History

An historical journey.

The first cultivated grape in our nation calls North Carolina home. In 1524, Giovanni de Verrazzano, a Florentine navigator who explored the Cape Fear River Basin for France, verified seeing, "….Many vines growing naturally there…." Even some of Sir Walter Raleigh's men concurred when they said that the coastal area of North Carolina was overflowing and abundant with these grapes.

Few of this state's natural treasures have garnered more attention than the scuppernong grape. It is derived from the species, commonly known as muscadine, which is native to the Southern U.S. This variety is tough-skinned and has a bronzy, greenish color. Other types range from light green to reddish to dark purple.

Muscadines really love the heat and humidity that is common in the South and thrive in this region as a result. The colonists on Roanoke Island are the ones credited with discovering the "Scuppernong Mother Vine," which is over 400-years-old and has, throughout history, been known to produce grapes up to two inches in diameter. In 2001, the North Carolina General Assembly named the Scuppernong the official state fruit.

Selection & Preparation

How to select & handle NC muscadine grapes.

Choose grapes that are uniform in shape and color. Muscadines have a sweet fragrance and taste and fall easily from the stem when ripe. After purchasing or picking, muscadines can be stored in a shallow container in the refrigerator. When buying muscadines for cooking, a helpful fact is that two cups of the fresh grapes weigh approximately ¾ lbs. Do not wash until ready to use. Fresh muscadines can be kept for up to a week depending on their original condition but ideally should be eaten within a few days. Inspect stored grapes regularly and remove any that are becoming soft or showing signs of decaying.

To serve, rinse in cool water and eat fresh. Muscadines have thick skins and contain seeds. *To eat a muscadine,* place the grape with the stem scar facing upward in your mouth and squeeze or bite the grape. The pulp and juice will burst through the thick skin into your mouth. The skin can then be removed from your mouth and discarded and the seeds can then also be discarded or simply swallowed.

Muscadine Grapes

North Carolina Recipes.

The most common way to consume muscadines is eating the fresh fruit or making the fruit into wine or juices. If you love the flavor of fresh North Carolina muscadines, you may want to try cooking with them. Try the tasty Muscadine "Dump Cake," making some cider, or on a hot fall day, bring out the ice cream churn and try muscadine ice cream. We think you will be pleased with the muscadine flavor and add these recipes to your list of favorites.

North Carolina Muscadine "Dump Cake"

½ stick margarine ½ cup milk ½ cup sugar

1 cup prepared NC muscadines ¾ cup self-rising flour

To prepare muscadines, remove pulp; cook pulp until seeds loosen, then press through sieve to remove seeds. Add pulp to skins and cook until tender. Add sugar to taste, some grated lemon peel and a sprinkle of apple pie spice.

Melt butter in glass pie plate. Mix flour, sugar and milk in another bowl. Pour flour mixture over butter. Carefully pour prepared muscadines over the top. Bake at 350 degrees for 30 minutes. Do not open oven until baking time is up. Cake should be brown on top. Yield: 8 servings.

North Carolina Grape Hull Pie

5½ cups NC muscadine grapes, rinsed

1 tbs. grated orange rind 1 cup sugar 1½ tbs. lemon juice

pastry for 2-crust pie ¼ cup flour 2 tbs. margarine

Separate pulp from skins. Set skins aside. Boil pulp until seeds loosen, then press through a sieve to separate pulp from seeds. Cook pulp with skins until tender. Then add sugar, flour, lemon juice, and orange rind. Mix well. Put in pastry-lined 9-inch pie plate. Top with margarine. Add top pastry. Seal edges and slit top. Bake at 400 degrees about 40 minutes.

Mulled North Carolina Muscadine Cider

1 quart NC muscadine grape juice

2 (4-inch) sticks cinnamon

Dash of ground allspice 1 lemon, sliced 1 orange, sliced

Combine all ingredients in a saucepan. Bring to a boil; reduce heat, and simmer 5 minutes. Serve warm.
Yield: 8 half-cup servings.

