

GRAPE SEED EXTRACT – THE ULTIMATE GUIDE

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What comes to mind when you hear the word flavonoids?

Do you think of red wine, green tea, or chocolate? These foods have become famous for their powerful antioxidant and anti-inflammatory effects that come from special plant compounds called flavonoids, a type of phytonutrients (like resveratrol and [anthocyanins](#)).

However, there's one lesser-known functional food that boasts large amounts of flavonoids too: grape seed extract (GSE).

Grape seed extract has been researched for its numerous health benefits including heart disease prevention, antibacterial activity, anti-inflammatory effects, antioxidant properties, and brain protection.

Today you'll learn everything you need to know about using GSE for optimal health.

Let's start with a quick look at its history.

A Brief History of Grapes and Health

Grape by-products have been used for millennia in different civilizations to treat and prevent diseases.

Archaeologists discovered the first winemakers in recorded history lived in a small Stone Age village in 5,800 BC in the Republic of Georgia, located between Asia and Europe. They used fresh grapes each time because there were no preservation methods.[\(1\)](#)



Grapes have been used for millennia to treat and prevent illness

A few thousand miles West, Ancient Greece was one of the earliest regions to mass-produce wine over 6,500 years ago. Greek doctors – including Hippocrates – prescribed it in moderation as a digestive aid, analgesic, and to treat fevers. Since Greeks became leading traders of wine, they helped spread the medicinal uses of wine and grapes to other regions of Europe.[\(2\)](#)

In Africa, the Egyptians used red and white wine to steep healing herbs like mint and sage.

Grape seeds have been a waste product for most of history because there were no known methods for extracting the nutrients inside them, but that changed in 20th century.

In the 1940s, French researcher Jacques Masquelier was the first one to develop techniques for the extraction of grape seeds, and inside them he discovered powerful phytonutrients called oligomeric proanthocyanidin complexes (OPCs). Interestingly, he originally named them vitamin P (for proanthocyanidins), but now they're simply known as OPCs or condensed tannins.

Modern grape seed extract exists thanks to this invention. Let's dive into what it is and what it can do for you.

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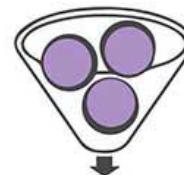


WHAT IS GRAPE SEED EXTRACT?

Grape seed extract (GSE) is extracted from the seeds of multiple common grapes that carry a healthy phytonutrient called **oligomeric proanthocyanidins (OPCs)**.

HOW IT'S MADE

Grape seed extract is created through solvent-based or water-based extraction methods.



GRAPE SEED EXTRACT VS. FOODS

You can't get the same phytonutrients by eating just grapes because almost all of the OPCs are concentrated in the seeds. GSE is not the same as grapeseed oil & doesn't have the same phytonutrients.

BENEFITS OF GSE

- 1 Contains Powerful Antioxidants
- 2 Reduces Inflammation
- 3 Kills Bacteria
- 4 Improves Heart Health
- 5 Boosts Eye Health
- 6 Helps To Manage And Prevent Diabetes
- 7 Fights Cancer Cells
- 8 Protects And Boosts Cognitive Function
- 9 Improves Skin Complexion
- 10 Reduces Leg Swelling



HOW MUCH CAN I TAKE?

You can take from 150 up to 600mg of GSE per day.



HOW TO CHOOSE A HIGH-QUALITY GSE

- 1 Choose Powder Form Instead of Tablets
- 2 Make Sure It Contains More Than 90% Total Polyphenols
- 3 Choose Water-Dissolved Instead of Solvent-Dissolved
- 4 Make Sure It Contains No Fillers or Sweeteners

SAFETY

Not suitable for pregnant women, children, people with bleeding disorders, or those who take blood thinners.



SIDE EFFECTS

Possible (but highly uncommon) side effects: headache, sore throat, dizziness, itchy scalp, stomach ache, nausea, diarrhea, among others.



What Is Grape Seed Extract?

Grape seed extract (GSE) is an industrial derivative of the seeds of multiple common grapes (*Vitis vinifera*), which carry a potent phytonutrient called oligomeric proanthocyanidin complexes (OPCs). These flavonoids are responsible for most of GSE's health benefits. It also contains flavonoids like epicatechin and catechin in lower amounts.

By weight, grape seed extract is made of:

- 74-81% oligomeric proanthocyanidin complexes (OPCs)
- Less than 6% flavonols like catechin, epicatechin, and gallic acid esters (3)(4)

Bioavailability of Grape Seed Extract

The effectiveness of grape seed extract has been heavily debated because there were no conclusive studies about its bioavailability (how much your body can actually use).



