



## Welch's 100% Grape Juice made from Concord grapes Executive Summary

*Welch's 100% Grape Juice* – The Original Super Juice. Just about everyone knows about the great taste of Welch's 100% Grape Juice, but what you may not know is that the Concord grapes which are pressed to produce our 100% Grape Juice are grown here in America and in Ontario, Canada, by our 1,200 family-farmer owners. For generations, this has helped ensure that only premium quality grapes go into Welch's 100% Grape Juice, so that it not only tastes delicious, but it is also inherently nutritious. For more than a decade, Welch's has been working with researchers to give us a deeper understanding of the health benefits associated with Concord and Niagara grapes and their respective juices.

Welch's 100% Grape Juice made from Concord grapes helps promote a healthy heart and arteries and maintain a healthy immune system. What's more, Welch's 100% Grape Juice is a great complement to whole fruits and vegetables and is a delicious and convenient way to incorporate more purple fruit into the diet.

According to the World Health Organization (WHO), at least 2.7 million deaths each year are attributed to low fruit and vegetable intake.<sup>1</sup> Studies show that we particularly fall short of blue and purple fruits and vegetables in our diets.<sup>2</sup> Dark-skinned blue and purple fruits like the Concord grape tend to have the highest levels of natural antioxidant capacity (within the fruit and vegetable category) and contain unique antioxidants and plant nutrients not found in many other colors of fruits and vegetables.

Welch's 100% Grape Juice is made from the entire Concord grape, including the skins and seeds which are pressed to release natural polyphenol antioxidants, similar to those found in red wine. A polyphenol antioxidant is a natural compound which appears to promote good health and help protect healthy cells from the damaging effects of unstable molecules called free radicals. These free radicals may play a part in certain diseases of aging.<sup>3</sup>

Welch's 100% Grape Juice made from Concord grapes has higher antioxidant power per serving than other popular 100% fruit juices.<sup>4</sup> The antioxidant power per 8oz. serving of Welch's 100% Grape Juice is more than twice as high as 100% orange juice and nearly six times higher than 100% apple juice.

### *Welch's 100% Grape Juice made from Concord grapes helps promote a healthy heart and arteries*

Welch's 100% Grape Juice contributes to cardiovascular health. More than a decade of cardiovascular research suggests that Concord grape juice can help promote a healthy heart and healthy, flexible arteries,<sup>5,6,7,8</sup> which contributes to healthy arterial function, circulation and blood pressure. The grapes used to make red wine and the Concord grapes used to make Welch's 100% Grape Juice contain many of the same polyphenols. Welch's 100% Grape Juice appears to provide many of the same heart healthy benefits as red wine, without the concerns of alcohol. Welch's 100% Grape Juice is also certified by the American Heart Association (AHA) and carries the AHA's heart-check mark.





### *Welch's 100% Grape Juice made from Concord grapes contributes to a healthy immune system*

Polyphenol antioxidants and vitamin C help protect the body against free radicals that can damage healthy cells and may weaken the immune system. Welch's 100% Grape Juice is abundant in the antioxidant vitamin C, an essential nutrient which helps promote a healthy immune system. Welch's 100% Grape Juice made from Concord grapes has been shown to significantly increase the number of gamma delta T-cells, which help detect bacteria and virally infected cells, and signal the body's immune system that a response is necessary.<sup>9,10</sup>

### *Emerging research suggests that what is good for the heart may also be good for the mind*

A recent pilot study found that drinking Concord grape juice may provide benefit for older adults with early memory decline and indicates there is potential for Concord grape juice to help forestall progression of age-related memory decline.<sup>11</sup> Further emerging research suggests that polyphenols in Concord grape juice may help maintain cognitive health by decreasing beta-amyloid plaques, associated with certain neurodegenerative diseases.<sup>12</sup> Studies indicate that a diet rich in antioxidants and anti-inflammatory compounds, such as those found in fruits and vegetables, may help slow and possibly even reverse age-related cognitive decline.<sup>13</sup>

## References

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<sup>2</sup> Produce For Better Health Foundation. State of the Plate Study on America's Consumption of Fruits and Vegetables. Wilmington, Delaware. 2003.

<sup>3</sup> National Cancer Institute. Antioxidant. In Dictionary of Cancer Terms.

[http://www.cancer.gov/Templates/db\\_alpha.aspx?searchTxt=antioxidant&sgroup=Starts-with&lang=](http://www.cancer.gov/Templates/db_alpha.aspx?searchTxt=antioxidant&sgroup=Starts-with&lang=) (accessed March 30, 2007).

<sup>4</sup> U.S. Department of Agriculture - Agri cultural Research Service. Oxygen Radical Absorbance Capacity (ORAC) of Selected Foods – 2007.

<http://www.ars.usda.gov/Services/docs.htm?docid=15866>. 2007. (Accessed: Nov. 30, 2007). The USDA ORAC database reports antioxidant power per 100 grams - for this comparison the study values have been converted to values per 8 oz. serving size for the beverages.

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<sup>6</sup> Freedman JE, Parker C, 3rd, Li L, Perlman JA, Frei B, Ivanov V, Deak LR, Iafrafi MD and Folts JD. Select flavonoids and whole juice from purple grapes inhibit platelet function and enhance nitric oxide release. Circulation. 2001. 103(23):2792-2798.

<sup>7</sup> Stein JH, Keevil JG, Wiebe DA, Aeschlimann S and Folts JD. Purple grape juice improves endothelial function and reduces the susceptibility of LDL cholesterol to oxidation in patients with coronary artery disease. Circulation. 1999. 100(10):1050-1055.

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<sup>10</sup> Percival SS. Grape Consumption Supports Immunity in Animals and Humans. J Nutr. 2009. 139(9):1801S-1805S

<sup>11</sup> Krikorian R, Nash TA, Shidler MD, Shukitt-Hale B and Joseph JA. Concord grape juice supplementation improves memory function in older adults with mild cognitive impairment. Br J Nutr. 2010. 103(5):730-734.

<sup>12</sup> Ho L, Wang J, Zhao W, Humala N, Talcott ST, Ferruzzi MG, Percival SS and Pasinetti GM. Isolation and characterization of grape-derived polyphenolic extracts with Abeta-lowering activity that could be developed for Alzheimer's disease. Presented at Neuroscience 2007. San Diego, CA. Nov 3-7, 2007.

<sup>13</sup> Joseph JA, Shukitt-Hale B, and Casadesus G. Reversing the deleterious effects of aging on neuronal communication and behavior: beneficial properties of fruit polyphenolic compounds. Am J Clin Nutr. 2005. 81(suppl):313S-6S.

