

FRESH FROM CALIFORNIA

GRAPES

For health, vitality and the good life



Grapes For Health

What the Science Says



People the world-over enjoy fresh grapes for their beauty, juicy-sweet flavor, energy-providing nutrition, and their health benefits. New research studies continue to explore just how grapes can benefit human health, with many of the completed studies showing fascinating and very promising results.

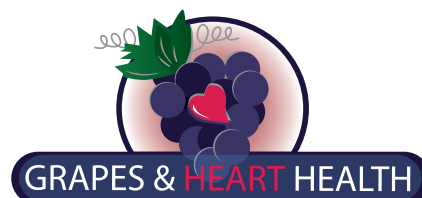
Throughout this booklet we will examine a broad spectrum of research results, and offer ideas for incorporating grapes into everyday meals and snacks. We'll start with a review of several studies regarding grapes and heart health, an area where grapes have shown considerable impact.

Some of the most compelling studies draw a link between heart health and eating grapes. And these are just a sampling of the many studies conducted. Some of the subjects were women, others men.

✿ In a study involving healthy men, a grape-enriched diet increased antioxidant capacity, and improved blood vessel function and blood flow.¹

✿ In another study, men with metabolic syndrome who consumed the equivalent of 1 ½ cups of grapes, reduced their blood pressure, improved their blood flow and decreased inflammation.²

✿ Both pre- and post-menopausal women consuming the equivalent of 1 ¼ cups of grapes per day during this study reduced their risk of key markers of heart disease.³ These reductions included blood triglycerides and LDL cholesterol levels, inflammation and whole-body oxidative stress.



Two studies addressed the benefits of eating grapes with meals:

✿ In one study, consuming a meal comprised of just protein, carbohydrates and fat – and with no source of antioxidants – resulted in oxidative stress. Adding grapes to the meal increased antioxidant capacity and helped prevent post-meal oxidative stress.⁴

✿ In another study, men consuming grapes with a high fat meal helped prevent the damaging impact (reduced blood flow) observed when a high fat meal was consumed without grapes.⁵

✿ Other studies involving grape-enriched diets show:⁶

- Relaxation of blood vessels to improve blood flow and pressure
- Reduction of oxidative stress
- Improvement in blood lipids
- A decrease in inflammation

The takeaway? Help your heart. Eat some grapes.

“May help”? What Does that Mean?

Good science involves repetition of studies and their results, and in this way, scientific evidence is constantly building. As a result, scientists often use terms such as “may” “might” and “potentially” when discussing study results and observed benefits.

Grapes For Health

Polyphenols and Heart Health

Many fruits and vegetables contain polyphenols, including grapes. Polyphenols are a “family” of phytonutrients thought to be associated with numerous health benefits. Grape polyphenols have been the subject of intense study for that reason.

Polyphenols are found in every part of the grape: the skin, the flesh and the seeds. They are found in all colors of grapes, too: green, red and black. In the chart below you’ll see some of the different sub-families and specific names of certain grape polyphenols.

Polyphenols appear to protect the health and function of cells. They accomplish this in a variety of ways, including serving as antioxidants and enhancing cell communication, known as “signaling.” These processes serve to promote overall health.

Numerous studies suggest that grape polyphenols play a significant role in promoting heart health,⁷ with emerging evidence suggesting that they may also play a role in healthy aging.

