Evidence Mounts for Heart Benefits of Alcohol

A large new Spanish study has found that men who drink alcohol in almost any quantity are nearly one-third less likely to develop coronary heart disease (CHD). The results are also among the first to separate former drinkers from non-drinkers, thereby avoiding what skeptics of previous research dubbed the "sick quitters" error.

The findings, using data from the Spanish cohort of the European Prospective Investigation into Cancer (EPIC), add to mounting evidence that alcohol consumption protects against heart disease. It's not clear why drinking might be good for the heart, but experts have speculated that the mechanism might involve alcohol's effects on clotting, insulin sensitivity, inflammation or HDL ("good") cholesterol.

Alcohol consumption was also associated with a reduced risk of CHD among women in the Spanish study, but the results were not statistically significant. Researchers suggested this was due to the lower number of coronary events, such as heart attacks, among female participants.

Larraitz Arriola, PhD, of the Public Health Department of Gipuzkoa, and colleagues analyzed data on 15,630 men and 25,808 women, ages 29 to 69, who completed a detailed questionnaire on their diet, drinking, lifestyle and medical history. Over an average followup period of 10 years, the men suffered 481 coronary events and the women experienced 128. Researchers adjusted for known risk factors for heart disease such as obesity and smoking.

In men, moderate, high and very high alcohol consumption were all associated with more than 30% lower rates of coronary heart disease. "Moderate" consumption was defined as 5-30 grams a day of alcohol, "high" as 30-90 grams daily, and "very high" as more than 90 grams; in the US, a standard drink is defined as containing 14 grams of alcohol, though of course actual amounts vary. All types of alcoholic beverages were associated with reduced CHD risk. The link was weaker for wine drinking, but remained significant at higher consumption levels.

Some scientists have questioned whether the results from earlier studies showing heart-health benefits from alcohol might be confounded by "abstainer error." By lumping former drinkers in with those who've always abstained, this thinking goes, results could be skewed by "sick quitters"—people who've recently stopped drinking due to illness, disability or frailty.

So Arriola and colleagues compared drinkers only to lifelong abstainers, analyzing ex-drinkers separately. Indeed, they found that people who'd quit drinking were much less healthy at the study's start, more prone to hypertension, diabetes and cardiovascular conditions. By removing these former drinkers from the comparison, the researchers could be confident that "abstainer error" did not cloud their results.

Although the Spanish study found a reduction in men's CHD risk associated with even the highest levels of alcohol consumption, drinking too much has other risks. The Dietary Guidelines for Americans advises that if you do drink alcohol, you should do so in moderation: no more than two drinks a day for men, one for women. Count as one "drink" 12 ounces of regular beer, 5 ounces of wine or 1.5 ounces of 80-proof distilled spirits. Keep in mind, too, that alcoholic beverages contain "liquid calories"—about 100 in a glass of wine, 150 in a bottle of beer.

**To learn more:** Heart, online before print, <dx.doi.org/10.1136/hrt.2009.173419>.

Walnuts Linked to Healthier Blood Vessels

In the latest finding sure to please walnut lovers (not to mention growers), Yale researchers report that a daily dose of walnuts improved the blood-vessel health of type-2 diabetics. David L. Katz, MD, MPH, and colleagues recruited 24 diabetes patients, average age 58, and tested their endothelial function (a measure of the health of blood-vessel linings) before and after eight weeks on a diet containing about two ounces of walnuts daily. Those results were compared to eight weeks on patients' usual diet.

Endothelial function improved significantly on the walnut diet. While on the walnut diet, patients also saw increased fasting serum glucose, lowered total cholesterol and reduced LDL ("bad") cholesterol compared to the start of the trial, although these changes weren't significant when compared to their standard diet. There was no weight gain during the trial.

The findings are in line with another recent study (see the July 2009 Healthletter) that showed walnuts were associated with reduced cholesterol levels; other research has reported heart-health benefits for other nuts including pistachios and macadamias.

In 2004, the US Food and Drug Administration (FDA) allowed walnut packagers to add a qualified health claim to their labels: "Supportive but not conclusive research shows that eating 1.5 ounces of walnuts per day, as part of a low saturated fat and low cholesterol diet, and not resulting in increased caloric intake may reduce the risk of coronary heart disease." (Keep in mind as you munch that 1.5 ounces of walnuts—about 20 halves—contain 278 calories.)

Dr. Katz and colleagues are now launching a study of adults at risk for diabetes, to see if these same benefits extend to that much larger population.

**To learn more:** Diabetes Care, online before print; abstract at <dx.doi.org/10.2337/dc09-1156>.