

Common genetic link found between stress, heart disease

A new genetic finding from Duke Medicine suggests that some people who are prone to hostility, anxiety and depression might also be hard-wired to gain weight when exposed to chronic stress, leading to diabetes and heart disease.

An estimated 13 percent of people, all of whom are Caucasian, might carry the genetic susceptibility, and knowing this could help them reduce heart disease with simple interventions such as a healthy diet, exercise and stress management.

“Genetic susceptibility, psychosocial stress and metabolic factors act in combination to increase the risk of cardiovascular disease,” said Elizabeth Hauser, Ph.D. director of Computational Biology at the Duke Molecular Physiology Institute. Hauser is senior author of a study detailing the findings in the Oct. 1, 2014, online issue of the *European Journal of Human Genetics*.

Hauser and colleagues analyzed genome-wide association data from nearly 6,000 people enrolled in the Multi-Ethnic Study of Atherosclerosis (MESA). The MESA study began in 2000 to better understand how heart disease starts, compiling the participants’ genetic makeup as well as physical traits such as hip circumference, body mass index, cholesterol readings, glucose levels, blood pressure and other measures.

In the Duke analysis, the researchers first pinpointed a strong correlation between participants who reported high levels of chronic life stress factors and increased central obesity, as measured by hip circumference.

Read full original article: [Gene Interacts with Stress and Leads to Heart Disease in Some People](#)