



GRAPE SEED EXTRACT: PREVENTS HEART DISEASE, CANCER, AND MORE!



- **Stops heart disease in its tracks**
- **Kills cancer cells**
- **Prevents inflammation, weight gain, and more!**

Grape Seed Extract: A Natural Disease Fighter

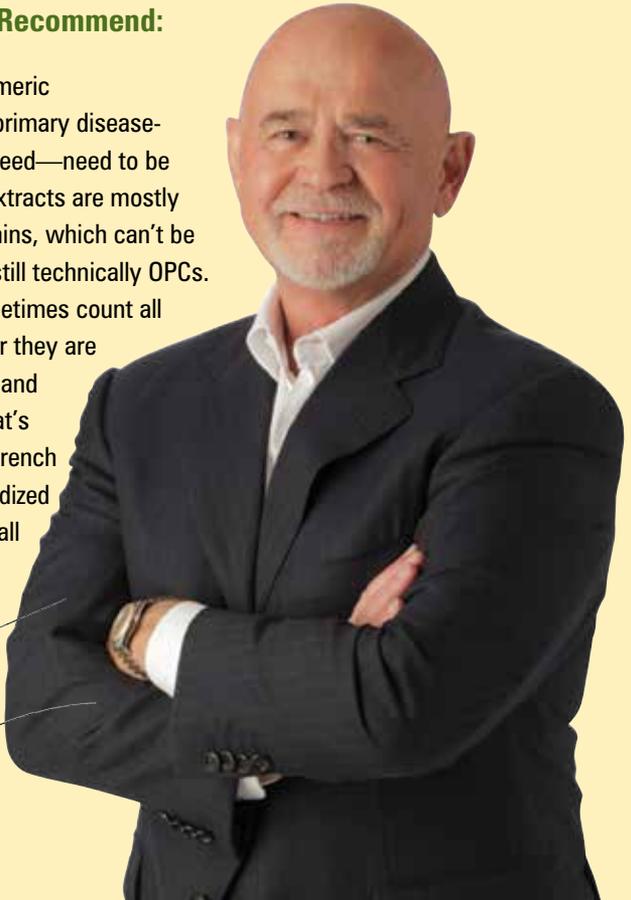
Grape seed extract is well-known and thoroughly researched, and years ago was considered an essential ingredient to preventing heart disease and other cardiovascular conditions. But grape seed extract is even more versatile than many people may realize. Grape seed extract holds the key to preventing the oxidative damage and inflammation that are the root causes of virtually every health condition. In this booklet, you'll learn how the right grape seed extract can:

- **Lower blood pressure**
- **Stop deep vein thrombosis**
- **Prevent diabetes and obesity**
- **Speed muscle recovery**
- **Inhibit tumor growth**
- **Protect the brain**
- **Stop inflammation**
- **Prevent oxidative damage**

The Grape Seed Extract I Recommend:

In order to be effective, the oligomeric proanthocyanidins (OPCs)—the primary disease-fighting compounds from grape seed—need to be absorbed. Unfortunately, many extracts are mostly very large molecular weight tannins, which can't be absorbed, even though they are still technically OPCs. However, supplement labels sometimes count all OPCs as being the same, whether they are very small and effective, or large and unabsorbable and ineffective. That's why I recommend a tannin-free French grape seed extract that is standardized to provide only OPCs that are small enough to guarantee absorption, with a high level of polyphenols.

To your good health,
Terry...*Naturally*



Grape Seed Extract: A Botanical Wonder

There are many botanical ingredients that simply work wonders for our health. Grape seed extract is one of them. This amazing ingredient prevents heart disease, kills cancer cells, speeds the healing of damaged muscle tissue, reduces non-alcoholic fatty liver disease, reduces inflammation, stops diabetes, and prevents weight gain. In this booklet, we'll explore the many ways that grape seed extract can improve your health, and possibly even save your life.

History

People have been enjoying grapes for thousands of years, both as fruit and wine. Because of this, it would be understandable if you thought that the seeds from grapes were an old European folk medicine. But the reality is much different. Grape seed extracts have only really only been heavily researched since the middle of the 20th century. And even then, the study of grape seed oligomeric proanthocyanidins (OPCs) developed in a roundabout way.

The story begins with a French professor, Jacques Masquelier. Early in his professional life, Masquelier found himself working in one of France's most famous wine-growing regions. Despite the proximity of vineyards, his original work centered on discovering the beneficial properties that could be extracted from the waste material of peanuts bound for the nearby oil presses. This research in the late 1940s and early 1950s solidified his understanding of anthocyanins, still very much in the early stages of discovery for most scientists. He began to see how many plants shared the building blocks for these valuable natural chemicals, and early lab work revealed that OPCs from peanut skins shortened bleeding time, strengthened blood vessels, and protected the cardiovascular system overall.



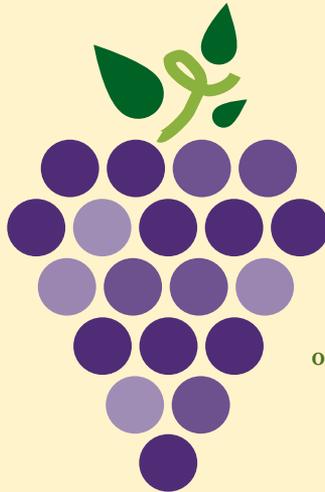
Later, Masquelier had a great interest in the history of the French explorer Jacques Cartier. Cartier's ship and crew were trapped in the ice of the St. Lawrence River by an early

winter, preventing them from returning to France. His crew was surviving on dried meat and biscuits, as they had no fresh fruits or vegetables. Many were dying from a horrible disease we now know as scurvy. A Native American Indian showed Cartier how to make a tea from a specific pine tree, and the tea cured the scurvy. Masquelier quickly realized that the genus and species of the tree was *Tsuga canadensis*, native to the region and rich in OPC content, found on the reddish-colored inside layer of the bark.

