

Alcohol? It's a No-Brainer

by Vicki Griffin

Some widely-publicized studies suggest that light to moderate amounts of red wine consumption may lower the risk of heart attacks and fatal heart disease. But one analysis of such studies concluded that, "consumption of up to two drinks per day can promote changes in the levels of molecules that reduce the risk of heart disease, while also increasing the level of certain molecules that promote heart disease."¹

In fact, even socially-acceptable levels deemed safe for driving prompt a sharp increase in destructive, free radical activity, linked to a wide array of chronic diseases, including liver and heart disease.

Alcohol molecules are very small and are soluble in both fat and water, allowing them to attack almost every tissue in the body. Alcohol is listed by the U.S. National Toxicology Program and the International Agency for Research on Cancer as a known human cancer-causing agent. Just one drink a day increases a woman's risk of breast cancer by nine percent.²

According to Kenneth Mukamal, an instructor at Harvard Medical School and associate in medicine at Boston's Beth Israel Deaconess Medical Center, every drink is associated with greater brain shrinkage—linked to dementia. He remarked, "It's been clear that alcoholics have shrunken brains; it was a bit of a surprise that it wasn't just alcoholics."³

The parts of the brain especially susceptible to alcohol damage are the frontal lobes, which are the centers for emotions, planning, and decision making.

In an animal model, dark grape juice was "much more effective" than alcohol-containing wine in its ability to inhibit plaque build-up in the arteries, improve lipids, and raise blood levels of antioxidants that help stave off heart disease.⁴

Plant compounds called polyphenols are thought to be the main source of benefit. It may even be that these polyphenols are behind red wine's ability to dilate blood vessels, apart from the alcohol. Wine without alcohol had the benefit of dilating them more quickly. Alcohol actually delayed the beneficial response, although it did occur.⁵

So in review:

Some studies suggest that drinking wine may have some health benefits, and those benefits appear to be much greater with unfermented grape juice.

Alcohol attacks every tissue in the body and increases the risk of disease, including cancer.

With each drink of alcohol, brain cells are destroyed and you have less of a brain.

Alcohol? It's a no-brainer!

1 Mukamal K.J., Rimm E.B., "Alcohol's Effects on the Risk for Coronary Heart Disease," *Alcohol Research & Health*, 2001 Nov:25(4)255-61.

2 Hamajima N. Br. J., "Alcohol, Tobacco and Breast Cancer—Collaborative Reanalysis of Individual Data from 53 Epidemiological Studies, Including 58,515 Women with Breast Cancer and 95,067 Women Without the Disease," *Cancer*, 2002:87 (11)1234-45.

3 Canadian Press, *Sept. 17, 2001*.

4 Vinson J. A., et al., *Atherosclerosis*, 2001:156(1)67-72.

5 "Benefits of Red Wine May Not Be Due to Alcohol Content," *Medical Tribune*, 1999:40(1)24.

CORRECTION: The reference from last month's *Lifestyle Matters* article, "Are the Perks Worth the Price?" is from Hurghes Jr., et al, "Endorsement of DSM-IV Dependence Criteria Among Caffeine Users," *Drug and Alcohol Dependence*, 1998 Oct:52(2)99-107.

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