In lower risk groups, lifestyle, rather than genetics, plays the largest role in diabetes and heart disease, study shows

The data-miners have found a new vein of data, the UK Biobank, which contains genetic information on about 500,000 of their citizens.

... The question posed was the interaction of lifestyle choices and our genes; in this case looking at cardiovascular disease and diabetes.

... Polygenic patterns were identified for coronary artery disease, atrial fibrillation (an irregular heartbeat), stroke, high blood pressure and diabetes.

... The higher genetic risk group had a greater incidence of all of the target diseases. Intermediate risk and low-risk groups showed little difference in the frequency of the targets. So at least for the higher genetic risk profiles, we identified a change in health outcome.

Poor lifestyle increased the risk of an adverse outcome in each of the genetic risk groups. The poorest results were those individuals with the highest risk and worst lifestyle.

... The findings of those with intermediate genetic risk, and remember that is the majority, you and me, were essentially the same as the low-risk genetic group. The most significant effect was solely due to poor lifestyle.

... To summarize, the researchers found no interactions between genetic risk profiles and lifestyle; the role of genes, at least based upon our current knowledge of genetic risk made little contribution to health outcomes for cardiovascular disease and diabetes. The fault does not appear to lie in our genes but our choices.

Read full, original post: Genetics Or Lifestyle – Where Is The Cause Of Disease?