Continuing his research, Masquelier discovered another powerful source of OPCs right in his backyard—grape seeds. He pioneered the process of extracting OPCs from grape seeds. Supported by thousands of studies, grape seed extract has since become one of the world’s most important clinically studied ingredients.

Grape Seed Extract: A Great Multitasker

Grape seed extract addresses a multitude of health concerns. It is one of nature’s “do everything” ingredients.



heart

cardiovascular disease

oxidative stress

high blood pressure

diabetes

exercise recovery

cancer

focus & cognition

inflammation

Alzheimer’s disease

obesity & weight gain

In the years since, French grape seed extract has become a preferred source of OPCs for a variety of health concerns, from lowering blood pressure to preventing tumors. I believe that adding an absorbable, tannin-free OPC grape seed extract to your regimen is one of the best things you can do for your health.

Protects Your Cardiovascular System

Grape seed extract is well known for improving heart and cardiovascular strength. There's good reason for this. Grape seed extract reduces high blood pressure, protects the blood vessel walls from free radical damage, and prevents the dangerous oxidation of LDL cholesterol—one of the first steps on the road to a heart attack or stroke.

In an Italian clinical study, individuals with pre- or mild hypertension were divided into three groups, two with grape seed extract, at lower and higher dosages (150 mg and 300 mg per day, respectively), and one with a diet and exercise intervention only, serving as a control group. At the end of the four-month trial, both grape seed extract groups saw an improvement in blood pressure, although those at the higher dosage noticed more dramatic effects. In fact, blood pressure numbers normalized in **93 percent of those in the higher dosage group.**

Research published in the *Annals of the New York Academy of Sciences* examined the vasodilating—blood vessel relaxing—properties of grape seed fractions. By allowing blood vessels to open rather than restrict, blood travels with less force, reducing pressure. Grape seed increased the level and activity of compounds (nitric oxide and cyclic GMP) that reduce blood vessel tension.

Another clinical study, published in the *Journal of Medicinal Food*, compared the results of individuals with mildly high cholesterol taking a grape seed extract versus a placebo for 8 weeks. Lipid profiles and oxidized LDL (bad) cholesterol were improved in those taking grape seed extract. The researchers concluded that grape seed extract decreased the risk of abdominal blood clots and other cardiovascular disorders.

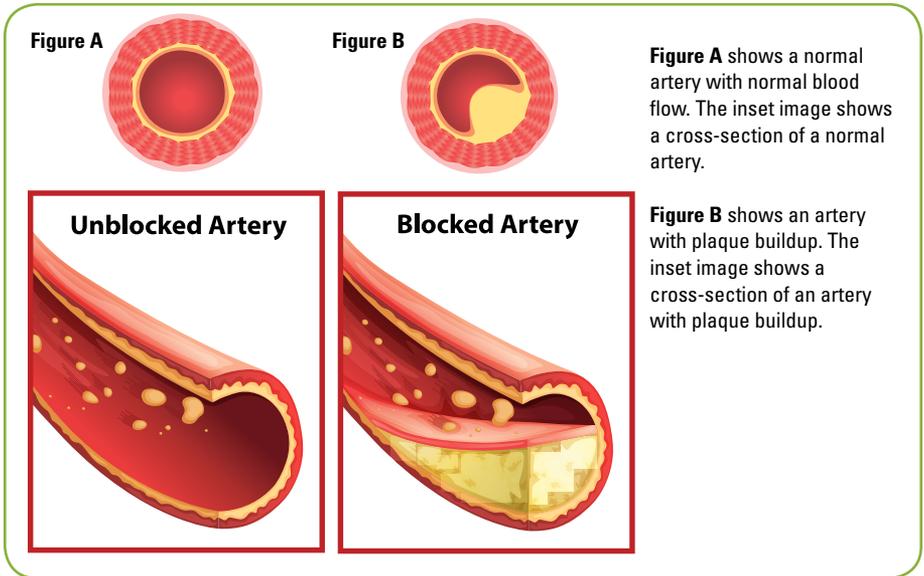
What are OPCs?

OPCs are compounds found in grape seeds that have great protective value for our cells by stopping oxidative damage and reducing inflammation. But to be beneficial, OPCs need to be a certain size so that they can be absorbed by the body.

Size Matters. Small OPCs Only, Please!

Tannins are OPCs that are too big to be absorbed by the body, but many grape seed extracts are simply *all* tannins. Technically, tannins and OPCs are both proanthocyanidins. But tannins have no biological value, so when it comes to your health, size matters—think small. OPCs are water soluble and highly bioavailable, and that's what will make the difference for your health.

Grape seed extract can help stop the oxidation of LDL-cholesterol that leads to clotting and inflammation in the arteries and blood vessels.



Other scientific studies have found similar results: grape seed extract helps prevent blood clots from forming without thinning the blood, lowers blood pressure, and shields blood vessels and arteries from free radical damage.

A Yale review of existing grape seed extract research concluded that this powerful botanical lowers systolic blood pressure and heart rate, so a broad spectrum of medical experts have taken notice of this clinically proven natural medicine. I think this definitely shows how well regarded grape seed extract has become.

There may be no more powerful natural medicine
to protect against heart disease
than grape seed extract.

Stops Obesity

A laboratory study in 2009 found that a uniquely standardized French grape seed extract reduced the buildup of abdominal fat—commonly called “belly” fat—and reduced blood sugar. This was due, in part, to an increase of adiponectin, a protein responsible for regulating blood sugar levels, insulin metabolism, cholesterol levels, and inhibiting NF-kB activation and other inflammatory markers. Compared to the control group, the adiponectin level of the grape seed group increased 61 percent! Other laboratory studies have found similar results—that the use of grape seed extract protects against fat accumulation and improves blood triglyceride and plasma lipid levels.



Further laboratory studies show that grape seed extract can protect against damage caused by diabetes, including diabetic neuropathy and the risk of cardiovascular complications, like heart disease. Other laboratory work found that an exercise regimen combined with grape seed extract reduced triglycerides, improved total cholesterol levels, aided weight loss, and lowered systolic blood pressure.



