Why some Amish are genetically wired to live longer

Although known mainly for their adherence to an older, simpler way of life, some Amish folks also have a genetic advantage with respect to longevity and the likelihood they'll develop diabetes. Recent <u>research</u> has found that members of the Old Order of Amish who carry a single copy of a mutated gene (the SERPINE1 gene) not only have less diabetes, their chromosomes have longer telomeres which translates into longer lifespans.

The authors of the study, led by Dr. Douglas E. Vaughan from Northwestern University in Chicago, explained that a particular compound, plasminogen-activator inhibitor-1 (PAI-1) is a direct mediator of cellular senescence or aging.

. . .

The investigators determined the mean leucocyte (a white blood cell) telomere length (LTL) in the carriers. They found that, compared to Amish non-carriers, the carriers had significantly longer LTL. Further, analysis of lifespans of direct relatives of the mutation carriers indicated that their lifespans were 7 years longer than those of non-carriers.

. . .

The results of this study are important for us non-Amish folk too — not that we're going to develop that particular mutation. These findings suggest another means of affecting the risk of diabetes and telomere shortening/lifespan. It may be possible to develop drugs that partially inhibit PAI-1, which in turn might prove beneficial.

Read full, original post: Some Amish Have A Genetic Advantage