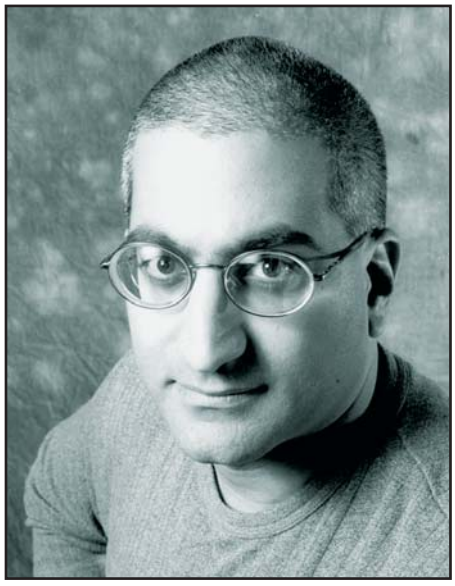


J.P. Saleeby, MD

Red Wine's

Interest in wine's health benefits in the last two decades may have been sparked by a desire to establish a reason for the so called "French Paradox". There is a where a lower incidence of heart disease is found in the French. The French have a diet rich in fat and it is rational to think this antagonistic diet would be incompatible with good health. The French are known to eat more beef, cheese and butter than their European neighbors. Several researchers concluded that along with their rich fatty foods they also have a significant intake of red wine when compared to other Europeans and even Westerners. Thus the door was open for many researchers to study the health effects of wine (especially red wine) as a possible solution to this quandary. There is research supported information that moderate red wine consumption (that is one glass for women and one to two for men) can protect you against heart disease, hypertension and cancer. It also has been shown to have a positive effect on cholesterol levels. Of course moderation is key here. This is certainly not an example of where a little is good a whole lot is better. Therefore, the medical community is very cautious to recommend routine use of red wine for obvious reasons.

Some studies in women regarding the consumption of alcohol and risk of breast cancer found an increase of this type of cancer in women who consume at least one drink daily. According to a report by the American Cancer Society in 2004 there was an increase of 30% in the death rate from breast cancer in women who would drink alcohol daily. This confounding information aside consumption of one or two drinks per day is associated with a reduction in risk of approximately 30 to 50 percent in coronary heart disease. Heart disease being the overwhelming number one killer of woman annually makes it the major target. So wine consumption has an overall positive effect on death rates in the female population.

The compounds responsible for the protective powers of wine are a class of compounds called antioxidants. Red wines contain several antioxidants the key isolate being the polyphenol compound called trans-Resveratrol or Res for short. Res is found in other fruit besides grapes including mulberries, raspberries and muscadine grapes (indigenous to the Americas). And in this particular grape Res is reported to be seven times as concentrated. Resveratrol is also encountered in peanuts and other nuts.
Researchers at University of North Carolina-Chapel Hill and the University of Illinois found that Res has both anti-inflammatory and anticancer properties. A paper published by the UNC researchers in 2000 in the journal Cancer Research reports that Res inhibits the activity of a protein called NF-kappa B which attaches to DNA inside human cells. This protein acts like a switch turning certain genes on and off. Cancer cells propagate and continue to survive by means of NF-kappa B and thus under controlled settings researcher introduce Res which turns off this protein and thus causes the death (apoptosis) of cancer cells.

In 1992 Harvard Medical School researchers included moderate alcohol consumption as one of eight ways to reduce coronary heart disease risk. The cardioprotective effect is attributed to the antioxidants found in wine grape skins and seeds. These antioxidants (flavonoids) are found in higher con-

JP Saleeby, MD is Assistant Medical Director of the Emergency Department at Liberty Regional Medical Center in Hinesville,Georgia. He is a strong advocate of nutritional medicine and an oneophile of sort founding the Savannah Wine Club.