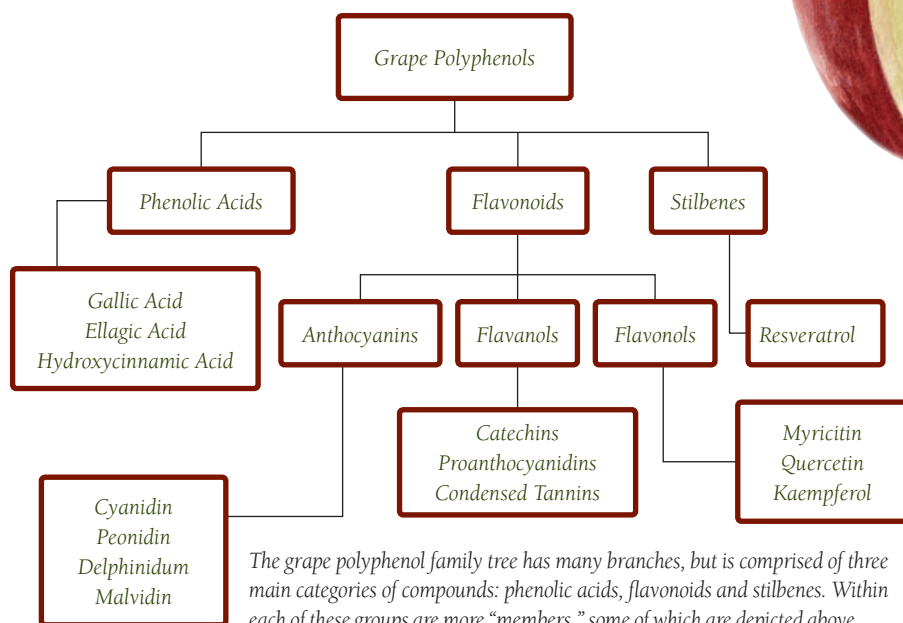


All California table grapes are of the European species *Vitis vinifera*, the same grape species most commonly used to make wine.

Seed remnant: Food scholars believe that all seedless grapes are descended from *V. vinifera* seedless varieties grown for centuries in Eurasia. Most seedless grapes have a slightly discernible seed remnant.

Skin: The skin of *V. vinifera* adheres tightly to the flesh and is not easily separated from it, encouraging “whole” food eating.

Flesh: The juicy flesh of most California table grapes tend to have a natural greenish tinge.



Do both the flesh and skin of grapes confer cardioprotection?

One study specifically addressed this question, and found no difference in benefit between the flesh and the skin, including free radical scavenging abilities.⁸

Grapes For Vitality*

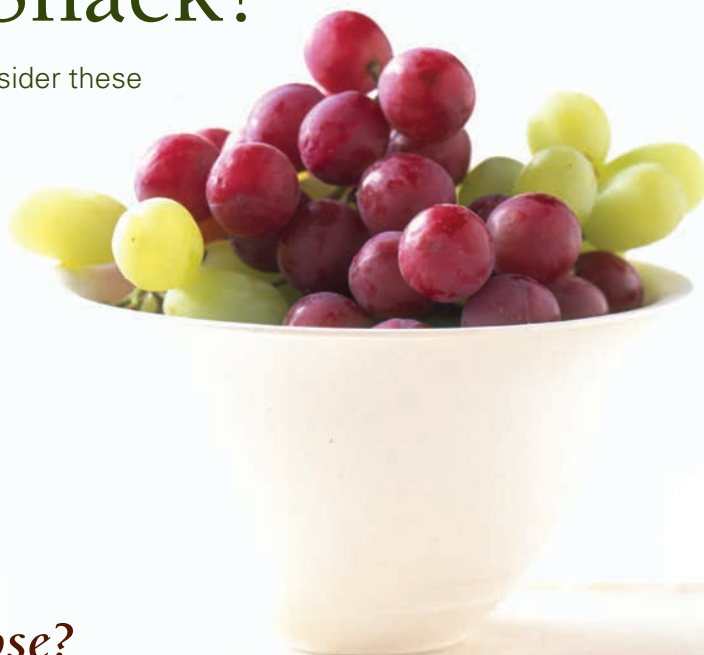
You Can't Find a More Super Snack!



G

rapes are one of the best snacks around. Consider these grape snack pluses:

- Crisp, sweet, tangy
- Juicy and hydrating
- Satisfying
- No fuss, no muss (no peeling, no coring, little waste)
- Packable
- Energizing
- HEALTHY



Hmm, Which Snack to Choose?