Grape seed extract is a by product of grapes

Here's the bad news:

OPCs in general are poorly absorbed. Most of them are stable in the stomach, pass unaltered through the small intestine, and degrade into small phenolic acids in your colon, never being absorbed into your bloodstream.

Now here's the good news:

There's always an exception to the rule. **The only OPCs your body can use are those with small molecules.** Research finds that only OPCs made of one (monomer), two (dimers), or three (trimers) molecules are properly absorbed but the rest are not.⁽⁴⁾

So what does that mean for grape seed extract?

Luckily, a high amount of the OPCs in grape seed extract have small molecules:

- 56% have two molecules (dimeric)
- 12% have three molecules (trimeric)
- There are small amounts of single molecules (monomeric)

This means a significant portion of GSE is highly absorbable.

In summary, GSE is rich in OPCs and it's well-absorbed, but not all extracts are created equal.

The quality of your GSE depends heavily on the extraction method.

How Grape Seed Extract Is Made

There are several patented methods for extracting the OPCs of grape seeds.

Some techniques use solvents and others use only water.

The most common extraction method involves solvents. Here's a step-by-step of how it happens:

Step 1. Pre-extraction: Seeds are separated from the skins and stems, washed with water and dried in the open air away from direct sunlight.

Step 2. Grinding: The dried seeds are crushed in a grinder at periodic intervals to avoid overheating.



Grape seed extract is derived from the seeds of grapes

Step 3. Defatting: Crushed seeds are soaked in hexane overnight to dissolve the fat in them.

Step 4: Extraction: Defatted seeds are extracted through temperature-controlled percolation (filtering) using a solvent like aqueous ethanol, methanol, or acetone.[\(5\)](#)

To avoid using solvents that can be detrimental to humans, some companies use a more expensive water extraction method.

This process involves:

- Heating up the dried seeds with increased pressure and reduced oxygen to obtain an aqueous mixture of OPCs.
- Extracting through reverse osmosis.[\(6\)](#)

Water extraction tends to be more expensive, but it can produce a higher-quality extract.

Grape Seed Extract vs. Grapes



OPCs are only found in the skin, stems, and seeds of grapes.

You may be wondering... can't you simply eat grapes to get the magical benefits of OPCs?

Well, that would be impractical, since OPCs are only found in the skin, stems, and seeds of grapes (not the flesh).[\(7\)\(8\)\(9\)](#)

Here's how a grape stores its polyphenols[\(10\)](#):

- 10% in the fruit (none of which are OPCs)
- 28-35% in the peel
- 60-70% in the seeds

Considering you won't eat the seeds, you'd have to eat only grape skins to get the OPCs, which would be difficult.

That's what makes GSE so special: it unlocks the OPCs hidden in the seeds that you wouldn't normally eat.

Here's how GSE compares to a grapes:

Grapes

The percentage of OPCs in grapes change depending on the plant variety, point of harvesting, and season of the year.

In one study, the amount of OPCs and catechins in different grapes was in the range of 230-1108 mg/kg, with the majority concentrated in the seeds. The skins held 4-61 mg/kg while the seeds had a whopping 185-1074 mg/kg. (8)

As you can see, the range is broad and you have no way of telling if the grapes you buy at the supermarket fall in the lower or higher range.

Grape seed extract

Meanwhile, a single capsule of pure grape seed extract can give you up to 112 mg of polyphenols.

The difference is clear. Unless you are willing to eat a couple pounds of grape skins and seeds, a grape seed extract is your best bet.

Grape Seed Oil vs. Grape Seed Extract

They're often confused, but grape seed extract is not the same as grape seed oil.

Grape seed oil is made for cooking and it's extracted through cold-pressing, where the seeds are pressed with a machine until they release their oil. It retains many nutrients like polyunsaturated fatty acids and vitamin E.



Grape seed extract is not the same as grape seed oil

On the other hand, grape seed extract is made for supplementation, not cooking. It's extracted through intricate solvent or water-based processes and contains mostly OPCs. It can come in either powder or tablet form.

10 Science-Backed Health Benefits of Grape Seed Extract

Grape seed extract has been widely researched for its protective effects. Here are the top 10 ways GSE improves your health:

#1. Contains Powerful Antioxidants

The phytonutrients in grape seeds have powerful free-radical scavenging activities.

Research finds that GSE can successfully fight two types of harmful free radicals: the stable DPPH and short-lived hydroxyl free radicals. One of the extracts tested was able to **scavenge 54 to 82% of free radicals.**

(11)

Another study showed that OPCs increased the ferric-reducing antioxidant power (FRAP) in the blood. The FRAP measures the antioxidant power of foods.(12)

Thanks to these effects, GSE can promote longevity.

