

Indeed, the year 2000 was a very good year for wine makers -- and not just because it brought a bumper crop of cabernets, zinfandels, and chardonnays. Evidence of the far-reaching health benefits of wine continued to pour in from researchers around the world.

Here's a review of the good news for wine makers -- and wine lovers:

A Healthier Heart

Several reports in 2000 confirmed the glad tidings that wine -- in moderation, of course -- reduces the risk of cardiovascular disease and heart attacks. In the September issue of the *Annals of Internal Medicine*, for instance, Swedish researchers at the Karolinska Institute reported that, compared to teetotalers, light drinkers who consumed wine cut their risk of dying prematurely by almost one third, and wine drinkers as a group had significantly lower mortality from cardiovascular disease and cancer. Actually, drinking any kind of alcoholic beverage helped, the scientists found. But by far the biggest benefit accrued to wine drinkers.

What's more, scientists are beginning to understand how wine may bestow its salutary benefits. For starters, according to findings published in the January 2000 issue of *European Heart Journal*, this most ancient of beverages appears to dilate [arteries](#) and increase [blood](#) flow, thus lowering the risk of the kind of clots that cut off [blood](#) supply and damage heart muscles.

In addition, the fruit of the vine appears to boost levels of HDL, the "good" [cholesterol](#), and helps prevent [LDL](#), or bad [cholesterol](#), from causing damage to the lining of arteries. In a study published in the May 2000 issue of the journal *Pharmacology, Biochemistry, and Behavior*, scientists at the Institute for Research in Extramural Medicine in Amsterdam tested 275 men and women around the age of 32. Those who imbibed the equivalent of a glass or two of wine each day had significantly higher levels of "good" [cholesterol](#) because they remove the "bad" artery-clogging LDLs before they have a chance to choke blood vessels. Indeed, wine seems to facilitate that process, making it easier for HDLs to hustle their dangerous counterparts out of the bloodstream.

Yet even when LDLs remain behind in the arteries, substances in wine called phenols appear to help prevent the bad cholesterol from causing

injury. In the November 2000 *Journal of [Nutrition](#) and Biochemistry*, Italian researchers from the National Institute for Food and [Nutrition](#) Research reported that phenols seem to limit the oxidation of LDLs, making them less capable of damaging the linings of arteries and, therefore, less able to set the stage for [cardiovascular disease](#), like [heart disease](#) and [stroke](#).

A Shield Against Cancer

Wine also may protect against several forms of another common killer: [cancer](#). It turns out that the same phenolic compounds that lower [heart disease risk](#) also may slow the growth of [breast cancer](#) cells, according to findings reported by scientists at the University of Crete in Greece in the June 2000 issue of *Journal of Cellular Biochemistry*. Phenols also were shown to suppress the growth of [prostate cancer](#) cells. And French scientists found evidence that an antioxidant in wine called [resveratrol](#) can put the brakes on the growth of [liver cancer](#) cells, according to a report in the July-August 2000 issue of *Oncology Reports*.

There also was a report that wine -- particularly red wine -- might help ward off [oral cancer](#). Researchers from the University of Missouri School of Dentistry discovered that resveratrol and another antioxidant called quercetin may inhibit the growth of oral cancer cells. Their findings, published in the June 2000 *Journal of the American Dental Association*, note that red wine is loaded with a slew of other [antioxidants](#) that seem to boost its [cancer](#)-fighting abilities.

Stronger Bones and Sharper Minds

But perhaps the most startling news of all came in studies suggesting that moderate drinkers may cut their risk of [osteoporosis](#) -- age-related bone thinning related to [calcium](#) loss. A report in the *American Journal of Epidemiology* in April 2000 showed that women who drank 11 to 29

grams of alcohol a day -- the equivalent of one to three glasses of wine -- had greater [bone mineral density](#), measured in the hip region of their thighbones, than nondrinkers or heavy drinkers. Bone mineral density is the measure physicians use to determine bone strength and resilience.

That news was quickly followed by an equally encouraging report in November in the *American Journal of Clinical Nutrition*. Testing nearly 500 elderly women, researchers from Creighton University in Omaha, Neb., found that bone mineral density was 12% to 16% higher among moderate drinkers, compared with nondrinkers.

And women aren't the only ones who may benefit. In a study published in the journal [Osteoporosis International](#) in November 2000, Finnish scientists tested 143 men aged 54-63. Compared to nondrinkers, the men who enjoyed a glass or two of alcohol a day also showed signs of greater bone mineral density.