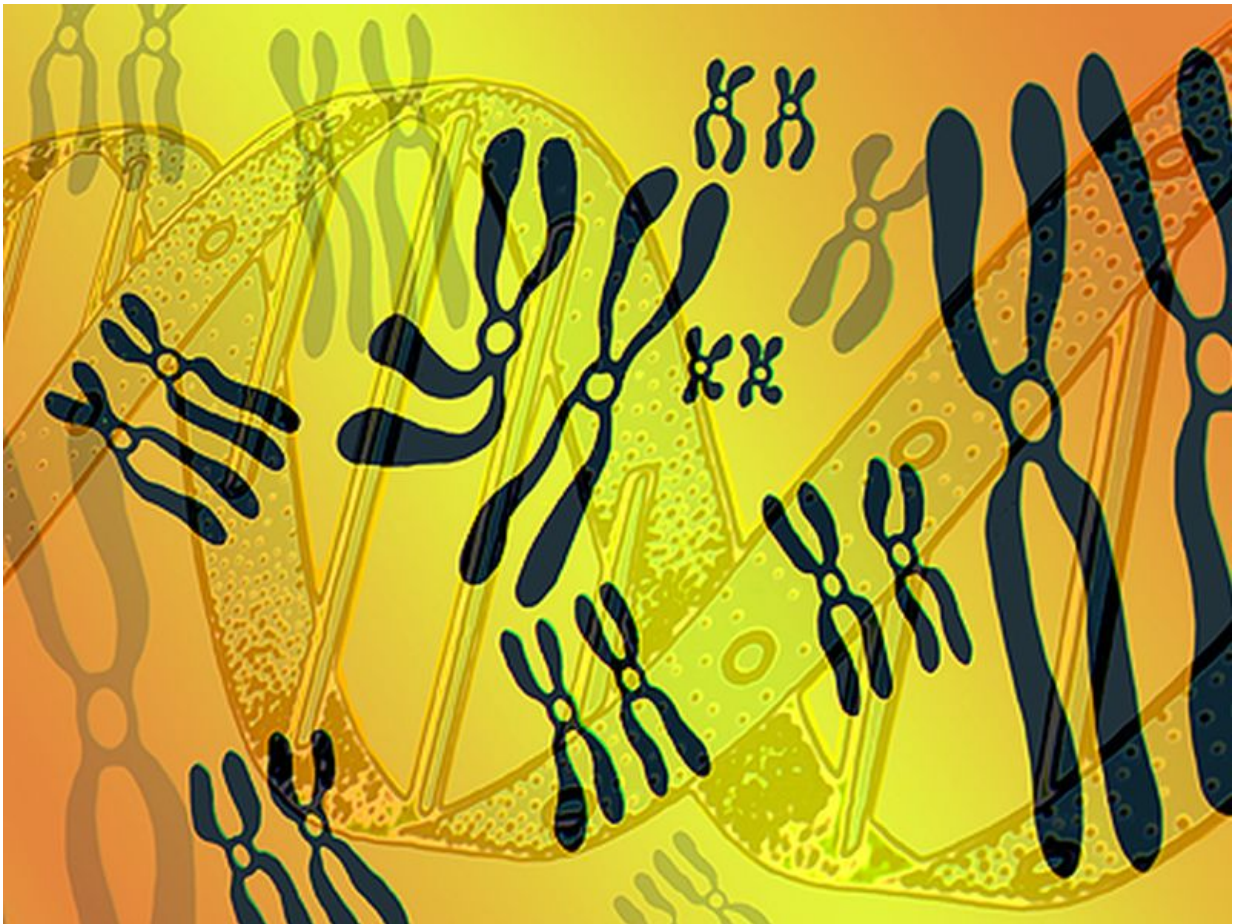


Telomere length tied to higher myocardial infarction risk

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(HealthDay)—Telomere length (TL) is associated with an increased risk

of myocardial infarction (MI), according to a study published in the April 19 issue of the *Journal of the American College of Cardiology*.

Matthew J.J. D'Mello, from the Hamilton Health Sciences General Site in Canada, and colleagues examined the correlation between TL and MI in a large multiethnic case-control study (the INTERHEART study). Participants were recruited within 24 hours of presenting with an acute MI; controls were matched for age and sex and had no history of cardiovascular disease. A validated qualitative polymerase chain reaction method was used to measure leukocyte TL in peripheral blood samples from 3,972 subjects and 4,321 controls.

The researchers found that TL was significantly shorter for INTERHEART subjects than controls. When examined as a continuous variable, each unit reduction in TL correlated with elevated MI risk (odds ratio, 2.24). When categorizing TL into tertiles, the relationship between TL and MI was linear, with odds ratios of 1.36 comparing middle with longest tertile and 1.78 for shortest versus longest tertile. For shortest versus longest two tertiles, the population attributable risk was 14.0 percent. The addition of TL to [cardiovascular risk factors](#) correlated with significant improvement in the discriminability of the regression model.

"Our study supports the use of TL as an independent marker of MI," the authors write. "Further prospective studies of multiethnic populations are needed to confirm results."

The INTERHEART study was partially funded by unrestricted grants from several pharmaceutical companies; one author disclosed financial ties to the pharmaceutical industry.

More information: [Full Text \(subscription or payment may be required\)](#)

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