

# Health Benefits



The muscadine grape is a nutritional powerhouse. Like many intensely colored fruits, vegetables, and berries, the muscadine grape is a rich source of polyphenols. The skins and seeds of muscadine grapes are particularly rich in the polyphenolic compound resveratrol, which has been studied for its anti-oxidant benefits in numerous diseases, including cancer and heart disease. However, many of the health benefits of the muscadine have been linked to other polyphenolics, including ellagic acid.

[New Muscadine Research at Wake Forest University School of Medicine](#)  
[Links to Scientific Research Papers](#)

## Muscadine Nutritional Facts

One serving of grapes is about 1/2 cup, or 16 grapes. That amount of muscadines has:

Nutrition Facts	
Serving Size 1/2 cup (80g)	
Servings Per Container	
Amount Per Serving	
Calories 45	Calories from Fat 5
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 11g	4%
Dietary Fiber 3g	12%
Sugars 7g	
Protein 1g	
Vitamin A 2%	Vitamin C 0%
Calcium 2%	Iron 2%
*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 65g 80g
Saturated Fat	Less than 20g 25g
Cholesterol	Less than 300mg 300mg
Sodium	Less than 2,400mg 2,400mg
Total Carbohydrate	300g 375g
Dietary Fiber	25g 30g
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

- 55 calories
- 0.78 grams of protein
- 0.45 g of fat
- 13.37 g of carbohydrate
- 3.37 g of fiber
- They are also about 84 percent water.

They are fat free, cholesterol free, sodium free, an excellent source of manganese, and a good source of fiber.

### **Muscadine Polyphenols**

Polyphenols are highly complex chemicals found in plants that provide multiple health benefits. Years of research have shown that polyphenols from foods support the function of brain, heart, liver, joints, muscle recovery, and other organs. As anti-oxidants, these phytonutrients support the body's cellular function and recovery from normal metabolism, and reduce oxidative stress and inflammation associated with many disease states. Muscadine grapes contain particularly high concentrations of polyphenols as compared to other grape varieties. The highest concentrations of these healthful phytonutrients are in the skins and seeds of the grapes.

The muscadine's polyphenols include both resveratrol and ellagic acid, two anti-oxidants that are also found in red wine, pomegranate and berries. Resveratrol is a well-researched anti-oxidant that extended the lifespan of animals, improved the metabolic function of the energy-producing mitochondria, and possesses a number of beneficial activities when consumed. Ellagic acid and gallic acid, plus the polyphenolic tannins from which they are derived during ripening and processing, are potent anti-oxidants that have metabolic, anti-inflammatory and anti-cancer activities.

Muscadines also contain flavonoids such as [anthocyanins](#) and [quercetin](#), which give muscadines their purple-red or yellow hue, respectively. Scientific studies, such as cell culture experiments, animal models, and human clinical trials, show that anthocyanidins and anthocyanins possess anti-oxidative and anti-microbial activities, improve visual and neurological health, and protect against various non-communicable diseases. Quercetin is a more potent anti-oxidant than vitamin C, vitamin E, or beta carotene.

## **Exciting Research on Muscadine Health Benefits**

The muscadine grape is a nutritional powerhouse. Like many intensely colored fruits, vegetables, and berries, the muscadine grape is a rich source of polyphenols. The skins and seeds of muscadine grapes are particularly rich in the polyphenolic compound resveratrol, which has been studied for its anti-oxidant benefits in numerous diseases, including cancer and heart disease. However, many of the health benefits of the muscadine have been linked to other polyphenolics, including ellagic acid. [A recent study at NC State University](#) found that a compound contained in muscadines, green tea, and chocolate may inhibit the Covid-19 virus!

Exciting research at Wake Forest University School of Medicine over the past five years investigated the use of a highly concentrated muscadine grape extract in both animal studies and clinical trials in humans. The researchers showed that the muscadine grape extract reduced human breast and prostate tumors growing in mice, improved gut health and cardiovascular health in rodents, amplified the effectiveness of standard breast cancer therapies in mice with human tumors, improved exercise capacity in hypertensive rats and reduced self-reported fatigue in cancer patients. The research team includes over 25 faculty members from multiple departments. This work is supported in part by a \$20 million gift made in 2015 by an anonymous donor.