Grape Seed Extract for Metabolic Syndrome

Metabolic Syndrome is a clustering of disease factors: high blood pressure, imbalanced cholesterol levels, high blood sugar, and unhealthy weight. All of these conditions are either caused by, or themselves cause, inflammation and oxidation. Because grape seed extract fights each of these disease states, it is in a unique position to prevent and fight this potentially deadly combination known as Metabolic Syndrome.

If You Have Two or More of the Following Health Conditions, You May Have Metabolic Syndrome?



Extra Weight Around The Middle: A good diet is so essential. It's not just a matter of "calories in and calories out" it's what's in those calories that count. I recommend a ketogenic or "caveman" diet that doesn't cause inflammation and spikes in blood sugar. Make sure it is rich in wholesome animal proteins, fats, fruits, berries, vegetables, seeds and nuts.

As for weight and waistline, here are some numbers to keep in mind:

- **For men, a waist measurement of 39 inches (101 cm) or less**
- **For women, a waist measurement of 34 inches (87 cm) or less**

For more information go to: www.ketogenic-diet-resource.com



High Blood Pressure: High blood pressure (hypertension) is called "The Silent Killer" because it typically doesn't show any symptoms, and the people who have it are often not even aware of it. Healthy blood pressure for a resting adult is 120/80. It can change with exercise or stress, but 120/80 is considered average. A range of 140/90 is high blood pressure, and the range of

121-139/80-90 is what is known as pre-hypertension. Basically, that is blood pressure that is above what is typically considered normal, but not elevated enough to classify as high blood pressure. However, it can still lead to damaged arteries and should never be ignored.



Type 2 Diabetes/Insulin Resistance/High Blood Sugar:

The statistics on high blood sugar are alarming. According to the Centers for Disease Control (CDC), about 30 million Americans have diabetes, but 8 million of them remain undiagnosed. That means many people may not even realize they have the disease even while it damages their blood vessels and nerves, and puts their health at serious risk.

If you have elevated fasting glucose—a high amount of sugar in your bloodstream even when you haven't been eating—you could be on track to getting Type 2 diabetes and by extension, Metabolic Syndrome. A high blood sugar reading is a fasting blood glucose that is in the 100-125 mg/dL range. That's pre-diabetes. Higher than that, and you have diabetes.



Poor Cholesterol Balance: My opinion about cholesterol differs quite a bit from the established practice, but let's think of it this way: boosting HDL levels is a good idea, and you can't do that with the Standard American Diet (SAD). Focus on this aspect of cholesterol—boost HDL. The higher your HDL—ideally 60 or higher—the lower risk of heart disease. If your cholesterol is 200, but your HDL is 60 (LDL 140), your ratio

of total cholesterol to HDL is only 3.3, which is a good indication of reduced heart disease risk.

High Triglyceride Levels: Although triglyceride levels tend to get lumped in with cholesterol levels, they really are different. Triglycerides are stored as fats from carbohydrates, not from animal proteins. Carbohydrate intake is what contributes to high triglyceride levels.

Speeds Recovery from Exercise and Injury

The anti-inflammatory power of grape seed extract has brought it to the attention of researchers studying its effects on muscle recovery. In these investigations, grape seed OPCs have boosted anti-inflammatory cytokines (IL-10), and helped regenerate damaged muscle fibers. Macrophages, known for their ability to stop bacteria and viruses, also help heal injured tissue. One study found that elevated levels of macrophages and neutrophils (white blood cells found at the scenes of inflammation) were completely resolved in just 5 days when using grape seed extract.



Prevents Cancer and Tumor Growth

Cancer is a leading cause of mortality around the world, and diet is seriously implicated in increasing or reducing cancer risk. A decline in the consumption of fruits, vegetables, berries, nuts, and seeds almost always corresponds with a rise in cancer rates in any given population. (There are few exceptions to this—populations that historically have adapted to diets of mostly fats and meats—but most of us need polyphenols, fiber, and other compounds from the vegetable kingdom.)

One of the reasons that grape seed extracts are potentially so valuable in the fight against the development of cancer is that they concentrate the beneficial compounds found in plant-based foods that stop DNA damage. An Italian review found that grape seeds have higher phenolic acid and flavonoid content (up to 70 percent of some extracts) than whole fruit extracts or grape skin.

While there are other strong ingredients that fight cancer (like epigallocatechin from green tea), grape seed extracts have shown extraordinary abilities to fight human and animal cancer cells and prevent tumor proliferation.

Because of this demonstrated anticancer activity, grape seed OPCs are on the front line of cancer research. Some of the most exciting studies have been done at the University of Colorado Anschutz Medical Campus. Their research of grape seed extracts has shown that this powerful botanical ingredient has the ability to target specific colon cancer cells, and stop them from growing and replicating.

Another study examined the effect of grape seed extract on breast cancer cells when used alone or with a conventional treatment. Their results showed that the two interventions worked well together, but that grape seed extract alone was a strong inhibitor of breast cancer cells.

These results have been mirrored in other research showing that grape seed extract polyphenols have a powerful ability to stop tumor growth.



One of the reasons for this is that grape seed extract inhibits aromatase, an enzyme that converts androgen into estrogen. Breast and prostate cancer tissues typically have higher levels of aromatase. A study published in the journal *Cancer Research* discussed the valuable potential of grape seed extract, when their research showed that it

inhibited aromatase activity and reduced growth in breast cancer cells. They concluded, *“We believe that these results are exciting in that they show grape seed extract to be potentially useful in the prevention/treatment of hormone-dependent breast cancer through the inhibition of aromatase activity as well as its expression.”* I think this is very exciting news for women who are concerned about breast cancer in their family history. With all of the evidence we’re seeing, I consider grape seed extract to be a big improvement over synthetic aromatase inhibitors such as the drug tamoxifen, which may cause side effects.

