

The Mighty Muscadine

A native North Carolina grape shows remarkable benefits for our health



By Deborah B. Pullen

Louie Bodenhamer used to look out his back door in Rowland, Robeson County, and see tobacco fields. Today, he sees acres of muscadine grapevines.

Muscadines, North Carolina's official state fruit, are famous across the Southeast for their sweet, delicious flavor and marketed in juices, wines, jellies and dietary supplements. But researchers are increasingly studying muscadines for their potential benefits in the battle against disease.

Dr. E. Ann Tallant and Dr. Patricia E. Gallagher at Wake Forest University Health Sciences this spring presented their research findings on how muscadines inhibit cancer. Their study tested Nature's Pearl muscadine extract on seven different types of human cancer cells in vitro (in petri dishes). The doctors found that on every cell line of human cancer studied—lung, brain, breast, colon, prostate, skin and leukemia—the muscadine extract significantly reduced cancer cell growth.

"This is the most comprehensive study on muscadine grapes that has been done," said Dr. Tallant. The doctors studied muscadine extract effects on triple negative breast cancer, which has no targeted drug yet able to combat this rapidly growing cancer. They tested different doses on the growth of the cancer, and at the highest dose of muscadine seeds and skin extract, the triple negative breast cancer growth was obstructed 92.6 percent.

The Wake Forest doctors stated that if Nature's Pearl extract had limited cancer growth in even one of the lines of human cancers studied, that would have been a very good outcome. But the muscadine seeds and skin extract inhibited cancer cell growth in all seven of the human cancers studied.

Part of the secret of muscadines' power lies in its birth in the humid southern climate where it flourishes. Muscadines have developed toughness against disease, insects and fungi. This gives muscadines the ability to combat free radical damage from pollutants, radiation or other environmental poisons. When muscadines are absorbed into the body, they can make up for our body's weakening immune system as we age.

Our natural antioxidant levels drop by 50 percent by the time we are 40 years old. By the age of 60 or 70, we only have 5–10 percent of the antioxidants we had when younger. This can be caused by exposure to free radicals from poisons in the air, the water we drink, chemicals in our food, skin care or personal products. The result can be low energy and greater vulnerability to disease.

The N.C. Department of Agriculture & Consumer Services promotes muscadines as "the winner in total phenolics" (natural plant chemicals which strengthen the body). Free radicals can contribute to degenerative diseases, according to N. C. State University's College of Agriculture and Life Sciences in Raleigh. Free radical damage to brain cells can contribute to Alzheimer's, Parkinson's and other mental diseases.

Muscadine grapes are now used not only for the state's growing number of wineries but as a dietary supplement. Louie Bodenhamer, whose Rowland farm grows muscadines for Nature's Pearl supplements, juice and skin care lines, sees muscadines as a source of new life for North Carolina farmers.

Nature's Pearl, based in Davie County, has also tested its muscadine supplement in a human clinical trial with 50 cardiovascular participants. This study, conducted by Wake Forest University researcher David Herrington, found significant physiological effects on cardiovascular health.

For more information, visit www.naturespearlproducts.com. 

Good enough for a state senator

When former North Carolina state senator Fountain Odom was diagnosed with cancer 18 years ago, he decided to try to find anti-cancer products to aid in his recovery. He found health foods like green tea and blueberries, but nothing that matched the antioxidant power of the North Carolina native muscadine grape.

He then learned about the 400-year-old muscadine vine growing on Roanoke Island known affectionately as "The Mothervine." It may be America's oldest cultivated grape vine, perhaps planted by English settlers as early as 1584 or by Native Americans who used the grapes for medicine.

In 2003, Fountain and his wife, Carmen, formed The Mothervine Nutraceutical Company. They partnered with Tinga Nursery in Wilmington (www.tinganursery.com) to propagate from The Mothervine, and with Duplin Winery in Rose Hill (www.duplinwinery.com) to establish the Mothervine Vineyard. In 2008, the first bottles of Mothervine Muscadine Wine were produced and marketed. Proceeds support the nonprofit Outer Banks Conservationists.

But it wasn't just the wine they were after. Fountain and Carmen wanted what was left over from the juice: the muscadine pomace, the skin, pulp and seeds to be used in their Original Mothervine Whole Grape Supplement.

The Mothervine itself recently survived an accidental but poisonous herbicide spraying by Dominion Power and shows signs of recovery, testimony to the strength of the muscadine. At 73, Fountain Odom believes the healing properties of muscadines also have been the primary contributor to his own thriving survival.

For more information, visit www.themothervine.com.



Fountain and Carmen Odom