Grapes

¾ cup
90 calories



Cookies (chocolate chip)

4 cookies
190 calories



Chips

7 chips
140 calories



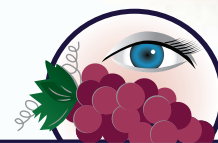
French Fries Small

(2 ½ oz.)
229 calories



Cheese and crackers

1 slice cheese + 5 crackers
150 calories



GRAPES & EYE HEALTH

All Eyes on Grapes

- **Grapes May Help Slow Macular Degeneration:** In a promising pilot study⁹, a grape-enriched diet prevented blindness in mice by protecting the retina from oxidative damage that can lead to macular degeneration. The phytonutrients in grapes offered significantly more protection than lutein.
- **Good "Eye-dea" – Start Early Eating Grapes:** In the same study cited above, results showed that eating grapes at an early age protected vision into old age.

Grapes can satisfy without the added fat, salt and sugar, and the processed nature of many other snacks.

You Can Take'em With You!

Grapes are easy to take for a snack to work, school, the gym, outdoor concert or sports event – anywhere really. You can, for example:

- ▶ Pack them in a plastic or reusable bag – they're remarkably durable
- ▶ Put them in a re-usable closed container – they're not going to brown or spoil during the day
- ▶ Pick them up already packed in the produce department of your local grocery along with the other cut fruits
- ▶ Purchase them at your local deli/café or the at-work cafeteria, pre-packed and ready to go



This snackable mini-meal is a nutritious plate for kids busy at play or doing homework.



Frozen Grapes: Just Like a Mini-Sorbet

Freezing grapes is simple and easy, and can be done with small clusters or individual grapes. Just give the grapes a quick rinse and pat dry. Then put the clusters of grapes in a bowl, or the loose grapes in a single layer on a sheet pan, and pop them in the freezer. After two hours the grapes are ready to eat.

**What is vitality? It's "abundant physical and mental energy, usually combined with a wholehearted and joyous approach to situations and activities." – Encarta, 2009*

Grapes and Diabetes Types 1 & 2: The Promising News

- ▶ **Diabetics CAN eat grapes:** Grapes are considered a low glycemic fruit. The American Diabetes Association uses the ½ cup measure as one serving in a diabetic diet. That's about 10 grapes, depending on size.
- ▶ **Type 1 Diabetes Study Shows Grapes May Provide Many Benefits:**¹⁰ An animal study of non-obese diabetic mice found that grape consumption:
 - helped reduce the onset of autoimmune diabetes
 - protected against the destruction of insulin-producing cells in the pancreas
 - reduced levels of inflammation in the spleen
 - increased serum antioxidant level capacity
- ▶ **Grapes May Lower Risk of Developing Type 2 Diabetes:**¹¹ A recent study showed that greater consumption of specific whole fruits, **especially grapes**, apples, pears and blueberries, is associated with a significantly lower risk of developing Type 2 diabetes.

Grapes for Health and Vitality: Timely Combinations



In addition to their healthy attributes, grapes have unique culinary qualities. They're delicious in both sweet and savory preparations. They're cross-cultural and have a role to play in nearly every cuisine. They can be eaten fresh or marinated, roasted, grilled, baked, pickled, sautéed – in a word, they are versatile. And now their contributions to human health are being recognized, placing them in the circle of “superfoods.”

Combining grapes with other superfoods may produce health-promoting synergies – as well as great-tasting dishes. Consider these pairings:

GRAPES + GREEN TEA

Both foods have been widely studied for antioxidant and other polyphenol components and their contribution to health and disease prevention.



Grape and Green Tea Smoothie

Grapes and green tea make for a refreshing antioxidant-rich smoothie: combine ½ cup cooled green tea, one cup grapes, ½ cup ice and ½ cup of another fruit. Whirr in the blender. Add a bit of honey if you like.

Grapes and Green Tea Studies

In a series of laboratory studies,¹² combining grapes with green tea created a synergistic effect that inhibited the growth of cancer cells.

GRAPES + TURMERIC

Turmeric is one of the most extensively studied spices in health research. Results have shown possible anti-inflammatory qualities as well as the potential for its use in the treatment of arthritis and Alzheimer's Disease.



