

Coronary heart disease due to genes, not family lifestyle

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It has long been known that hereditary factors play a role in coronary heart disease. However, it has been unclear whether the increased risk is transferred through the genes or through an unhealthy lifestyle in the family. A new study from the Center for Primary Health Care Research in Sweden, published in the *American Heart Journal*, shows that genes appear to be most important.

The researchers, led by Professor Kristina Sundquist, studied people who had been adopted and compared them with both their biological and their adoptive parents. The Swedish multi-generation register and the in-patient care register were used to follow 80 214 adopted men and women. They were all born in 1932 or later and developed coronary [heart disease](#) between 1973 and 2008. Using the registers, the researchers also studied the adoptive parents and biological parents over the same period.

The risk of coronary heart disease in adopted individuals who had at least one biological parent with coronary heart disease was 40-60% higher than that of a control group. There was no increased risk in individuals whose adoptive parents suffered from coronary heart disease, not even if both adoptive parents had the disease.

"The results of our studies suggest that the risk of coronary heart disease is not transferred via an [unhealthy lifestyle](#) in the family, but rather via the genes," says Kristina Sundquist, a professor at the Center for [Primary Health Care](#) Research in Malmö, Sweden.

"But that does not mean that one's lifestyle is not a factor in one's own risk of developing [coronary heart disease](#)."

More information: Authors: Sundquist K, Winkleby M, Li X, Ji J, Hemminki K, Sundquist J.

Title: Familiar transmission of coronary heart disease: A cohort study of 80,214 Swedish adoptees linked to their biological and adoptive parents. Am Heart J. 2011 Aug;162(2):317-23.

Link: [www.ahjonline.com/article/S000... \(11\)00400-5/abstract](http://www.ahjonline.com/article/S000... (11)00400-5/abstract)

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