

# Even moderate drinking may dull the aging brain

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(HealthDay)—People who drink at even moderate levels may see some

of their mental skills slip faster as they age, a new study suggests.

The researchers found that those who regularly drank alcohol showed greater brain shrinkage than non-drinkers by old age. They also lost more of their language "fluency"—a measure of memory and thinking skills.

And, the effects were seen even among [people](#) who drank "moderately"—roughly four to seven drinks a week, the researchers found.

The findings do not prove that alcohol was to blame.

But experts said they add to evidence that moderate [drinking](#) is not as healthful as many like to believe.

"People should be skeptical of the idea that it's actually healthy, and treat alcohol with respect," said Tim Stockwell, director of the Center for Addictions Research at the University of Victoria, in British Columbia, Canada.

Stockwell, who was not involved in this latest study, has done work examining a popular notion—that drinking, in moderation, is good for the heart.

Many studies have found that moderate drinkers tend to have lower heart disease rates than heavy drinkers and non-drinkers alike.

But, in his own research analyzing those studies, Stockwell and his colleagues have found critical flaws. For one, the definition of "non-drinker" often creates problems. In many studies, it includes former drinkers who likely quit for health reasons—whereas people who continued to drink as they aged were probably healthier to begin with.

And while the latest study cannot pin the blame on alcohol, it avoided some of the pitfalls of other research, Stockwell said.

"It measured the cumulative effects of alcohol across the lifespan, with six measures of drinking over 30 years," he said. "This largely avoids the kinds of bias we highlight in our research."

The findings were published June 6 in the *BMJ*. They're based on 550 British adults who were 43 years old, on average, at the outset. Over the next 30 years, they reported on their health and lifestyle habits every five years or so. They also took standard tests of memory and other mental skills.

Toward the end of the study, they underwent MRI brain scans.

Overall, the study found, people who regularly drank showed more atrophy in a brain region called the hippocampus, versus those who'd consistently been occasional drinkers or abstainers.

Hippocampus size is linked to memory, explained lead researcher Dr. Anya Topiwala. Atrophy in that brain region, she said, is one of the early changes seen in Alzheimer's disease.

"However, there can be other causes of hippocampal atrophy," stressed Topiwala, a clinical lecturer in psychiatry at Oxford University, in England.

So these findings cannot actually show whether drinkers face any greater risk of dementia, she said.

Overall, the study found, moderate drinkers were more than three times as likely as abstainers to show abnormal levels of atrophy in the right hippocampus.

That included people who averaged 14 to 21 "units" of alcohol each week. That is roughly equivalent to four to six pints of beer, or five to seven glasses of wine, a week, according to Topiwala's team.

Similarly, both moderate and heavier drinkers showed a faster decline in language fluency over 30 years—a 14 percent to 17 percent greater reduction, versus abstainers.

Language fluency was measured by a test that asks people to name as many words starting with a specific letter as they can in one minute.

There was no evidence, Topiwala said, that lighter amounts of drinking "protected" the brain, compared with abstinence.

On the other hand, the study found, people's drinking habits were not tied to their performance on other tests of mental acuity, including [short-term memory](#).

Topiwala said that was surprising, given the findings on hippocampus size.

One possibility, she said, is that the hippocampus may shrink before problems with short-term memory and other mental functions make themselves known.

Last year, the U.K. changed its guidelines on "safe" drinking limits, based on evidence tying [moderate drinking](#) to certain cancers. Now, the government advises men and women to drink no more than 14 units per week (five glasses of wine, for example).

U.S. guidelines remain more liberal. Women are advised to have no more than one "standard" drink a day, while men can have up to two a day.

A standard drink includes a 12-ounce beer, for example, or a 5-ounce glass of wine.

"We found harmful associations with multiple brain measures in those drinking at levels within U.S. guidelines," Topiwala said.

"My personal view," she added, "is that people should be less confident that drinking at the upper end of U.S. guidelines is 'safe,' and it would be prudent to reduce their intake."

**More information:** Anya Topiwala, BMBCCh, DPhil., clinical lecturer, old age psychiatry, University of Oxford, U.K.; Tim Stockwell, Ph.D., director, Center for Addictions Research of BC, University of Victoria, British Columbia, Canada; June 6, 2017 *BMJ*, online

The U.S. Centers for Disease Control and Prevention has more on [alcohol and health](#).

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