Quinoa Grape and Curry Salad

Turmeric is one of the primary components in Indian curry blends. When combined with grapes, the two offer delicious balancing flavors and potential health-promoting benefits.

GRAPES + CINNAMON

Cinnamon is used throughout the world as a folk remedy to promote health and prevent disease. Scientific studies have shown positive results in regard to its anti-inflammatory, antioxidant and anti-clotting qualities. Cinnamon may also play a role in controlling blood glucose levels. Studies concerning grapes follow similar research paths.



Chicken Tandoori and Grape Skewers

Like grapes, cinnamon has a flavor that works well in both sweet and savory dishes. These skewers are marinated in a sauce that contains the spice mix garam masala; cinnamon is a major component of the mix.

GRAPES + GARLIC

Garlic, like grapes, is a cross-cuisine star, as well as a much-studied food for its health benefits. Garlic has been linked to everything from heart health to digestive health and anti-inflammation. Garlic has also been cited as a possible benefit for men with enlarged prostate and bladder function issues (*grapes may play a role here too, see below*).

GRAPES + GINGER

Ginger is one of the oldest folk remedies for an upset stomach and digestive health in general. Today science is linking it to many more health benefits associated with the entire digestive tract, including its potential benefits in preventing stomach and colon diseases. (*grapes, too, see below.*)

Emerging Research

Keeping Brains Healthy:

Interesting preliminary research has looked at the impact of grape consumption on brain health. Two recent animal studies suggest grapes may help maintain brain health by:

- **Protecting neurons:** Consuming grapes helped reduce inflammation and protect against neuronal damage caused by loss of oxygen to the brain.¹³
- **Reducing Anxiety and Memory Impairment:** A grape-enriched diet prevented anxiety-like behaviors, learning and memory impairment in mice, as well as the increased blood pressure typically associated with oxidative stress.¹⁴

Colon Health and Grapes:

In a pilot human study,¹⁵ grape consumption protected healthy colon tissue by inhibiting the genes that promote colon cancer.

Bladder Health and Grapes:

In a series of animal studies,^{16,17,18} a grape-enriched diet helped protect bladder function by preventing the oxidative damage that can result from obstruction to the bladder.



Spicy Chicken and Grape Lettuce Cups

Lots of minced garlic and ginger, plus juicy grapes to cool the palate and add the best kind of sweetness, make this recipe one you'll want to make again and again. It's food for health and for sheer culinary pleasure Asian-style.

GRAPES + WALNUTS

Nuts and seeds are often included in the superfood circle, but none star higher than walnuts. They are associated with heart health and cancer prevention.



Grape and Salmon "Power" Salad

This salad has all the elements of a healthy all-in-one salad meal: omega-3 rich salmon and walnuts, the polyphenol power of grapes plus kale in a whole grain base.

For these recipe ideas and more, go to grapesfromcalifornia.com

Grapes For the Good Life

The Go-To Fruit For the Table



Including grapes in your everyday eating is easy. Their uses are unlimited, from breakfast to dinner to a midnight snack. Plus, the healthy goodness of grapes keeps on giving all through those 24 hours.

BREAKFAST:



Breakfast “To-Go” Smoothie

Add frozen grapes, 1 sliced banana, ½ cup Greek vanilla yogurt, ½ cup grape juice and ¼ cup of flake cereal of your choice. Whirr in the blender 1 minute for two servings of a healthy, filling and enjoyable breakfast.



Granola, Grapes and Yogurt

Never added grapes to your granola and yogurt? Give it a try and your morning will be healthier and cheerier for it. Grapes from California are truly “in season” from May through January.

For these recipe ideas and more, go to grapesfromcalifornia.com

LUNCH:



Tuna Salad with Grapes

Just add your favorite nuts plus grapes to tuna or chicken salad to make a delicious, heart-healthy sandwich.



