

Scientists sequenced DNA of oldest woman in hopes to unlock long life secrets

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Hendrikje van Andel-Schipper's 113 birthday. Image: Wikipedia.

(Medical Xpress) -- Hendrikje van Andel-Schipper became the world's oldest person in May of 2004 at the age of 115 but dies only a few months later. But contrary to what you would expect Andel-Schipper was as sharp as a whip right up until her death.

Not only did she suffer no signs of Alzheimer's disease or dementia, she did not experience any other typical signs of aging one would expect to find in a person over 100, such as hardening of the arteries. She had been tested for mental sharpness back when she was 112 and 113 and,

despite minor vision problems, she performed better than most 60 to 75-year-old individuals.

Now, six years after her death, a team of scientists from the VU University Medical Center, led by Dr. Henne Holstege, have sequenced Andel-Schipper's DNA and hope to determine if there was something in her genetic makeup that protected her from the typical age-related medical conditions or if there was some outside factor that contributed.

Dr. Holstege's father, a neuroscientist from the University of Groningen, was the first to examine Andel-Schipper's brain immediately after her death. He was shocked to find no signs of dementia or Alzheimer's. This was the first brain over 100 years that did not show any signs of either condition.

Andel-Schipper was born prematurely and doctors did not know if she would survive. She was diagnosed, treated and survived breast cancer at the age of 100 but lost the battle with gastric cancer at 115. Her siblings lived into their 70s and her mother passed away at 100.

Preliminary studies show that there are some rare genetic changes in the DNA yet the role they may have played in protecting against age-related conditions has yet to be determined. The work was presented at the American Society of Human Genetics annual meeting in Canada.

Researchers believe this is the beginning step in understanding how DNA variations contribute to long life but they will need to sequence hundreds more people in order to get a full understanding. Holstege hopes by studying the [DNA](#) of Andel-Schipper they will be able to better understand what protected her from dementia and atherosclerosis and that this will provide as a reference for studying these conditions.

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