

'Longevity gene' one key to long life, research suggests

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(HealthDay)—Even among people who live well into their 90s, those with a particular gene variant may survive the longest, a new study finds.

The [variant](#) is in a gene known as CETP, and researchers have known for more than a decade that people who carry it have a better shot at an exceptionally long life—past 95 or even 100.

CETP is involved in cholesterol metabolism, and the longevity-linked variant raises blood levels of HDL cholesterol (the "good" kind) and promotes larger-than-normal HDL particles, researchers say.

The new findings show that even when you look at people who've

already lived beyond age 95, those with the "favorable" CETP variant survive longer, said Dr. Sofiya Milman, an assistant professor at the Albert Einstein College of Medicine in New York City.

Milman was scheduled to present the findings Thursday at the annual meeting of the Gerontological Society of America in Washington, D.C. Data and conclusions presented at meetings are usually considered preliminary until published in a peer-reviewed medical journal.

The results build on work that began at Einstein in the late 1990s. Researchers there have been studying centenarians in and around New York City, all of Ashkenazi Jewish descent. They've found that people in this long-lived group often carry the CETP variant, and have very high HDL levels.

"They don't only live longer, they live healthier, too," Milman said.

Research has linked the CETP variant to lower-than-average rates of heart disease and stroke, as well as sharper mental function in old age, Milman noted. But she said the gene could have other, yet unknown roles in aging, too.

These latest results are based on more than 400 people from the Einstein project. They were typically 97 years old when they entered the study, and were followed anywhere from one to 11 years, Milman said.

Overall, the researchers found, centenarians with the favorable CETP variant tended to survive longer—as did those with relatively higher HDL levels.

But high HDL is "just one of the pieces of the longevity puzzle," said Dr. Luigi Fontana, who co-directs the longevity research program at Washington University in St. Louis.

Researchers are studying a range of factors that can promote a healthier, longer life—including various genes, diet and exercise. Lifestyle choices "have major effects in promoting health and longevity," Fontana said.

In his own research, Fontana is investigating how diet choices, including calorie-cutting, might slow the aging process. Animal research has shown that calorie restriction can extend lifespan—but no one knows if that's true of humans.

Milman agreed that CETP and HDL are far from the only factors in healthy aging and a long life. But understanding at least some of the genes behind longevity, and how they function, is important, she said.

"Down the road, it might be possible to develop therapies that mimic these genes' effects," Milman said.

Drug companies have already begun working on CETP inhibitors, with the hope of mimicking the process by which the gene raises HDL.

More information: The U.S. Centers for Disease Control and Prevention has more on [healthy aging](#).

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