal cells (Bagchi, *et al.*).

Grape seed extract can cross the blood-brain barrier, protecting glial cells in the central nervous system from oxidative stress, and helping maintain levels of L-Glutathione, another powerful antioxidant, in the microglial cells of the brain’s immune system.

Normal metabolic function produces free radicals, and this production increases with physical exercise. In a human trial, blood plasma was examined following exercise to measure lipid peroxides, an indicator of oxidative damage to cell membranes. Grape seed extract prevented an exercise-related increase in oxidation. Muscle fatigue after training was also lessened.

When free radicals cause oxidative damage, a by-product called 8-oxodG is produced. By measuring this by-product in the blood or urine, researchers can determine how much oxidative damage is occurring. In an animal study, rats were fed supplemental grape seed

extract for 47 days. At the end of the trial there was a significant lowering of 8-oxodG levels, indicating a reduction in oxidative damage (Morin, *et al.*).

PROMOTING EYE HEALTH

Grape seed extract has several benefits for vision and eye health. Proanthocyanidins concentrate in and protect the cornea and retina of the eye. One clinical trial studied people who experienced eye fatigue due to working at a computer terminal. Supplementing with proanthocyanidins from grape seed reduced eye fatigue. In another clinical trial, people were given supplemental grape seed proanthocyanidins daily for six weeks. There was a significant improvement in night vision and recovery from glare (Corbe, *et al.*).

Proanthocyanidins have been shown to improve the structural integrity of the capillaries that supply blood to the retina of the eyes, helping prevent short-sightedness. Stronger capillaries are less likely to leak, so bloodshot eyes can be improved or prevented. A study using rats also showed that regular consumption of grape seed proanthocyanidins effectively suppressed cataract formation. The researchers concluded that supplementing with a grape seed extract may prevent the onset or progression of cataracts.

DOSAGE

GrapeSeedRich is available in 50 mg and 100 mg potencies.

Recommended adult dose:

50 mg: 2 capsules, 2 times daily, or as directed by a health care practitioner.

100 mg: 1 capsule, 2 times daily, or as directed by a health care practitioner.

SAFETY

Grape seed extract has been used in Europe for decades with no reported side effects. In studies of acute and chronic toxicity, mice were given high doses of grape seed extract daily for 6 months with no detrimental effects.

Pregnancy and lactation: Grape seed extract is considered safe during pregnancy; however, pregnant or nursing mothers should always check with their health care practitioner before changing or supplementing their diet.

Children: Suitable for children at one quarter to one half the adult dose.

Drug Interactions: When grape seed extract is taken with anticoagulant drugs (including Cloidogrel, Ticlid, Heparin, Warfarin, and Aspirin), the effect of the drug may be increased. Consult a health care practitioner prior to use.

Contraindications: Due to the ability of proanthocyanidins to limit platelet adhesion, grape seed extract may increase the amount of time it takes for blood to clot. Consult a health care practitioner prior to use if you are taking blood-thinning medications.

Grape seed extract is one of the most potent antioxidants found in nature. The polyphenols found in it have been shown to promote heart health, healthy blood pressure levels, and an appropriate inflammatory response, as well as to strengthen capillaries, neutralize free radicals and improve eye health. Daily supplementation with GrapeSeedRich is an effective way to protect your health at any age.

KEY REFERENCES

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