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More Evidence That Moderate Drinking May Benefit the Heart

Two large studies published in June, one covering 52 countries around the globe and the other from Scandinavia, link low-to-moderate alcohol consumption to reduced risk of heart attack or a life-threatening flaw in the main artery from the heart.

The protective effects of moderate drinking were not universal across Asia. And it's not clear whether all types of alcohol offer the same benefits - both papers urge further exploration of that and other questions. **But both also find increased risk of harm when drinking goes from moderate to heavy**.

"There is now solid evidence that alcohol, when consumed on a regular basis and at low volumes (up to one drink for women and two drinks for men daily), confers protection against cardiovascular disease, whereas regular amounts of more than four to five drinks daily and heavy episodic drinking have (the) opposite effects," write Drs. Stefan Kiechl and Johann Willeit, neurologists at Innsbruck Medical University in Austria, in an editorial in the journal *Circulation*.

One of the new studies looked at drinking and risk of experiencing abdominal aortic aneurysm (AAA), a "ballooning" of the main blood vessel from the heart that delivers blood to the trunk and lower body.

The condition kills about 11,000 Americans each year and contributes to the death of 17,000 more, according to the Centers for Disease Control and Prevention.

Men, especially those over age 60, are most likely to have AAA. Smoking and high blood pressure can increase the risk, and if the aneurysm ruptures, it can be life threatening.

Heart attack, which affects about 1.5 million people in the U.S. each year, is subject to many of the same risk factors and also can be life threatening.

For the heart attack study, researchers used data from 52 countries to compare 12,000 cases of

first heart attacks with 15,500 similar people who did not have a heart attack. Trained staff administered alcohol use questionnaires to heart attack victims and the comparison group.

Compared to not drinking at all, current alcohol use was linked to a 13 percent lower risk of heart attack, on average, in almost all regions, with the exception of South Asian countries including India, Sri Lanka, Pakistan and Bangladesh.

In other regions, the protective association went away when alcohol consumption increased beyond four drinks per week.

Having six or more drinks in the past 24 hours was associated with a 40 percent increased risk of heart attack, especially for people over age 65.

"There have been several postulated mechanisms by which low levels of alcohol use could protect against heart attack and by which heavy alcohol use could increase the risk of heart attack," said lead author Dr. Darryl P. Leong of the Population Health Research Institute at McMaster University and Hamilton Health Sciences in Canada.
It could also be true that people who drink a low to moderate amount of alcohol do other things differently that might affect their risk of these problems, Leong told Reuters Health by email.

These findings suggest caution before "*recommending: low to moderate alcohol use*," Leong said, "*given that alcohol may not be protective for all people and is also implicated as a cause of some cancers and injury."*

"**There is little doubt that heavy drinking should be avoided**," he said. "We do not know at an individual level if there is a 'safe' threshold of alcohol use; this will need further study."

For the AAA study, researchers combined two Swedish data sets with a total of 70,000 men and women over age 45 who were followed from 1998 to 2011.

Their alcohol consumption was reported in food frequency questionnaires, and the incidence of AAA was cross-referenced with Swedish Health Registries. Over the 14-year period, 1020 men and 194 women were diagnosed with AAA.

Drinking four to six glasses of alcohol per week was associated with a 20 percent lower risk of AAA for men and a 44 percent lower risk for women, compared to drinking less than one or two glasses per week.

The risk kept decreasing up to the point of consuming 10 glasses per week for men and five for women. Among specific alcohols, beer and wine in particular were associated with lower risk.

However, for people who did not have cardiovascular diseases, moderate drinking was not tied to any change in AAA risk.

"Generally speaking, the development of AAA and heart attack is a slow process that is thought to begin with an inflammatory damage of the vessel walls," said lead author Dr. Otto Stackelberg. "This damage can, for example, be caused by infections, cigarette smoke, high blood pressure, or other circulating components in your blood, like fatty acids or sugar."

"The alcoholic component itself (ethanol) has previously been found to alter levels of fatty acids in the blood, while antioxidants found in fermented beverages like wine and beer have been connected to other favorable effects (e.g. decrease inflammation in the vessel walls)," said Stackelberg, of the Institute of Environmental Medicine at the Karolinska Institutet in Stockholm, in an email.

Although moderate alcohol use has been associated with many cardiovascular diseases, this is the first time a study has specifically identified an association with AAA, he told Reuters Health. It may be that the association is due to a third factor or behavior he and his team did not account for, he said.

"I would not advise anyone to start to drink alcohol if they have not been drinking before based on these findings," Stackelberg said. "However, a low to moderate consumption does not seem to be harmful for most individuals so I would neither discourage those who like to take a glass of wine to dinner."

"The American Heart Association recommends no more than two daily glasses of alcohol for men, and no more than one daily glass for women," he noted.

SOURCE: National Institute on Alcohol Abuse and Alcoholism