

Even moderate, habitual alcohol consumption can cause irregular heartbeat

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Often people who binge drink experience an irregular heartbeat or a heart "flutter," sometimes referred to as "holiday heart syndrome." However, people who drink smaller amounts of alcohol on a regular basis are also at higher risk of irregular heartbeat, according to a review published today in the *Journal of the American College of Cardiology*. Irregular heartbeat, also known as atrial fibrillation, not only directly affects the heart itself, but is a leading cause of stroke, heart failure and other heart-related complications.

More than 100 previous studies have shown that a light to moderate intake of alcohol—up to seven standard drinks per week for women and 14 standard drinks per week for men—can actually be good for some people, and reduce the risk of heart disease, more specifically [coronary artery disease](#). However, this review shows this is not the case when it comes to irregular heartbeat.

"There has been a lot of attention in recent years about the benefits of drinking small amounts of alcohol for the heart," said the study's lead author, Professor Peter Kistler, M.B.B.S., Ph.D., of Baker IDI Heart and Diabetes Institute and the Alfred Hospital in Melbourne, Australia. "The results are significant, since chances are, there are people who are consuming one to two glasses of alcohol per day that may not realize they are putting themselves at risk for irregular heartbeat."

The review included following nearly 900,000 people for 12 years and reported an 8 percent increase in the risk of irregular heartbeat for every

[alcoholic drink](#) per day consumed. Both men and women were equally affected. "While moderate amounts of alcohol appear protective for the 'plumbing' or blood supply to the heart muscle, the benefits of alcohol do not extend to the electrical parts of the heart or heartbeat," Kistler said.

Alcohol has many effects on the human body, and several likely contribute to irregular heartbeat:

- **Effect on the Cells:** Drinking can damage the cells and lead to small amounts of fibrous tissue within the heart causing an irregular heartbeat. The review found that people who continue to drink are more likely to have ongoing irregular heartbeats even after catheter ablation, an important treatment for irregular heartbeat where parts of the heart are cauterized.
- **Electrophysical Effects:** Heart cells contract in a coordinated way by movement of electrical signals between cells. Over time, drinking may actually change these electrical signals, triggering irregular heartbeat.
- **Effect on the Autonomic Nervous System:** The autonomic nervous system controls bodily functions such as heart rate, digestion and respiratory rate. The review found that alcohol stimulates this internal nervous system leading to irregular heartbeat.

"People who continue to consume alcohol at moderate rates may also notice their irregular heartbeats become more frequent. This is concerning, because it can lead to serious issues, such as [heart failure](#) and stroke," Kistler said. "So, even though we do not have randomized data that tells us what a 'safe' amount is to consume, people with an [irregular heart beat](#) should probably drink no more than one alcoholic drink per day with two alcohol free days a week."

More research still needs to be done to determine the specific causes

responsible for the relationship between alcohol and irregular heartbeat. Researchers believe they may include direct toxicity and alcohol's contribution to obesity, sleep disordered breathing and hypertension. More research also needs to be done to determine whether avoiding [alcohol](#) completely is required for patients who have [irregular heartbeats](#).

More information: *Journal of the American College of Cardiology*, DOI: [10.1016/j.jacc.2016.08.074](https://doi.org/10.1016/j.jacc.2016.08.074)

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