

In Vino Sanitas: In Wine There Is Health

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Physicians have used wine for its medicinal qualities for millennia. Receipts for wine based medicines in ancient Egyptian papyri and Sumerian tablets date back circa 2200 BC, making wine the world's oldest documented medicine. The Greek physician Hippocrates (circa 400BC), the "Father of Medicine", is recorded as using wine as a disinfectant, antiseptic, an aid to digestion, a diuretic, a vehicle for other drugs and as part of a healthy diet. Ancient Rome's most famous physician, Galen (2nd century AD), wrote extensively about the medical uses of various wines from different regions of Greece and Italy.

Wine continued to play a central role in medicine until the 19th century, probably due to the lack of safe drinking water as other health benefits were unproven. In the late 19th and early 20th century, alcohol's toxic and addictive effects became clear and it fell out of favour with the medical profession. However, interest in the health benefits of regular wine consumption has grown considerably over the past 30 years; is this interest valid?

Recent resurgence of interest followed St Leger et al's publication in the *Lancet* in 1979 that there was an inverse relationship between wine consumption and deaths from coronary heart disease in developed countries. Public interest was fuelled by the United States (US) news programme 60 Minutes' broadcast in 1991 on the "French Paradox", which featured Serge Renaud's observation that in France there was low mortality from coronary heart disease despite a high intake of saturated fat, whereas in most countries, high intake of saturated fat was positively related to high mortality from coronary heart disease. He explained that this paradox may be attributable to high wine consumption in France. He also proposed that the protective effect was due to alcohol's ability to inhibit platelet aggregation in the blood clotting mechanism.

Following the 60 Minutes broadcast, US sales of red wine rocketed 44% over previous years. Renaud subsequently published his evidence in the *Lancet* in 1992.

There has been much scientific debate on

whether all alcoholic drinks confer the same health benefit. Various studies including Rimm et al's review of 25 studies in the *BMJ* in 1996 and Rimm et al's study of 39,007 men in the *NEJM* in 2003, suggested that daily consumption of something alcoholic provided some protection from heart disease compared with drinking less often or not at all. Renaud et al's prospective study of 36,250 men in Eastern France, aged 40-60, followed for 12-18 years, in *Arch Intern Med* in 1999, found that moderate intake of both wine and beer was associated with a lower relative risk of cardiovascular disease, but the risk was more significant with wine. However, only daily wine intake (22-32 g of alcohol) was associated with a statistically significant 33% lower risk of all-cause mortality due to a lower incidence of cardiovascular disease, cancer, violent death, and other causes. Klatsky et al's prospective study of 128,934 adults, followed for 20 years, in *Am J Epidemiol* in 2003, found that moderate wine drinkers had a statistically significantly lower mortality risk than beer or liquor (spirit) drinkers, largely because of a lower risk of coronary heart disease. There was also a substantially increased risk for heavy drinkers and a slightly higher risk for abstainers resulting in a J-shaped alcohol-mortality curve.

The substantial medical risks of heavy alcohol drinking and the probable existence of a less harmful or safe drinking limit have been well documented. Heavy alcohol drinking is associated with many diseases including liver disease (hepatitis and cirrhosis), cancer (oral, oesophageal and stomach), pancreatitis, cardiovascular disease (alcoholic cardiomyopathy, hypertension, heart rhythm disturbances and haemorrhagic stroke), central and peripheral nervous disorders (dementia, depression, anxiety and sexual difficulties), serious accidents and obesity.

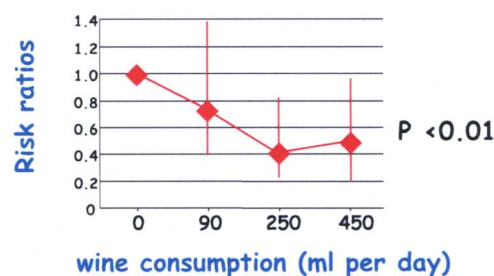
There is a wide variation in recommended safe drinking limits between different countries. Recommended

safe limits of alcohol drinking in the UK are three units per day for men and two units per day for women (pregnant women should abstain). There are one and a half units of alcohol in a small glass (125ml) of an ordinary strength wine (12% alcohol by volume).

Diet and lifestyle are widely accepted to be important modifiable risk factors for good health. The INTERHEART standardised case-controlled study of acute myocardial infarction (heart attack) of 15,152 subjects in 52 countries, published in the *Lancet* in 2004, demonstrated that abnormal blood cholesterol, smoking, hypertension, diabetes, abdominal obesity and psychosocial factors were negative risk factors, while daily consumption of fruit and vegetables, and regular alcohol consumption and physical activity were positive risk factors for myocardial infarction worldwide in both sexes and at all ages in all regions. Interestingly, a number of other studies showed that wine drinkers had a higher quality diet and consumed more fruit and vegetables and lower levels of carbohydrate and saturated fat, and were less likely to smoke and more likely to exercise.

Serge Renaud set up the Lyon Diet Heart Study in 1985, a randomised, controlled trial of 605 patients to test the effectiveness of a Mediterranean-type diet, which emphasises fruit, vegetables, bread, cereal, fish and alpha-linolenic acid, on the rate of coronary heart events in patients who have had a first heart attack. After an average follow-up of 46 months, patients following the Mediterranean-style diet had a 50-70% lower risk of recurrent heart disease. The findings from this study imply risk factors beyond lipids and lipoproteins

Lyon Diet Heart Study - after an initial MI wine reduces further vascular events (de Lorgeril M et al., *Circulation* 2002, 106: 1465-9)



Source: Dr Roger Corder

