



Hoist
a glass
and keep heart disease
at bay, many experts declare.

Unfortunately,
that's not the whole story.

By **Michael Mason**

The Truth About Women & Wine

By now you've probably heard about the

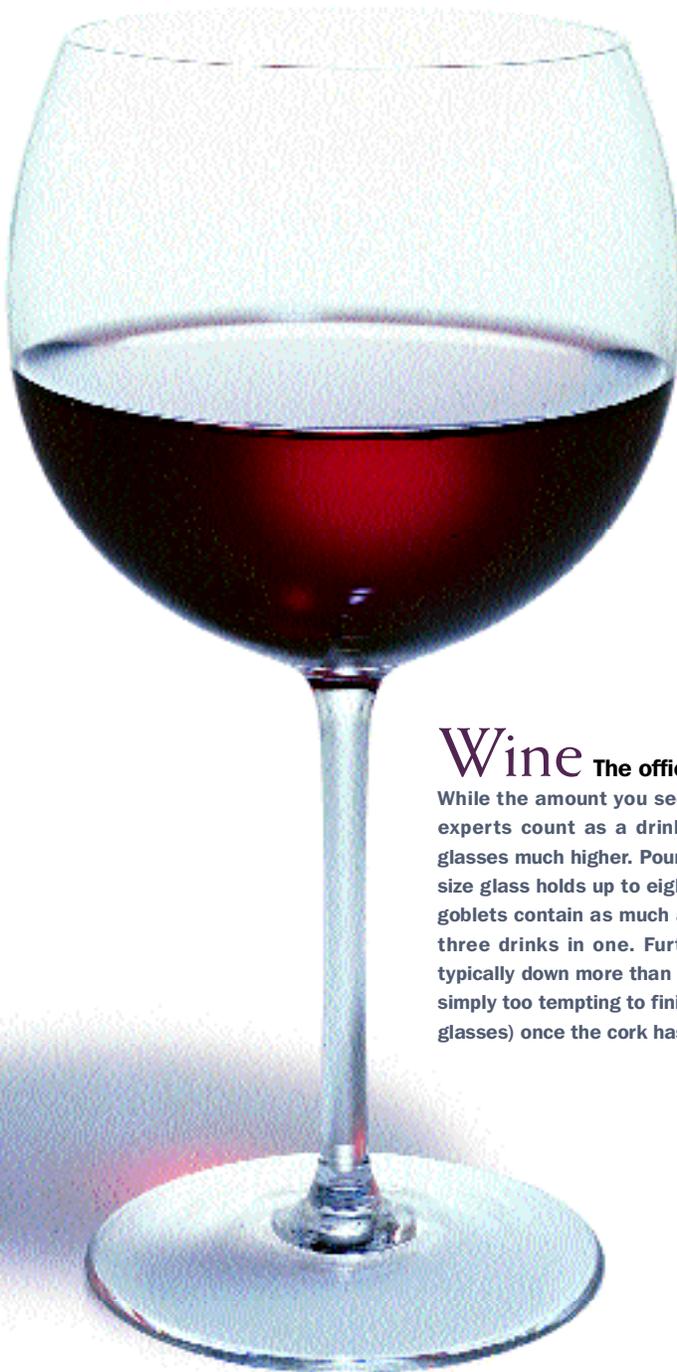
French Paradox. It goes like this: Wine does something fabulous—nobody knows what exactly, but it is fabulous—for your heart. A sip of cabernet, a quaff of fumé blanc, and your arteries are trilling with delight. Just look at the French. Lolling about cafés, eating pâté and cream sauces that ought to leave them dead before dessert, and do they have heart disease? No—that's the paradox. How do they do it? Wine by the bucketful! If Americans drank like the French, we'd be free of heart disease, too. So set up the glasses, dear: It's time to pop the cork on a new era.

If that's your rationale for guzzling zinfandel after work, maybe you'd better think about letting this cup pass. True, the research on drinking and health is promising, even exciting. After two decades of study experts largely agree that for some people a regular nip can reduce the risk of heart attack by 40 percent. That's a miraculous number. Heart disease is the leading cause of death in this country; 500,000 Americans suffer fatal attacks every year. Only one other measure has been shown to better the odds by so much: stopping smoking. If you don't smoke in the first place, says epidemiologist Curtis Ellison of the Boston University School of Medicine, then no other lifestyle change—not starting a light exercise program, not lowering your

Photograph by **Darryl Snaychuk**

How Much Is Too Much?

