

Moderate-to-heavy alcohol intake may increase risk of atrial fibrillation

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Atrial Fibrillation (AF) is the most common cardiac arrhythmia (abnormal heart rhythm). Its name comes from the fibrillating (i.e., quivering) of the heart muscles of the atria, instead of a coordinated contraction. The result is an irregular heartbeat, which may occur in episodes lasting from minutes to weeks, or it could occur all the time for years. Atrial fibrillation alone is not in itself generally life-threatening, but it may result in palpitations, fainting, chest pain, or congestive heart failure.

There is no doubt that heavy alcohol intake and [binge drinking](#) can lead to cardiac arrhythmias, with the "Holiday Heart Syndrome" being known for more than three decades. This syndrome often includes atrial fibrillation; the syndrome is usually not associated with long-standing heart disease and the arrhythmia tends to resolve when drinking stops.

Members of The international Scientific Forum on Alcohol Research comment "This paper, *Alcohol consumption and risk of atrial fibrillation. A meta-analysis*, analyzing the results of 14 papers suggests that even [moderate drinking](#) can lead to this syndrome, but others find no effect for moderate alcohol intake, only for heavy drinking. One of the best studies on alcohol consumption and risk of atrial fibrillation is a Danish cohort study (the Danish Diet, Cancer and Health Study) examining the issue among 22,528 men and 25,421 women followed over 6 years. The study included a large number of cases with atrial fibrillation, detailed information on potential confounding factors, and complete follow up through nationwide population-based registries. The results included a

modest increase in risk of atrial fibrillation in men drinking more than 2 drinks/day and no association between alcohol consumption and risk of atrial fibrillation in women.

There is much evidence that heavy alcohol consumption is associated with an increased incidence of atrial fibrillation, among other health risks. The pattern of consumption (speed, time frame and without food), not often addressed, affects risk too - we know that binge drinking is associated with a greater incidence of arrhythmias, especially atrial fibrillation.

A weakness of this paper, and of essentially all meta-analyses, is that there were varying definitions for categories of [alcohol consumption](#), and the highest category of alcohol intake included alcoholics and 6 or more drinks/day for some studies, while the highest category of alcohol intake was = 1-2 drinks/day in other studies.

The consistent message is that there is a difference between heavy and moderate use of alcohol, between binge drinking and a healthy pattern of drinking, and inherent health risk. The most important question would be: Does light to moderate drinking increase the risk of AF? The conclusion of the authors of this paper seems to be yes, while many other studies find little effect of such drinking'.

Overall, the scientific evidence from many studies suggests that heavy drinking may increase the risk of atrial fibrillation, although whether light-to-moderate intake increases the risk seems unlikely. Previous basic scientific data of mechanisms of [atrial fibrillation](#) have suggested that alcohol has little effect on this arrhythmia.

More information: Kodama S, Saito K, Tanaka S, Horikawa C, Saito A, Heianza Y, Anasako Y, Nishigaki Y, Yachi Y, Iida KT, Ohashi Y, Yamada N, Sone H. Alcohol consumption and risk of atrial fibrillation.

A meta-analysis. *J Am Coll Cardiol* 2011;57:427-436.

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