Treatment for Alzheimer's, heart disease may be hidden in genes of Icelandic people

Iceland is desolate, remote and isolated...Since the Vikings settled there more than 1,200 years ago, Iceland's population has remained relatively cut off from the rest of the world, leading to an extremely homogenous gene pool. As much as 90% of the population is considered to be pure Icelandic.

• • •

[N]eurologist and geneticist Kari Stefansson...returned home to Iceland two decades ago and founded a company called deCODE, with the ambitious goal of mapping the genome of the entire country.

Stefansson's team at deCODE has identified genes that impact the chances of developing conditions such as Alzheimer's, heart disease and breast cancer. They have even brought it to a level of problemsolving and creativity. Scientists at deCODE can tell you, based on your genetic makeup, whether you like crossword puzzles or have an artistic mind.

• • •

Most Icelanders can trace their lineage to a single Viking settler. Armed with that information, deCODE can track disease trends through family trees. So when researchers find a gene mutation or variant, it is easier to trace.

"We discovered a variant a few years back...that confers protection against Alzheimer's disease," Stefansson explained. "It's a rare (gene) variance found in about 1% of the Icelandic population, and if you carry that variant, you are almost completely protected against Alzheimer's disease."

However, variants identified in the homogenous Icelandic population may not prove to be effective options among a more heterogeneous population.

The next step is to replicate what the genetic variant does in the body, in the form of medicine, to protect the health of others.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: The key to curing disease could lie in Iceland's genes

For more background on the Genetic Literacy Project, read <u>GLP</u> on Wikipedia.