

# A memory aid for seniors: laughter

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Study suggests that humor helps improve recall, reduces stress hormone.

(HealthDay)—Humor and laughter may help combat memory loss in the elderly, a new study suggests.

Previous research has found that the [stress hormone cortisol](#) can harm memory and learning ability in older adults. This new study examined whether mirth might reduce the damage caused by cortisol.

Researchers showed a 20-minute humorous video to a group of healthy seniors and a group of seniors with diabetes. These groups were compared with a group of seniors who didn't see the video.

The two groups that watched the funny video showed significant decreases in [cortisol levels](#) and greater improvements on memory tests, compared to the group that didn't see the video. The diabetes group showed the largest decrease in cortisol levels, while the healthy group had the greatest improvement on memory tests.

The study was to be presented Sunday at the Experimental Biology meeting in San Diego. Research presented at meetings should be viewed as preliminary until published in a peer-reviewed medical journal.

"It's simple, the less stress you have, the better your memory," one of the study's authors, Lee Berk, said in a Federation of American Societies for Experimental Biology news release. "Humor reduces detrimental stress hormones like cortisol that decreases memory [brain cells], lowers your blood pressure and increases blood flow and your mood state. The act of laughter—or simply enjoying some humor—increases the release of endorphins and dopamine in the brain, which provides a sense of pleasure and reward.

"These positive and beneficial neurochemical changes, in turn, make the immune system function better," Berk added. "There are even changes in brain wave activity towards what's called the 'gamma wave band frequency', which also amp up memory and recall. So, indeed, laughter is turning out to be not only a good medicine, but also a [memory](#) enhancer adding to our quality of life."

The findings could be used in designing wellness programs for the elderly, according to study author Dr. Gurinder Singh Bains. Berk and Bains are both from Loma Linda University in Calif.

The study did not prove that humor offsets [memory loss](#), it only found an association between the two.

**More information:** The Geriatric Mental Health Foundation explains how to keep [mentally fit as you age](#).

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