North Carolina Scuppernong Ice Cream

2 cups chilled scuppernong juice ½ cup lemon juice

1 quart light cream 3 cups sugar 2 cups whipping cream

Combine sugar, whipping cream and light cream in a large mixing bowl; beat on medium speed of electric mixer 1 minute or until sugar dissolves. Add juices and beat well. Pour mixture into 1-gallon size freezer can. Freeze according to manufacturer's directions.

Nutrition

What's in a muscadine grape?

Nutritional Analysis

Serving size: 100 grams (fresh weight), 10-12 large grapes

	Bronze-skinned	Dark-skinned
Protein	5 g	5 g
Fat	0 g	0 g
Carbohydrate	12 g	14 g
Calories	68 g	76 g
Sodium	5 mg	7 mg
Calcium	17 mg	24 mg
Potassium	163 mg	167 mg
Magnesium	5 mg	7 mg
Vitamin C	7 mg	6 mg
Dietary Fiber		
(total)	3 g	3 g
(soluble)	1 g	1 g
Resveratrol	930 ug	1170 ug

Prior to analysis, the seeds were removed and the muscadine juice, pulp and skins were pulverized in a blender. (We actually measured 0.4 g fat, which is considered to be 0 g for labeling, since it's below 0.5 g per serving.)

Compiled by Betty Ector, Mississippi AFES

Muscadine Antioxidants

The power of antioxidants.

"The finding that muscadine grapes are naturally high in healthful antioxidants has led to an expansion of the industry in North Carolina. Antioxidants help protect the body from the damaging effects of oxygen free radicals, which can contribute to degenerative diseases."*

*Source: College of Agriculture and Life Sciences, North Carolina State University, Raleigh, NC

Healthful Antioxidants & Free Radicals

Having a better understanding of both.

In order to understand the magnitude of the discovery of potent and powerful antioxidants in the muscadine grape, one must understand a little about free radicals. The ever increasing pollutants, radiation and the body's natural metabolism produces free radicals, which are unbalanced oxygen atoms due to a missing or unrepaired electron. These predators try to replace the lost electrons by raiding other molecules. This theft damages all DNA and tissue contacted until stopped by antioxidants or certain enzymes produced by the body. Antioxidants readily give up electrons without becoming harmful.

The U.S. National Institute of Health has determined that one of the primary causes of deteriorating health as we age is the relentless attack from free radicals. It has been estimated that each cell in our body is attacked by free radicals 10,000 times a day. Your body makes special enzymes to seek out and neutralize free radicals. Unfortunately, as you get older, your body produces fewer of these enzymes. Another way to battle free radicals is to eat fruits and vegetables high in antioxidants. Antioxidants are used by the body to neutralize free radicals, by doing this antioxidants reduce the amount of damage our body suffers as we age.

Free radical damage to brain cells plays a large role in deteriorating mental functions as we age. It also contributes to conditions such as Alzheimer's and Parkinson's diseases. The Copenhagen study found that those individuals who drink red wine on a daily basis had a lower death rate from diseases, as well as improved mental function compared to non-wine drinkers. This study, the largest of its kind, spurred researchers to determine the cause of this "French Phenomenon". What they discovered is that it is not the alcohol but a group of phenolic compounds that come from the grape that are responsible for the increased longevity. Resveratrol was determined to be one of the primary phenolic compounds in wine. Resveratrol is different from almost all antioxidants because it can cross the blood brain barrier to help protect brain cells. The search was on to find nature's best source of resveratrol and a rare grape native to the U.S., known as the muscadine, was the winner.

Resveratrol Concentrations Chart

*Mississippi State University, Dr. Betty Ector.

ORAC Values

Grape Type	Levels
Pinot	1.1 ug/g
Chardonnay	1.1 ug/g
Gamay	1.0 ug/g
MUSCADINE (white)	43.65 ug/g
MUSCADINE (red)	44.57 ug/g