A DRINK IS A DRINK IS . . . well, what exactly? When experts talk about drinking to protect the heart, they mean one drink a day for women, two for men. Officially, each contains half an ounce of pure alcohol. But as anyone who's ever slid off a bar stool can testify, all drinks are not created equal. Wine contains more alcohol than beer does; hard liquor packs the biggest punch. The truth is, many people underestimate how much they're getting in any one glass. And over the long haul, that can wreak havoc on your health.



Wine **The official drink:** five ounces

While the amount you see here is the five ounces experts count as a drink, many people fill their glasses much higher. Poured to the brim, a normal-size glass holds up to eight ounces. Some oversize goblets contain as much as 14 ounces—giving you three drinks in one. Furthermore, wine-drinkers typically down more than one glass at a sitting; it's simply too tempting to finish off a bottle (about five glasses) once the cork has been popped.



Beer **The official drink:** 12 ounces

Drinking Americans overwhelmingly prefer beer, and it's not a bad choice. It's inexpensive and goes with many kinds of food, which is important since research suggests eating while you imbibe adds to alcohol's heart-protective effects. Even better, a single can or bottle is exactly the 12 ounces that qualifies as one drink, making it easier to stick to the one-a-day guideline. Still, young adults, particularly men, typically drink far too much at a sitting. As a result, beer is implicated in accidental injuries more often than wine or hard liquor.

Liquor **The official drink:** 1.5 ounces of 80 proof

Just look at the piddling amount in this martini glass! But that's how much experts count as a single drink. Needless to say, the jumbo martinis all the rage in swank bars probably pack in at least twice this amount. Many older Americans prefer hard liquor, and at least one study has suggested that it provides better heart protection than other alcoholic beverages. But because these drinks are small, it's easy to toss back more than one. —M.M.



cholesterol from 240 to 210 or your blood pressure from 140 to 120—wards off heart disease as well.

Despite the impressive statistics, however, drinking for health reasons is a tricky proposition. If you figure, One more glass won't hurt—at least I'm protecting my heart, you could be putting yourself at risk for other serious health problems. A lot depends on how much you drink and when. If you're a woman, especially if you're under 50, the picture is even murkier. The science behind alcohol and health may be achingly clear. But what each of us should do about it . . . well, that story is as tangled as the grapevines of Bordeaux.

ON THAT a noon cocktail might benefit the body wasn't always held with open arms. Alcohol has a checkered history in this puritanical nation. In some of the first researches on heart disease balked at their

work, a cardiologist with the Kaiser Permanente Medical Center in Oakland, California, and his colleague Gary Friedman were among that early crew. Twenty-five years ago they found themselves sitting atop a scientific gold mine: computerized medical histories from hundreds of thousands of enrollees in the Kaiser program. Back then it was unusual to have so many records available in one place. Rarer still, many of the patients had filled out questionnaires on their living habits, including whether they drank alcohol. Seeing a chance to identify new risks for heart disease, Klatsky and Friedman gathered data from 500 heart attack victims and compared them to a similar group of healthy patients.

"We started out looking at things like numbers of headaches and other symptoms," Klatsky recalls. "But one of the most striking differences was alcohol. Nondrinkers were at higher risk for heart attacks than light drinkers." Klatsky and Friedman published this finding in 1974—to no great fanfare—and subsequently performed more detailed surveys of 130,000 Kaiser patients. To their surprise, the results were the same. Light drinkers were having fewer heart attacks and living longer.

"At first I was sufficiently leery that I tried to attack the finding myself," says Klatsky. After all, doctors had long viewed alcohol as a source of addiction, and in the decades since Prohibition the government had spent tens of millions of dollars warning Americans away from the bottle.

Yet the discovery was no fluke. Over the past 15 years signs of this same relationship between alcohol and mortality have appeared in more than two dozen large population studies in Europe and North America. In a 12-year survey of 85,000 nurses aged 34 to 59, Harvard researchers found that women who drank a few times a week had less chance of death than abstainers. A 13-year study of 12,000 British physicians—all of them men—found that light drinkers were living longer than nondrinkers,

primarily because of lower heart disease rates. And after tracking the health of 3,700 women aged 45 to 74 for 13 years, researchers at the Centers for Disease Control and Prevention discovered that women who drank moderately were 39 percent less likely than nondrinkers to suffer from a common form of heart disease.