Bulgur Salad with Grapes and Kale

If kale is King of the Greens of late, then grapes make a mighty alliance in the superfood world. Sweet-tangy crisp grapes make a pleasant foil for the often slightly bitter and chewy kale. Add bulgur – or any other grain you like – and this makes a nice light meal or lunch.

DINNER:



Thai Prawn Curry with Grapes

This aromatic Thai coconut curry with prawns is finished with fresh grapes, lime juice and basil for a quick and luscious meal.



Pork Chops Braised with Spiced Honey and Grapes

This is a quick, easy-to-prepare and “special” main course all in one. The spicy grape sauce includes cinnamon sticks for a healthy “timely combination” that’s sweet and savory all at once.

Grapes For the Good Life

We're Having a Party!



Anytime you serve grapes you can be confident that you are providing friends and family with one the most beautiful and healthiest of fruits. Grapes are always festive, bright, lively and refreshing.

FEAST FOR THE SENSES



Black Grape Margarita

Be your own mixologist with Black Grape Margaritas. Icy, potent, colorful, tangy – it's a fiesta in a glass. To create your signature craft cocktail, place 1 cup black grapes, 2 shots tequila (3 ounces), 2 shots (3 ounces) sweet and sour mixer, and two cups of ice in a blender. Puree until slushy. Serve in your best margarita glasses with a lime wedge and a whole grape for garnish. Salted rim optional.



Grape Caprese Hors d' Oeuvres

Grapes can be substituted for tomatoes in many recipes. This riff on a caprese salad puts it altogether in one bite. Fresh mozzarella, basil, olive oil, balsamic vinegar and a plump juicy red grape is a mouthful of good health and good eating.



Green Grape Gazpacho

Gazpacho is a premier raw food, and there's no better way to take advantage of the just-picked quality of fresh grapes than in this recipe for a jade-green cold soup. Offer small servings garnished with a moon of toasted, sliced baguette for an elegant starter.





Rosemary and Grape Skewers

Rosemary and grapes are a culinary match that comes from centuries of growing in proximity. These skewers are very aromatic and complementary to the best cuts of meat. Grapes retain their juicy quality even when under the heat of a gas or charcoal grill. (These skewers can also be prepared stovetop with a grill pan.)



Decorating with Grapes

Grapes are healthy, scrumptious and beautiful. They practically arrange themselves when placed in a clear crystal bowl, on a platter with cheese, or surrounding the Thanksgiving turkey. Grapes just seem to evoke bounty, artistry, glamour and vitality.



Grape Tuxedo Bites

Little bites of grapes, chocolate and nuts – healthy ingredients disguised in decadence.

“It has been thought that the Maharajas of India insisted on having a variety of grapes at every meal, their delicate beauty adding color and style to the grandest table décor.”

– Monisha Bharadwaj, *The Indian Spice Kitchen*

Selection and Storage of Grapes

- Grapes are fully ripe when they arrive at the supermarket.
- Look for plump grapes with pliable green stems.
- Keep grapes unwashed and refrigerated in a plastic bag until ready to use, then rinse with cold water and serve, or add to recipes.
- California grapes are available from May through January and come in three vibrant colors: green, red and black.

Nutrition Facts	
Serving Size 3/4 cup (126g/4.5 oz.)	
Amount Per Serving	
Calories 90	Calories from Fat 0
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0g	0%
Sodium 15mg	1%
Potassium 240mg	7%
Total Carbohydrate 23g	8%
Dietary Fiber 1g	4%
Sugars 20g	
Protein 0g	
Vitamin A 0%	Vitamin C 2%
Calcium 2%	Iron 0%
Vitamin K 25%	
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	
	Calories 2,000 2,500
Total Fat	Less than 65 g 80 g
Sat. Fat	Less than 20 g 25 g
Cholesterol	Less than 300 mg 300 mg
Sodium	Less than 2400 mg 2400 mg
Total Carbohydrate	300 g 375 g
Dietary Fiber	25 g 30 g



The California Table Grape Commission is a state agency funded by California's table grape growers to increase worldwide demand for fresh California grapes through a variety of research and promotional programs.

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