According to the American Cancer Society, prostate cancer is second only to skin cancer as a common cancer in men. Like other cancers, prostate cancer progresses through

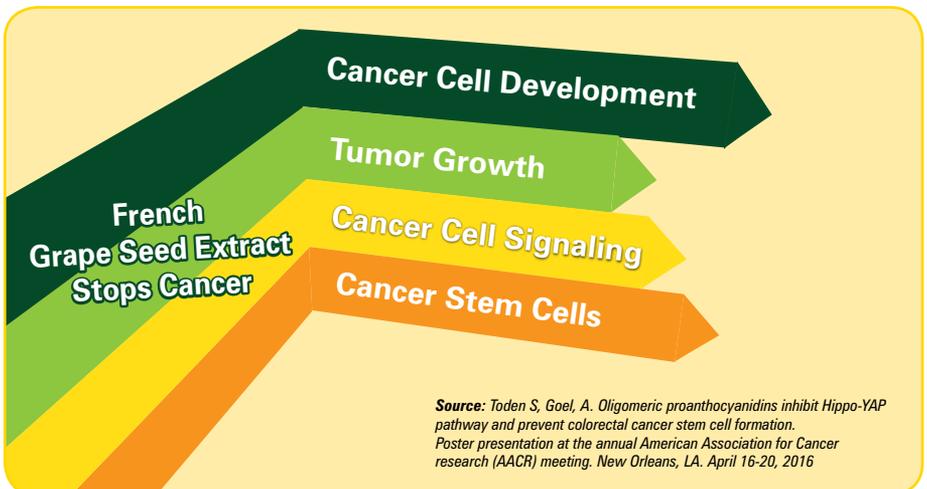
multiple stages. The goal for research is finding the right combination of ingredients—in this case grape seed extract—and timing. If cells can be protected preventively, then there’s less chance of a problem in the first place. But, once tumor cells have started to form, the challenge is twofold: how to stop them from growing further, and ideally, reducing them altogether.

Research at the University of Colorado examined the effect of grape seed extract on prostate cancer cells and found that proanthocyanidin fractions from grape seed extract had the greatest effect of inhibiting—and killing off—tumor cells.

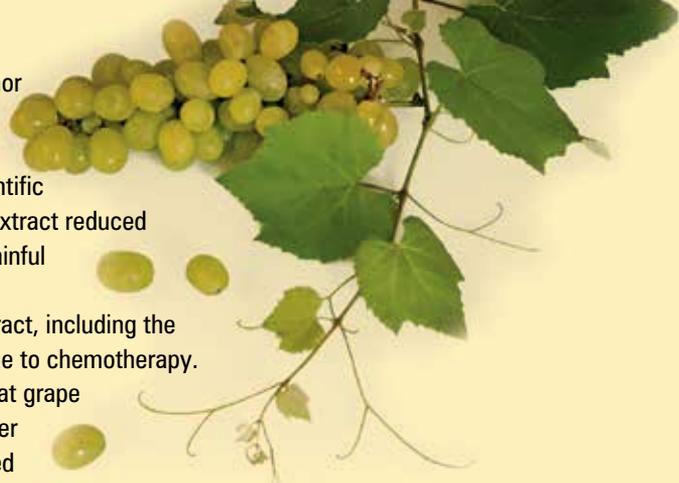
Colorectal cancer has the second highest mortality rate in the United States. While lifestyle and diet can prevent or modify the risk, there is an urgent need for effective therapies that don’t create havoc with the quality of life, and fully extinguishes the threat. Fortunately, grape seed extract may be a key in stopping this disease.

Breakthrough research at Baylor University in Texas has examined the effect of grape seed extract on cancer stem cells—the “seeds” left behind after chemotherapy drugs kill cancer cells. These stem cells can lead to cancer recurrence and new tumor formation. The scientists at Baylor found that a tannin-free, French grape seed extract eliminated cancer stem cells by inhibiting a pathway in the body called HIPPO-Yap. This pathway is necessary for cancer stem cell survival and is known to lead to cancer cell formation.

So, after exposing colon cancer cells to this grape seed extract, the number of live cancer cells was **reduced by 70-80 percent**. In an animal model of colon cancer using the same French grape seed OPC extract, **tumor growth was suppressed by up to 90 percent!** Nothing has ever before been found to block or inhibit the HIPPO-Yap pathway, so these are unprecedented new findings.



Aside from helping inhibit tumor cells, grape seed has other applications for cancer treatment. An Australian scientific study found that grape seed extract reduced the severity of mucositis, a painful inflammation of the mucous membranes of the digestive tract, including the mouth and small intestines due to chemotherapy. The researchers also found that grape seed extract killed colon cancer cells outright. Other grape seed studies have shown that it stops bladder cancer by increasing oxidative stresses *only* to the cancer cells, halting their growth, while leaving healthy cells alone.



An additional way grape seed extract stops cancer is by preventing cancer cells from connecting to blood vessels, and depriving them of oxygen and nutrients. The process of blood vessel creation—angiogenesis—involves quite a few steps. And in each of these, grape seed extract can intervene to stop it from occurring. One of the natural proteins most associated with the development of blood vessel growth is Vascular Endothelial Growth Factor (VEGF). The fact that this protein can help tumors grow has been known for some time—the drug Avastin is an inhibitor of VEGF. However, the drug’s actions come with side effects, including high blood pressure, headache, dry skin, and rectal bleeding, to name a few.

But research at the Beckman Research Institute in California showed that grape seed extract could inhibit the ability of tumors to stimulate VEGF activity and blood vessel creation. The *in vivo* research, (as opposed to the cellular studies) showed that higher dosages were needed to slow down the activity, but the extract was extremely well tolerated.

If you spend a lot of time outdoors and skin cancer is a concern, grape seed extract may offer protection: a Romanian study reported that keratinocytes (the major type of cells in the outer layer of the skin) treated with grape seed extract 30 minutes before exposure to UVB radiation were protected from damage. Additional skin cell research shows that grape seed proanthocyanidins reduce oxidative stress markers and the risk of exposure.