How it works, no one is sure. Drinking raises blood levels of good cholesterol (high-density lipoprotein, or HDL), which may slow the formation of dangerous plaques in the arteries. And immediately after it's consumed, alcohol seems to make certain blood-clotting cells less sticky, which may prevent blockages. Whatever the mechanism, the evidence for alcohol's heart protection is so overwhelming that what once seemed bunkum is fast gaining legitimacy.

Last year both the U.S. government and the American Heart Association acknowledged, if grudgingly, that moderate drinking might help adults live a little longer. At the insistence of Congress, the National Institute on Alcohol Abuse and Alcoholism awarded \$2 million in grants for research into the potential benefits of alcohol. A conservative Washington think tank sued the U.S. Bureau of Alcohol, Tobacco, and Firearms to lift a rule forbidding health claims on wine bottles. And the American College of Cardiology encouraged everyone to hoist a glass by citing abstinence from alcohol as a probable risk for heart disease.

"It takes a long time for an idea like this to be accepted, because people are used to thinking about alcohol as evil," says Meir Stampfer, an epidemiologist at the Harvard School of Public Health. "But if you aren't drinking, you really ought to consider it."

MAYBE, MAYBE NOT. For many of us, all the hoopla about drinking has raised more questions than it has answered. Anne-Catherine Vinickas, a marketing official with a San Diego transit agency, first heard about the French Paradox from a television newscast. It made an impression: These days Vinickas often throws together a smashing pine-nut risotto for dinner, and she likes nothing better than to coax it down with a glass of wine.

But the news also left Vinickas with the impression that only red wine benefits the heart. "It's too bad," she says. "I drink white and probably not as much as they were talking about, so it's not doing me a bit of good."

The boom in the red wine industry suggests Vinickas isn't the only one who got that message. Last year consumer sales reached a record \$726 million amid strong consumer demand for zinfandels

(up 41 percent), merlots (29 percent), pinot noirs (21 percent), and cabernets (10 percent). In 1993 three of four California wineries were losing money; now three in four are profitable.

Yet wine-makers are simply riding the tailwind of a misleading media campaign. Despite the televised transformation of merlot into medicine, most scientists believe that *any* alcoholic beverage will protect the heart.

What matters most is ethanol, the kind of alcohol in hard liquor and beer as well as wine. Wine also contains antioxidants and other compounds that may turn out to be especially useful someday. But ethanol is what buttresses good cholesterol levels and keeps sticky blood clots from forming. And it provides this type of insurance against heart disease whatever form it takes. Studies have shown that Japanese American men in Honolulu, for instance, earn the same cardiac benefits from sake that the French do from wine.

"The wine industry just loves the health message and tries to promote it," says Mary Jane Ashley, an epidemiologist at the University of Toronto. "But the active ingredient is ethanol. If wine-drinkers seem healthier, it's probably just because they tend to be well-to-do."

STILL, THAT'S NO reason to breathe a sigh of relief if vodka is your drink of choice. The reduction in heart disease risk attributed to drinking has been observed in broad surveys of large populations. That doesn't mean every individual benefits from a daily nip. Martini or merlot, alcohol is fickle medicine—especially for women.

In Harvard's nurse study, one of the largest groups of women ever examined, moderate drinking helped only those over age 50. Several other studies have produced the same finding, and for women like Vinickas that presents something of a conundrum. For one thing, she's only 43. She also gets plenty of exercise and has no apparent risk for heart disease. So here's the question that experts have a hard time answering: Do women like her benefit from drinking?

The fact is, among premenopausal women, the risk of heart disease is vanishingly small. In 1993, the most recent year for which statistics are available, 240,000 women died from heart attacks, but only 6,200 of them were under 55. Estrogen seems to play a pivotal role in protecting younger women, though researchers aren't sure how.

But it's clear regular tipping won't improve the odds for most of these women. It's simple: You can't protect yourself from a disease there's virtually no chance you'll get. Perhaps more important, no one knows whether drinking in your thirties keeps you from getting heart attacks in your sixties.

"I wouldn't advise a young woman not to drink," says Klatsky. "But if she had no risks for heart disease, I'd have to say that having a drink each day probably wouldn't do her much good." The same

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Should Americans Really Be Encouraged to Drink?