#2. Reduces Inflammation

OPCs are highly anti-inflammatory. They can reduce inflammatory molecules in the blood, bones, and pancreas.

In one study, OPCs reduced inflammatory molecules in the pancreas of people with diabetes.(13)

Another study found GSE can help prevent bone destruction in inflammatory diseases like arthritis.(14)

Since inflammation is central in allergies, GSE may also help manage and reduce allergic reactions.

#3. Kills Bacteria

Grape seed extract has strong antibacterial effects on gram-positive bacteria, like *Staphylococcus aureus* and *Enterococcus*. These strains are responsible for multiple skin conditions like skin infections, wound infections, cellulitis, acne, abscesses, pneumonia, meningitis, and toxic shock syndrome.(15)(16)

GSE also stops the growth of a bacteria called *Listeria monocytogenes*, which creates an infection called listeriosis.(17)

B-type OPCs are also effective against the yeast *Candida albicans*, which causes candida.(17)

Lastly, grape seed extract can prevent tooth decay and periodontitis by fighting the harmful activity of P. micros (a bacteria that triggers periodontal diseases).(17)

#4. Improves Heart Health

Supplementation with grape seed extract can improve many cardiovascular factors, including your lipid profile, blood pressure, heart rate, and circulation.

GSE can improve blood pressure

Studies find that GSE can reduce systolic blood pressure, diastolic blood pressure and heart rate, particularly in young patients, obese subjects, or people with metabolic disorders.(18)(19)

In one study, otherwise healthy smokers were given GSE for 8 weeks. Vascular function (blood flow) remained unaltered, and subjects had a 5% reduction in total cholesterol and 7% in low density lipoprotein.

(LDL), aka bad cholesterol.[\(20\)](#) The extract also prevents the oxidation of LDL, stopping the formation of plaques.[\(3\)](#)

Another way it keeps the heart healthy is through improved circulation. GSE relaxes your blood vessels so the blood can flow freely.[\(21\)](#)

#5. Protects Eye Health

Grape seed extract may prevent declining eye health. Studies find it can protect the retina against degeneration in diabetic people and lower the chances of cataract formation.[\(22\)](#)[\(23\)](#)

#6. Helps To Manage And Prevent Diabetes

GSE extract can be beneficial for people with diabetes.

Studies find it can reduce markers of inflammation, glycemia, and oxidation in patients with type 2 diabetes, as well as improve conditions of hyperlipidemia (high lipids) and hyperglycemia (high blood sugar).[\(3\)](#)

GSE is beneficial for diabetes

#7. Fights Cancer Cells

OPCs have anti-mutagenic, antioxidant, and cell death-inducing properties that prevent the formation of many types of cancer, including colon, breast, and prostate cancers.[\(3\)](#)[\(21\)](#)

#8. Protects And Boosts Cognitive Function

Grape seed extract can protect cognitive function and prevent the onset of Alzheimer's Disease.

Studies show that GSE in combination with exercise prevents cognitive decline, while GSE alone sabotages the key mechanisms that cause Alzheimer's.[\(24\)](#)[\(25\)](#)

#9. Improves Skin Complexion And Wound Healing

Grape seed extract protects and bonds with collagen and elastin – two proteins necessary for skin health – to promote youthful skin, cell health, and skin elasticity and flexibility.[\(26\)](#)

Due to this effect, GSE may also accelerate wound healing.

#10. Reduces Leg Swelling

If you sit for long periods of time, GSE can keep your legs from swelling. One study found that in women who sat for 6 hours after GSE intake, leg swelling factors (distension and fluids) were significantly inhibited.[\(27\)](#)

How Much Grape Seed Extract Can I Take?

Research shows it's safe to consume 150-300 mg/day of grape seed extract, although higher doses of 600 mg have also been used without any side effects.[\(20\)\(28\)](#)

How To Choose The Best Grape Seed Extract

There are many grape seed extracts in the market, so it can be hard to find the ones with the best quality.

When you're shopping for a good GSE, make sure you checks the boxes:

Check #1: Powder Form Over Tablet

Grape seed extracts can come in powder, tablet, or capsule form.

Powdered GSE has a few advantages over tablets, including:

- It dissolves faster in water and stomach acid.
- It needs fewer ingredients, while tablets need extra compounds to hold the shape, form, and consistency of a tablet.
- They're generally the purest form of OPCs.