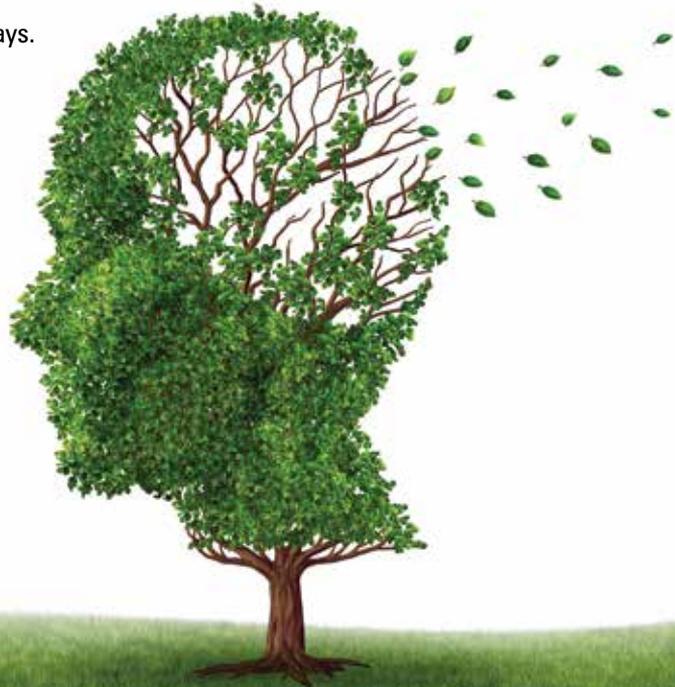
Slows Alzheimer's Progression and Promotes Focus

Because of their antioxidant and anti-inflammatory activity, grape seed OPCs are increasingly on the cutting edge of Alzheimer's research. Studies have shown that they protect the delicate circuitry of the brain. For example, an Indian study found that grape seed proanthocyanidins reduce the effects of oxidative stress in the aging brain and consider it a neuroprotectant to prevent cognitive loss. The nutrient's ability was due, in part, to its blood glucose lowering as much as its free-radical fighting power. Considering the growing body of research that points to a connection between blood sugar levels and risk of Alzheimer's, this is an important discovery. Other work has examined more direct effects of grape seed extract on Alzheimer's disease (AD).

The cause of AD is not entirely known. However, certain characteristic changes in the brain are associated with this condition—accumulated clusters of a protein called beta-amyloid, (sometimes called "amyloid-beta") and clumps of dead and dying nerve and brain cells. These clusters and clumps, called plaques and tangles, are believed to interfere with the proper transmission of messages between brain cells and the death of the cells themselves. As with most diseases, inflammation is also believed to be involved, causing the accumulation of plaques and tangles to have even more damaging effects.

Studies conducted by the Mount Sinai School of Medicine showed that grape seed extract inhibited the formation of plaques and tangles, and aside from preventing the buildup or clustering of beta-amyloid, grape seed extract supported greater brain plasticity—the ability of the brain to adapt and create new neural pathways.

While further studies are needed, I think it's very likely that we'll see more applications of French grape seed extract to bolster cognition and delay Alzheimer's symptoms in the future.



Other OPC research—using OPCs from pine bark—has investigated the application of this natural ingredient to attention deficit/hyperactivity disorder (ADHD) in children. A placebo-controlled, double-blind study published in the journal *European Child & Adolescent Psychology* found that after just one month, OPCs boosted attention span, caused a significant reduction of hyperactivity, and improved motor coordination. The researchers noted that the symptoms returned one month after stopping the treatment, so OPCs would need to be part of an ongoing regimen. Although the OPCs in this study are from a different source, their abilities in the body, whether from grape seed or pine bark, would likely be very similar.

Stops Inflammation and Oxidative Damage

Grape seed extract OPCs fight inflammation and the effects of free-radicals throughout the body. While we often associate antioxidant power with anti-aging, it also balances immune response to reduce everything from damaging chronic joint inflammation in rheumatoid arthritis (RA) to allergic responses. A Saudi Arabian study found that grape seed OPCs were able to regulate the activity of certain immune-regulating T-cells, inducing some and reducing others, in a way that stopped inflammatory markers. The researchers concluded that grape seed extract proanthocyanidins could become an adjunct therapy for RA, or possibly an alternative treatment in its own right.

Because autoimmune inflammation interferes with the process of bone formation and resorption, individuals with RA often contend with structural joint damage. However, researchers in Korea discovered that the ability of grape seed OPCs to reduce inflammation also stopped the symptoms of arthritis in a laboratory study and actually helped get the natural process of building bone back on track.

