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## **Moderate drinking associated with better cognition in women**

### ***American Heart Association journal report***

A drink or two a day may be associated with better cognitive function in women, according to a report from an ongoing study of New York City residents. The report was published in the rapid access issue of *Stroke: Journal of the American Heart Association*.

"Women who had up to two drinks a day scored about 20 percent higher on the Mini Mental State Exam (MMSE) than women who didn't drink at all or who consumed less than one drink a week," said Clinton Wright, M.D., M.S., lead author of the study and assistant professor of neurology at the College of Physicians and Surgeons of Columbia University in New York. "The difference remained after adjusting for risk factors such as income, marital status, race or ethnicity and other vascular risk factors such as high blood pressure and cardiac disease."

The researchers said they were surprised by the lack of association between carotid plaque and alcohol consumption. Other research had suggested that alcohol consumption might slow the progression of plaque, the fatty material that builds up in arteries and increases the risk of heart attack and stroke.

"This study suggests that the relationship between alcohol and cognition was not mediated by large vessel atherosclerosis," Wright said. "Future studies with brain imaging are planned to examine the importance of small vessel disease in this relationship."

The fact that the study did not find an association between alcohol consumption and cognition in men might be the result of the sample size since there was "only a small group of men who were never drinkers, so it may not have been possible to detect an effect in men," Wright said.

Study participants were enrolled in the Northern Manhattan Study, an ongoing study of 3,298 stroke-free residents of Northern Manhattan selected by a random digit dialing protocol. This study was conducted in a subsample of 2,215 participants with both alcohol and carotid plaque data available. Their average age was 69. Fifty-four percent of the participants were Hispanic, 25 percent black and 21 percent white.

The ethnicity of the participants was important, as only a few previous studies have included blacks or Hispanics, who have higher rates of cerebrovascular disease, dementia and Alzheimer's disease.

Researchers assessed alcohol intake in structured interviews, while carotid artery plaque was measured by carotid ultrasound.

"It was important for this study that all of the participants lived in the area of the same city, so they would all be subject to the same environmental influences," Wright said.

The participants were divided into five groups based on alcohol consumption:

- Never drinkers (509)
- Past drinkers (494)
- Seldom drinkers, defined as less than one drink a week (300)
- Moderate drinkers, meaning those who drank up to two drinks a day (796)
- Those who had more than two drinks a day (116)

Wright cautioned that the study is limited by the use of the MMSE, which "is not a very sensitive test and doesn't address a number of cognitive domains that would be assessed by a more sensitive neuropsychiatric evaluation. Such a study is currently ongoing in this cohort."

Despite study limitations, he said the results support observations that moderate drinking is protective in women and do not support large vessel atherosclerosis as a mediating factor.

The American Heart Association recommends that people who drink alcohol do so in moderation. This means having an average of no more than two drinks per day for men and one drink per day for women. (A drink is one 12 oz. beer, 4 oz. of wine, 1.5 oz. of 80-proof spirits, or 1 oz. of 100-proof spirits.)

The American Heart Association does not recommend that nondrinkers start drinking alcohol to seek health benefits. Drinking alcohol increases the risk of alcoholism, high blood pressure, obesity, stroke, breast cancer, suicide and accidents. Also, it's not possible to predict which people may develop alcoholism.

Consult your doctor on the benefits and risks of consuming alcohol in moderation.

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