THE HEART BENEFITS of alcohol may be compelling—for some of us, at least. But even if the prescription is right, ours may be the wrong society for it. Though we drink less per capita than most other nations, our alcoholism rate is among the highest in the world.

If we were talking about pills, not beer or wine, the dangers would be obvious, says Michael Criqui, an epidemiologist at the University of California at San Diego. “Suppose alcohol were brought before the Food and Drug Administration for approval as a heart drug. Trials would show some cardiac protection, but they would also show that 10 percent of users would develop lifelong addiction. The potential for harm is just too high.”

Part of the problem is that most Americans have a love/hate relationship with the bottle. We are a nation of bingers and teetotalers, surrendering ourselves to Saturday night benders, then swearing on Sunday we’ll never touch another drop.

Still, some segments of our society manage to drink moderately, even to get drunk on occasion, without disaster. Psychiatrist George Vaillant of Harvard Medical School tracked the health of 400 men from the Boston area for more than 50 years. The men from Italian American families were seven times less likely to become alcoholics than those from Irish American families.

Some experts speculate that genetics may play a role in explaining why certain cultures are more vulnerable to alcoholism than others. But attitude may be more important, Vaillant says. While Italians viewed drinking as a matter-of-fact part of their daily lives, the Irish stigmatized it as a sin—in church, at least. In the bars, Vaillant found, Irish men were far more accepting of drunkenness than their Italian neighbors and even admired one another’s capacity to overindulge.

If we could emulate our Italian fellow citizens, experts say, it would make sense for health watchdogs to push the light-drinking message. But given our current ambivalence, alcohol could prove one of the riskiest remedies we’ve ever tried. —M.M.

logic applies to men under 40, the age at which their heart disease rates begin to rise.

For young women who *do* have risk factors for heart disease—obesity, mildly elevated blood pressure, or a parent who had a heart attack before turning 60—light drinking may be helpful, as long as they have no other reasons to avoid alcohol. And alcohol can work magic for women once they pass menopause and their estrogen levels decline. Modest amounts of alcohol seem to shore up the body’s natural production of this key hormone, improve the balance of good and bad cholesterol, and keep arteries open. For women in their sixties and seventies, the age range at which *their* heart disease rates rise, a little alcohol may make a lot of sense.

With one possible exception: women on estrogen replacement therapy. Studies show that those little pills help prevent clogged arteries, and it’s not clear that alcohol provides much additional benefit. Not only that, drinking seems to accelerate the estrogen’s absorption into the bloodstream, which may raise the chances of breast cancer. Still, three-quarters of postmenopausal women are not on hormone therapy, and for them a martini, say, might be just the right heart prescription.

EVEN IF YOU FALL into one of the alcohol-friendly groups, you have one more reason to be wary: The good effects of ethanol decline sharply if you drink too much. By and large, experts in this country now agree that one drink a day for women, and two for men, is the optimal amount. But researchers at the University of Western Australia recently came up with even lower numbers. Analyzing 148 studies of mortality among drinkers and nondrinkers, they found that women who had less than one drink daily were the least likely to die of any cause, outliving women who abstained from alcohol. At one drink or slightly more daily, a woman’s chance of death began to parallel that of an abstainer; at just two drinks, her chance of death was 13 percent higher than a nondrinker’s. The researchers concluded that the best “dose” for women was “approximately two standard drinks per day less than in men.”

Which is to say, hardly any at all. Women who lived longest were having not quite half a drink a day. The Australians consider a standard drink to be ten grams of pure ethanol, while the typical American drink holds 12 grams. Factor in the difference, and the ideal amount for women is hardly enough to last through a plate of Vinickas’s risotto.

“One drink a day is the maximum amount for women,” says Ashley. “You can get most of the heart benefit from less.” In the Harvard nurses study, for instance, researchers found that just one to three drinks a week brought about a 17 percent drop in chances of death for middle-aged women, compared to nondrinkers.

That may sound like good news. Even abstemious Aunt Tilly should be able to manage a measly five ounces for her heart’s sake. But how practical is this

prescription? Committed teetotalers aren't likely to change their ways, no matter how sweet the carrot that researchers are dangling. And what moderate drinker is going to stop happily at half a drink? Even wine-lovers, the most temperate of imbibers, tend to consume more than one glass at an average sitting. Two drinks are *de rigueur* for those who prefer beer or spirits. Sipping just a smidge seems pointless somehow, like ordering a hot fudge sundae just to take one bite.

