## 'Fountain of youth' likely found in genes, not lifestyle

Researchers have just sequenced the genomes of 17 "supercentarians" — people over 110 years of age — and conclude that these long-lived individuals likely have genes that promote longevity, but the fountain of youth component remains elusive so far.

The good news, or bad, depending on how you look at it, is that lifestyle choices don't seem to matter much for those hoping to reach such advanced ages, according to the study, which is published in the latest issue of PLOS ONE.

"Lifestyle choices in terms of smoking, alcohol consumption, exercise, or diet do not appear to differ between centenarians and controls," wrote Hinco Gierman and colleagues. "Controls" in this case refers to younger people who served as comparisons.

That aspect isn't too surprising, given all of the interviews with people aged 100+ who say they still enjoy a glass of wine, a cigar or other indulgence, although most indicate that they do such things in moderation.

Gierman, of the Stanford University Departments of Developmental Biology and Genetics, and his team limited the majority of their analysis to 13 genomes from Caucasian females, just to avoid other major differences that might exist between various genomes.

The researchers suspect that super old people may be "enriched for a rare protein-altering variant" or variants that confer extreme longevity.

A possibility for the fountain-of-youth source is a gene called TSHZ3.

"From our gene-based analysis, the gene showing the most enrichment for protein-altering variants in supercentenarians compared to controls was the TSHZ3 transcription-factor gene," the researchers wrote.

Read full, original article: World's Oldest People Are Genetically Superior