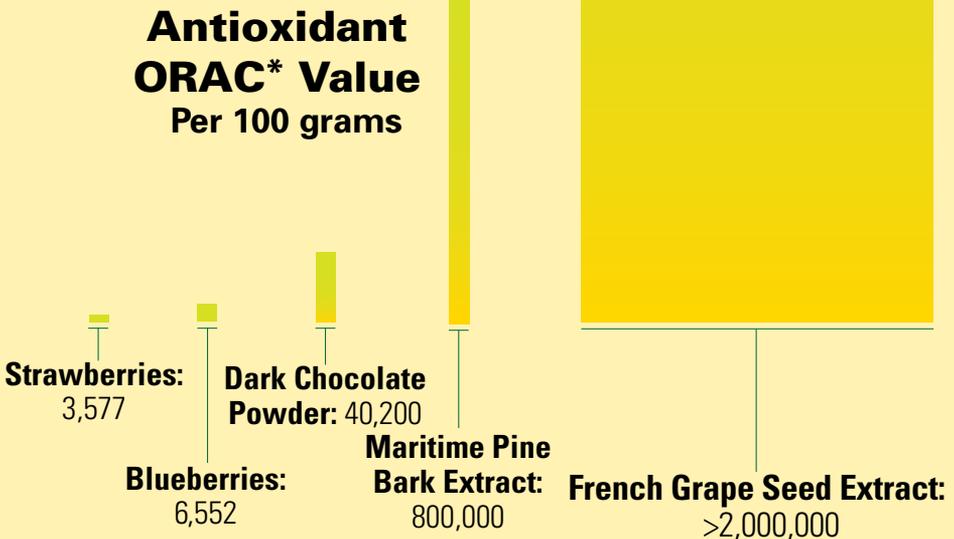


Figure 1 *Oxygen Radical Absorbance Capacity

Aside from combating RA symptoms and bone damage, grape seed extract prevents the inflammation that causes allergy-induced asthma symptoms. A Korean study found that grape seed extract reduced the allergic hyper-responsiveness that restricts bronchial airways, and the inflammatory markers in lung tissue. The researchers felt that grape seed extract could be a valuable therapeutic ingredient for acute and chronic asthma. Considering that French grape seed extract is free of side effects and risks, this could be excellent news for those who are looking for alternatives to asthma treatment. I wouldn't encourage anyone to simply throw away their inhaler, but I certainly would suggest adding a tannin-free, French grape seed extract to your regimen.

I believe that the best grape seed extract is one that can show high Oxygen Radical Absorbance Capacity (ORAC) value. ORAC values are typically presented as a way of determining how much free-radical fighting power a given fruit or vegetable has. While there's no way of duplicating the complex structure and synergy of a food, there are improved ways of taking some of the best components of fruits and vegetables and concentrating them to the point where you see extremely high ORAC values. The extract I recommend has an ORAC value of over 21,000 per gram!

Tip the Balance in Your Favor with French Grape Seed

RESTORE YOUR ANTIOXIDANT DEFENSE

Youthful Antioxidant Defense

Oxidative Stress

Antioxidant Defense

Adult/Middle Age Antioxidant Levels

Oxidative Stress

Antioxidant Defense

Old Age Oxidative Risk

Oxidative Stress

Antioxidant Defense

French Grape Seed Antioxidant Power

Oxidative Stress

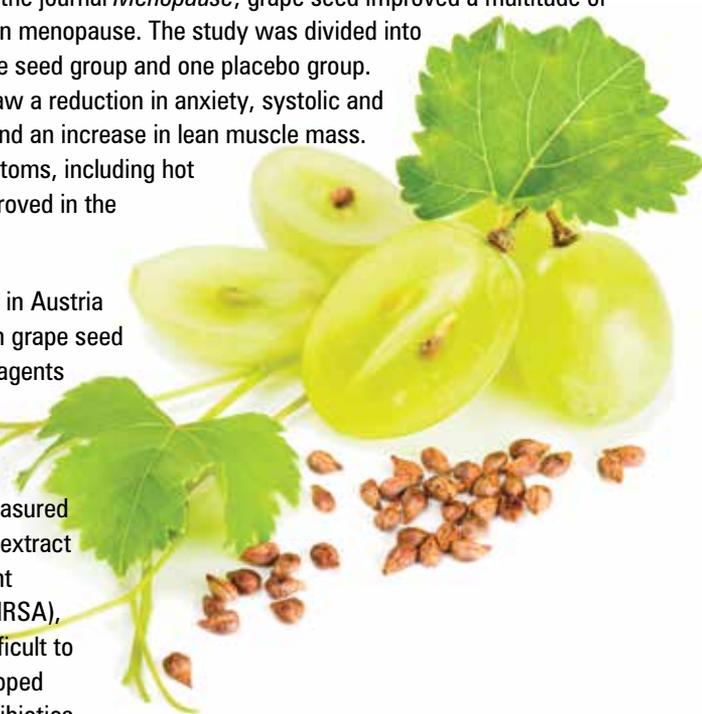
Antioxidant Defense

As we age, we are more vulnerable to oxidative stress as antioxidant defenses level off, and then decrease rapidly with each year. Because the compounds in French grape seed extract are such powerful antioxidants, starting a daily regimen with a supplemental, tannin-free source can restore your antioxidant resistance and help prevent the cause of common diseases

Other Powerful Benefits of Grape Seed Extract

Of course, with all of these attributes, I think I've just touched the surface of all of the amazing benefits of French grape seed. For instance, in a double-blind, placebo-controlled clinical study published in the journal *Menopause*, grape seed improved a multitude of health factors for women in menopause. The study was divided into a low- and high-dose grape seed group and one placebo group. Both grape seed groups saw a reduction in anxiety, systolic and diastolic blood pressure, and an increase in lean muscle mass. Specific menopause symptoms, including hot flashes and insomnia, improved in the high-dose group.

In other work, researchers in Austria have found that OPCs from grape seed are effective antibacterial agents against ten different pathogens. Another study reported in the *Journal of Toxicological Sciences* measured the abilities of grape seed extract against methicillin-resistant *Staphylococcus aureus* (MRSA), a staph bacteria that is difficult to treat because it has developed to become resistant to antibiotics.



The researchers found that grape seed extract was effective against 43 strains of the bacteria, and could, in the words of those conducting the study, “signify a major advancement in the treatment of MRSA diseases.”