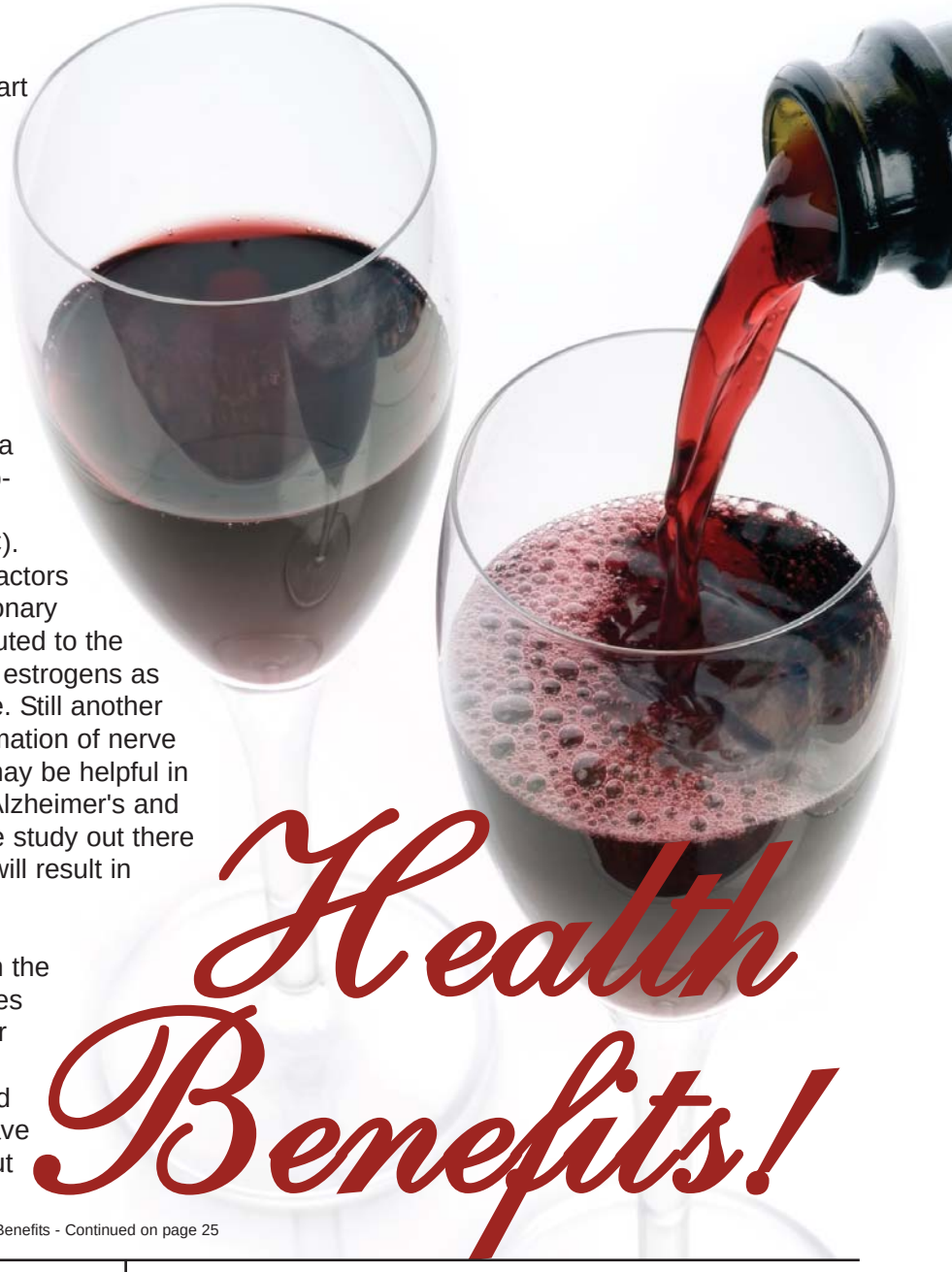
To Contact Dr. Saleeby:

http://www.saleeby.net
www.docsaleeby.blogspot.com
www.members.aol.com/savannah-wine

centration in red as opposed to white wine. As part of the red wine making process grape skins, stems and seeds are kept in contact with the juice for a long period of time imparting not only the "red" color but also these health-benefiting flavonoids. It should also be noted that certain flavonoids found in oak wood are conveyed, as many red wine spends much time "aging" in oak barrels.

Coronary heart disease reduction by Res and other antioxidant flavonoids occur in part due to a reduction in the production of low-density lipoprotein cholesterol (LDL-C) and the increase of the good high density lipoprotein cholesterol (HDL-C). Additionally these agents reduce blood-clotting factors limiting thrombus from causing "clots" in the coronary arteries. Some of these properties may be attributed to the fact that Res has mild estrogenic properties and estrogens as a class of hormones seem to be cardioprotective. Still another study indicated that Resveratrol aided in the formation of nerve cells. There are those experts that believe this may be helpful in the treatment of neurological diseases such as Alzheimer's and Parkinson's in the near future. There is even one study out there claiming that daily moderate wine consumption will result in weight loss.

Not all wines are created equally. Studies from the University of California at Davis conducted studies on several varietals. They determined that higher concentrations of flavonoids are present in Cabernet Sauvignon, followed by Petit Syrah and Pinot Noir grapes. Merlot and Red Zinfandels have far fewer flavonoids. Whites once again came out short, as the bigger bolder more tannic wines seemed best for high flavonoid yields. Red Wine's Benefits - Continued on page 25



Health Benefits!