Besides, when experts talk about an average drink, they mean five ounces of wine, 12 ounces of beer, or one and a half ounces of 80-proof liquor. Which is a whole lot less than what those stemware dirigibles you get at fancy housewares stores can hold. And at restaurants, if the bartender's generous, watch out.

Countless Americans may unknowingly drink more than they need to gladden their hearts. And that's what worries some experts, because at higher amounts—not that much higher than the one-drink guideline—alcohol carries health risks that may outweigh its benefits. When plotted on a graph, the death rates among drinkers form a J-shaped curve: The chances of dying dip if women drink just a little more than not-at-all but begin to rise again if they take as few as two drinks a day. The heaviest drinkers—those who have more than six servings a day—not only lose the heart benefits of alcohol but also die from other events such as accident or cancer at extraordinarily high rates.

In fact, here's something you don't hear much about the French Paradox: While heart disease rates are low in France, the French don't live much longer than we do. They just die differently—often from cirrhosis, accidents, and other problems related to alcohol use and abuse.

Among American women, the most frightening “other problem” may be a greater risk of breast cancer. According to the Harvard School of Public Health, two drinks a day raises a woman's odds of getting this deadly disease by 25 percent. That may be a conservative estimate. Some epidemiologists believe the risk rises as much as 40 percent.

In either case, however, the likelihood of breast cancer remains small, especially compared to the chances of developing heart disease. About 43,000 women lose their lives to breast cancer annually, while some 240,000 die of heart attacks. But in real life, figuring the probabilities can be a difficult and nerve-racking calculus.

Remember our risotto-loving friend? Vinickas's maternal grandmother died of breast cancer in 1945 at age 53, and Vinickas's doctor has already warned her to have annual mammograms. Family history

puts her at risk for breast cancer. Conceivably, a daily chardonnay might make matters worse.

“It's a big worry,” says Vinickas. “I certainly don't want to increase the chances of it happening.” But how can she know whether a drink here and there matters? She can't.

BELIEVE IT OR NOT, the picture gets still more complicated: *When* women drink may be as important as how much they drink. Epidemiologist Maurizio Trevisan of the University of Buffalo recently collected survey data from 8,000 male and 6,000 female drinkers in Italy. Those who drank apart from meals, he found, tended to have more overall than those who enjoyed their drinks with food. And the alcohol consumed away from the dinner table provided no additional cardiovascular benefits.

Worse, after accounting for other risk factors, Trevisan found that women who drank apart from meals had an 80 percent greater chance of dying from noncardiovascular causes than those who paired food and drink.

The reason? Not only is drinking while you eat a hedge against drinking too much—which may keep your cancer risk steady—but there seems to be a healthy synergy between what's on the plate and what's in the glass. For starters, food slows the absorption of ethanol into the bloodstream. That's particularly useful for women because the enzyme that breaks down alcohol in the stomach is four times less active in women than in men (barroom Don Juans have depended on this quirk for generations). Drink while you eat and you're less apt to get sloshed and end up in a fatal car crash. Also, ethanol may be even more effective at inhibiting the blood clotting caused by dietary fat if you drink and eat at the same time.

Feeling woozy yourself? No surprise: Getting a grasp on the drinking debate isn't easy. So here's some advice. If alcohol is to be your weapon against heart disease, the program should include not more than one drink a day, preferably less, taken at meals. That's not quite as glamorous as sucking down a bottle of burgundy with a stranger at a Paris café. And even in relatively small amounts, the risks of drinking may well exceed the benefits.

Already some experts are questioning whether a health strategy that requires so much hairsplitting can be worth the trouble. “There are easier ways to avoid heart attacks,” says psychologist Tom Greenfield of the Alcohol Research Group in Berkeley, California. “Exercise. Reduce the stress in your job. These behaviors carry a lot less risk.”

Greenfield isn't the only one who thinks so. Despite America's incessant rhapsodizing about drinking habits in France, the French themselves are choosing to drink less and less. We're reaching for the cabernet; they're reaching for the Perrier.

Now *there's* a paradox. H

Michael Mason is a staff writer.

A woman who has two or more drinks a day may raise her risk of breast cancer by as much as 40 percent.