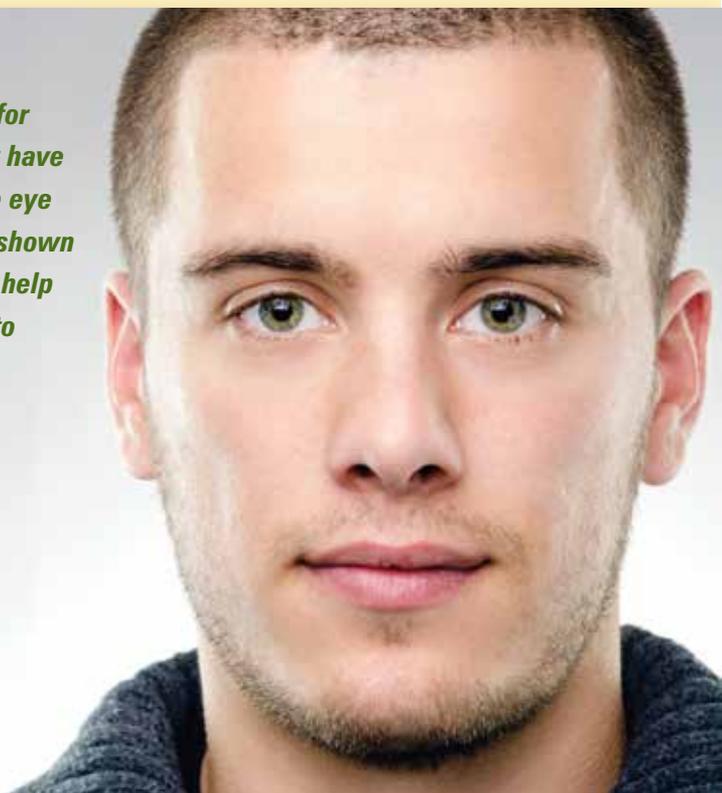
Grape seed extract also shows promise for people suffering from non-alcoholic fatty liver disease (NAFLD), a form of hepatic steatosis where the fats are deposited in the liver. The causes can vary—some people are just genetically prone to the disease, while other research points to dietary reasons, including the overconsumption of soft drinks. In fact, 70 percent of the cases of NAFLD are associated with metabolic syndrome.

Whatever the reason, it's important that these fats move out of the liver and are used by the cells for energy, otherwise the damage can be very serious. Once fat deposits begin to limit the liver's ability to detoxify and process nutrients, health starts an inevitable decline. After all, if the liver is not able to process and remove toxins, the body is vulnerable to damage from a wide range of dangerous substances. The condition can lead to further weakening of the liver, creating a spiraling health condition that can be tough to overcome.

Clinical research in Iran compared the liver restorative power of grape seed extract to vitamin C, which served as a control group medication. While everyone is familiar with vitamin C—and I think it's a valuable nutrient—fighting NAFLD requires a stronger intervention. One of the ways of measuring liver damage is by taking note of the levels of an enzyme called alanine aminotransferase. When the liver is functioning properly, levels are low. When it is diseased, they can rise dramatically. In this clinical study, individuals in the grape seed extract group saw significant changes in just three months. This botanical reduced the accumulation of fat deposits in the liver, stopped oxidative damage, and the results showed lower levels of alanine aminotransferase in their blood.

The antioxidant power of grape seed extract may one day help those undergoing radiation treatment. Because the liver reacts so poorly to radiation treatment (whether or not the liver or another part of the body is a target of the therapy), it suffers damage that becomes a serious secondary concern. Turkish scientific research showed that grape seed extract protected liver cellular membranes from oxidative damage, protein and lipid oxidation, and restored antioxidant parameters.

OPCs are also critical for healthy eyesight. They have the potential to reduce eye strain, and have been shown in scientific studies to help heal eye damage due to diabetic retinopathy.



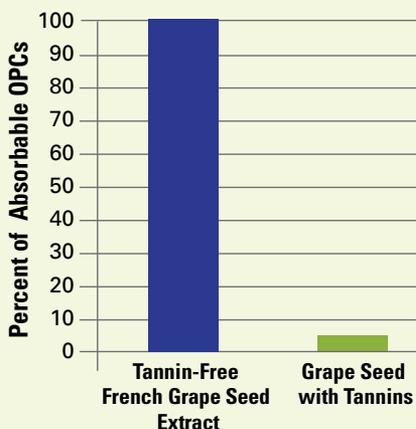
Tannin-Free French Grape Seed Extract = Lifesaving Power!

Not All Grape Seed Extracts Work.

The potential of grape seed extract is astounding. But, like any nutrient, it needs to be effectively absorbed in order to work. And this is where lesser extracts fall down on the job. Many extracts contain tannins, which are OPCs that are too large to be effectively absorbed. Tannins are great in wine—they add body and depth of flavor. But they are of no use to the body, so they are not good in your grape seed extract. Of course, there are a lot of other grape seed extracts available, so choosing one can be tricky. That's because any extract originally from grape seeds is, technically, an OPC. But beware of high-tannin extracts. They'll only give you a false sense of security that they're doing great things, and the money you think you're saving (some extracts appear to be very cheaply priced) is really just money down the drain. The French pioneered grape seed research, and I believe the best extracts are from the same regions of France that produce some of the worlds' finest wines.

Also, I believe that Masquelier's research on OPCs really proved that absorption was key. Some of the clinical work done in the early 1980s found that even small dosages of OPCs were effective because they were so well absorbed. In one study, just 150 mg per day was enough to stop the cramping, swelling, and "heavy" feeling of varicose veins. In others, dosages up to 300 mg stopped symptoms of chronic venous insufficiency in the legs.

Tannin-Free OPCs are Absorbed Best



Tannins are large molecules that aren't easily absorbed by the body and don't provide much benefit. The smaller the OPC, the better chance it will be absorbed.

What About Pine Bark Extract?

In addition to grape seed, some of Jacques Masquelier's early research investigated the OPCs found in maritime pine bark extract. This is also a valuable ingredient, because both OPCs from pine bark and OPCs from grape seed are beneficial and can bolster each other when combined.

Of course, there are differences between the two—French grape seed extract and pine bark extracts may provide different percentages of OPCs, but that's okay. The advantage of incorporating both into your regimen is that they cast a wide net and can address a greater range of health issues. Because of this, even smaller quantities of the combined botanicals can potentially have life-saving synergy.