Finding quality GSE can be difficult

For instance, some of the grape seed extract tablets on the market contain over 10 ingredients including fillers, stabilizers, binders, and texture enhancers, such as cellulose and polyvinylpolypyrrolidone (not a typo). These are required to form tablets, but you can skip them simply by choosing a powdered GSE.

Check #2: Provides More Than 90% Total Polyphenols

You need to pay attention to two important numbers when choosing your grape seed extract: serving size and percentage of total polyphenols.

A regular serving size (scoop, tablespoon, capsule) will provide between 150-600 mg of GSE. Under that number, it should say the percentage of actual polyphenols the serving size provides. Shoot for 90% total polyphenol content or more (hint: it's never 100%).

Here's why the serving size is different from the polyphenol content:

GSE usually comes with other ingredients like carriers, flavors, or sweeteners that are counted in the total serving size. The percentage of total polyphenols is there so you know how pure your extract is.

Any GSE providing less than 90% total polyphenols may be lower quality or contain other ingredients that dilute its potency.

Check #3: Water-Dissolved vs. Solvent-Dissolved

Solvent-dissolved GSE may contain traces of potentially harmful solvents such as acetone. These solvents are usually removed by evaporation, but depending on the quality of the process there could be traces in the final product.

Water-dissolved GSE doesn't have that potential risk because it doesn't use solvents at any point.

Check #4: No Fillers or Sweeteners

Low-quality GSE will be mixed with unnecessary ingredients like fillers, colorants, and sweeteners to cut costs and make the extract more palatable.

Sweeteners like corn syrup or sucrose can spike your blood sugar and contribute to energy crashes, so make sure your GSE doesn't have them.

To get the purest grape seed extract, make sure to read the ingredient label. The fewer ingredients, the better.

Safety

Grape seed extract shouldn't be taken if...

- **You're pregnant.** There's not enough evidence yet about its safety for pregnant women. However, animal studies have found no adverse effects on pregnant rats and even positive metabolic effects in male offspring.⁽²⁹⁾⁽³⁰⁾ Always consult with your doctor before taking any medications or supplements while pregnant. It's also not recommended for children.
Pregnant women should check with their doctor before using GSE
- **You have a bleeding disorder.** Grape seed extract can act as a blood thinner, so if you have a bleeding disorder it can put you at a higher risk of bleeding out.
- **You're going to have surgery.** Again, because it can thin the blood, it's not recommended before surgery.
- **You're taking blood thinners or aspirin.** Due to its blood-thinning effects, GSE shouldn't be taken with medications like warfarin (Coumadin), clopidogrel (Plavix), or aspirin.

Side effects

It's highly uncommon for people to experience side effects while taking GSE, but some reports have shown the following side effects in certain people:

- Headache
- Sore throat
- Dizziness
- Itchy scalp
- Stomach ache
- Nausea
- Diarrhea
- Vomiting
- Dry mouth
- Muscle pain
- Acute weakness

Consult with your doctor if you experience any of these symptoms after taking GSE.

Boost Your Health With This Powerful Phytonutrient

The OPCs in grape seed extract have impressive antioxidant and anti-inflammatory effects that can boost your health, particularly if you suffer from poor circulation, cardiovascular problems, candida, skin conditions, or diabetes.

Since the OPCs in grapes are concentrated mostly in the seeds, it's virtually impossible to get enough of them from your diet, so a GSE is the only way to absorb these phytonutrients.

To reap the full benefits, choose a water-extracted grape seed extract with over 90% polyphenols and few ingredients.

Try RealReds phytonutrient blend to give your body a dose not only of protective grape seed OPCs but also 7 other types of polyphenols from different superfoods including pomegranate and blueberry.

Steve Sisskind, M.D.

Hi, I'm Dr. Steve Sisskind, Chief Medical Officer & Founder at RealDose Nutrition.

As a young physician, I struggled because my patients came to me with serious health issues, but I didn't have the right tools to help them. Medical school taught me how to put "band aids" on their symptoms with drugs and surgery, but not how to address the root causes of their problems.

Years later I discovered a better approach... based on the fundamental idea that the power of nutrition can transform your health and vitality. But there's a lot of confusion... What foods should I eat? Which supplements should I take? What does the science say?

I have dedicated my life to answering these questions... And I share this knowledge with you every day here at RealDose Nutrition.

I invite you to connect with me by joining my [free private community](#). I've helped thousands of people and I know I can help you too!

Join the Whole Body Club

Dr. Steve Sisskind is on a mission to help you achieve amazing health and vitality through the power of nutrition. Sign up to get access to his valuable health tips, recipes, videos, and discounts for FREE!

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