

Study finds drinking wine with meals may lower the risk of type 2 diabetes

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Drinking a little wine with dinner may help lower risks of developing type 2 diabetes, according to researchers at Tulane University School of Public Health and Tropical Medicine.

The preliminary study results were presented last week at the American Heart Association's [Epidemiology, Prevention, Lifestyle & Cardiometabolic Health Conference 2022](#) in Chicago.

In the study researchers examined the effect moderate drinking may have related to new-onset type 2 diabetes among nearly 312,400 adults from the UK Biobank who self-reported themselves as regular alcohol drinkers. During an average of nearly 11 years of follow-up, about 8,600 of the adults in the study developed type 2 diabetes.

The analysis found:

- Consuming alcohol with meals was associated with a 14% lower risk of type 2 diabetes compared to consuming alcohol without eating food.
- The potential benefit of moderate drinking on type 2 diabetes risk was evident only among the people who drank alcohol during meals, although the specific time of meals was not collected in this study.
- The beneficial association between alcohol drinking with meals and type 2 diabetes was most common among the participants who drank wine vs. other types of alcohol.
- Consuming wine, beer and liquor had different associations with type 2 diabetes risk. While a higher amount of wine intake was associated with a lower risk of type 2 diabetes, a higher amount of beer or liquor was associated with a higher risk of type 2 diabetes.

“The effects of alcohol consumption on health have been described as a double-edged sword because of its apparent abilities to cut deeply in either direction – harmful or helpful, depending on how it is consumed,” said study author Dr. Hao Ma, a research fellow at the Tulane University Obesity Research Center and the Tulane Personalized Health Institute. “Previous studies have focused on how much people drink and have had mixed results. Very few studies have focused on other drinking details, such as the timing of alcohol intake.”

Moderate drinking is defined as one glass of wine or other alcoholic beverage daily for women and up to two glasses daily for men. That works out to be up to 14 grams, or about 150 ml, of wine a day for women and up to 28 grams, or about 300 ml, of wine daily for men, Ma said.

“Clinical trials have also found that moderate drinking may have some health benefits, including on glucose metabolism. However, it remains unclear whether

glucose metabolism benefits translate into a reduction of type 2 diabetes,” he said. “In our study, we sought to determine if the association between alcohol intake and risk of type 2 diabetes might differ by the timing of alcohol intake with respect to meals.”

A study limitation is that most of those participating were self-reported white adults and of European descent. It is unknown whether the findings can be generalized to other populations.

Co-authors are Dr. Xuan Wang, MD, PhD; Xiang Li, MD, PhD; Yoriko Heianza, PhD; and Lu Qi, MD, PhD.

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