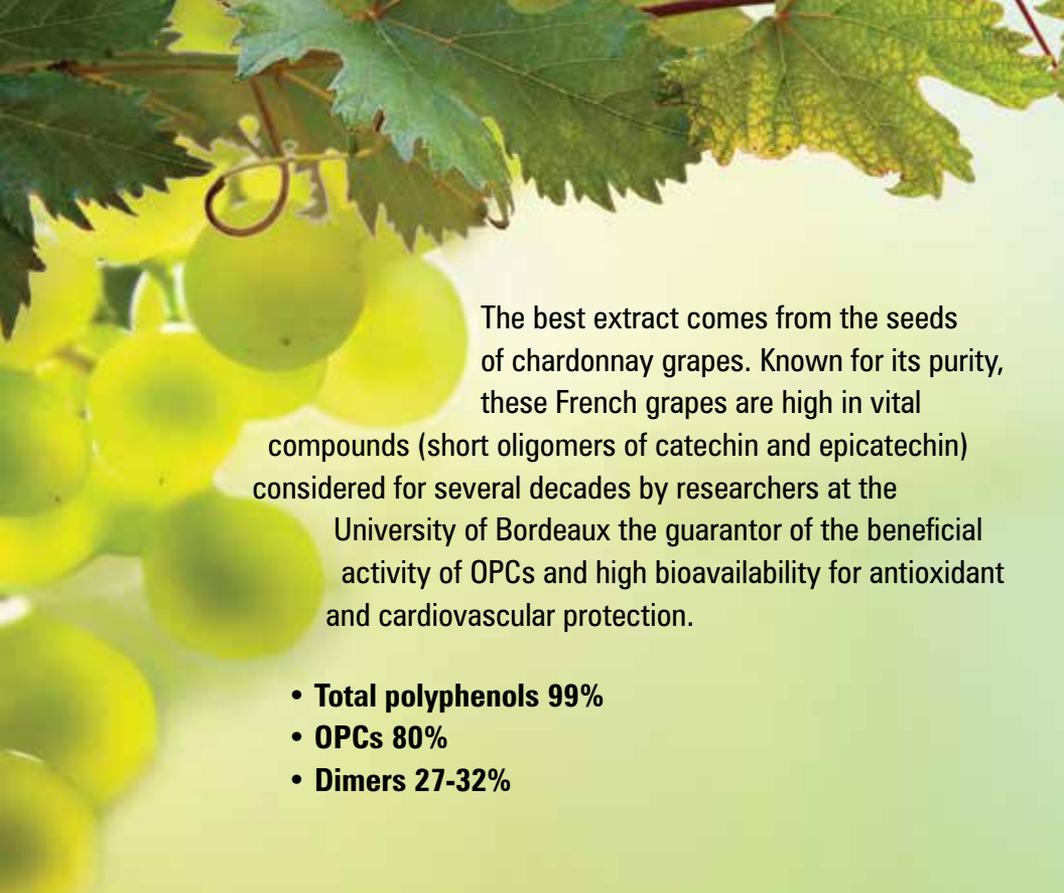


Pine Bark

Grape Seed Extract is a Botanical Miracle

Grape seed extract is a botanical wonder. This amazing ingredient prevents heart disease, kills cancer cells, speeds the healing of damaged muscle tissue, reverses non-alcoholic fatty liver disease, reduces inflammation, improves brain focus and can stop diabetes and prevent weight gain. Much like curcumin, this ingredient simply does it all. But, unlike fat-soluble curcumin, it is a water-soluble extract that works along different pathways in the body.

I urge you to add a French grape seed extract to your regimen starting today, and that's why I recommend a French grape seed extract that is tannin-free and standardized to contain only OPCs that matter—the smallest size for the biggest result.



The best extract comes from the seeds of chardonnay grapes. Known for its purity, these French grapes are high in vital compounds (short oligomers of catechin and epicatechin) considered for several decades by researchers at the University of Bordeaux the guarantor of the beneficial activity of OPCs and high bioavailability for antioxidant and cardiovascular protection.

- **Total polyphenols 99%**
- **OPCs 80%**
- **Dimers 27-32%**

Grape Seed Extract Dosage Levels:

High Blood Pressure: 300 mg daily

Leg Veins/Chronic Venous Insufficiency (CVI): 150 – 300 mg

Cancer: 600 – 1200 mg daily

Cancer Prevention: 150 – 400 mg daily

Menopause: 150 – 200 mg daily

How To Shop and What To Look For

Choosing the Right Grape Seed Extract

Of course, there are a lot of grape seed extracts available, so finding the right one can be tricky. In fact, it can be easy to be fooled outright by lesser supplements.

In one case, researchers purchased 21 supplements in stores and online and had them tested for grape seed and proanthocyanidin content. It turned out that 50 percent of these products were completely fake or subpotent. Only six of them were actually grape seed extracts, nine of them were low potency, and probably mixed with peanut skins, and another six were only peanut skin extracts with no grape seed at all!



That's why I recommend a tannin-free French grape seed extract, standardized to contain only OPCs that have a small molecular structure for guaranteed absorption.

Why Tannin Free?

All OPCs of grape seed extract are of various molecular weights and sizes. The smaller components of grape seed extract are known as monomers, dimers and trimers. The very large non-absorbable molecules of grape seed extract are known as condensed tannins. But tannins have no biological value and are not absorbed systemically. As I've mentioned, some manufacturers adulterate their products with peanut skins or spike their extracts with condensed tannins to lower their production price. Technically, they can still be called OPCs, but they don't provide any real benefits. To ensure the product that you purchase is of significant value, make sure it's tannin free and uniquely standardized for high absorption OPCs from French grapes.

Look For These Grape Seed Formulas I Recommend

French Grape (*Vitis vinifera*) Seed Extract 150 mg
Standardized to contain $\geq 99\%$ polyphenols and $\geq 80\%$ OPCs (Tannin Free)

French Grape (*Vitis vinifera*) Seed Extract 300 mg
Standardized to contain $\geq 99\%$ polyphenols and $\geq 80\%$ OPCs (Tannin Free)

French Grape (*Vitis vinifera*) Seed Extract 400 mg
Standardized to contain $\geq 99\%$ polyphenols and $\geq 80\%$ OPCs (Tannin Free)

French Grape (*Vitis vinifera*) Seed Extract 150 mg
standardized to contain $\geq 99\%$ polyphenols and $\geq 80\%$ OPCs (Tannin Free)

Pine (*Pinus pinaster*) Bark Extract 50 mg
standardized to contain $\geq 90\%$ OPCs



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I recommend a tannin-free French grape seed extract, standardized to contain only OPCs that have a small molecular structure for guaranteed absorption.

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