



NEWSLETTER

Since 2006 almost 3,600 Americans and 1,250 Danes have been participating in the Long Life Family Study — a research project on longevity and healthy aging

Family members participating in the Long Life Family Study appear to live a long and healthy life. The overall purpose of this study is to gain insight into the behavioral and genetic mechanisms behind this phenomenon so that more people can experience healthy aging.

Aging processes are slow, and changes are best identified over a period of several years. That is why we have contacted you by telephone or letter once a year to update the data we collect from you. We have been funded for a second in-person follow-up examination, which began in October 2014, so we will now be able to better examine the impact of genes and environment on longevity. This follow-up visit includes collecting updated and new information. Columbia University in collaboration with Washington University, Boston University, University of Pittsburgh, and the University of Southern Denmark. will carry out this research project.

Visit 2 Update

Thank you for your continued participation in this new phase of the study! If we have not yet contacted you to participate in this current investigation wave, you will hear from us over the next several months. All family members will be invited for our second follow-up visit, including those whose parent generation family members are no longer with us. Across all field centers mentioned above, 859 participants have been seen in this new investigative wave since last fall. The Columbia University staff members have conducted this second home visit on 282 of our participants, many of whom reside in the tri-state area as well as in more remote locations such as Wisconsin, California, Missouri and Florida. Of these 282 participants seen, 10% of our participants are over the age of 99 and 31% of our participants are between the ages of 90 and 99, demonstrating the exceptional longevity of our study participants. Additionally, among these participants seen, 107 (38%) are in the oldest generation and 175 (62%) are in the offspring generation. It has been great to see you all again and we continue to enjoy hearing about your secrets to longevity!

Additionally, spouses in both generations are essential for this follow-up study because they share environmental factors and not genes, this allows us to examine the influences of a healthy environment on successful aging. When combining information about the aging of the parents, their children and the spouses of participants, we can obtain knowledge about ways of enhancing our chances of living a long and healthy life.



National Institute
on Aging



What has the LLFS Study discovered so far?

Based on data we have been collecting since 2006, a number of studies have been carried out, and the findings from these analyses have recently resulted in more than 20 articles published in international, scientific journals. Below we describe some of our findings:

Memory and aging

We investigated the ability of the members of the LLFS-families to maintain their cognitive abilities. Our results suggest that cognitive function is better maintained in persons from families in which the members survived to very high ages, and that they have lower risk for developing dementia. Among long lived families, certain families demonstrate exceptional memory ability. Such exceptionality is seen in both the parents and children, and has been linked to specific genes.

Personality

Can the nature of our personality contribute positively to a long lifespan? The “children generation” is generally less worried and more extroverted than people in the general population, but they do not differ from other people with regard to other personality traits. Overall, these results suggest that worrying less and having an extroverted personality can be of importance for living a very long life.

Telomere length

One factor suspected to influence rate of aging and longevity is white blood cell telomere length. Shorter telomere length has been shown to be associated with a faster rate of aging and increased risk of mortality. We have found that telomere length is a heritable trait and that LLFS family members have longer telomeres than similarly aged spouses.

The importance of genes

Based on the blood samples that we collected during our first visit, we have carried out comprehensive analyses on the importance of genes for a long and healthy life. It seems that the genetic variants of importance differ among the families. Therefore, in the next phase of LLFS, we will focus on whether there are particular genetic variants within different families that have an influence on living a long life.

LLFS families including spouses have better health

Our study has shown that the LLFS-families and their spouses are healthier, have lower mortality, and, on average, have fewer chronic diseases than people the same age from other families.

Why do we want to continue the Long Life Family Study?

The discoveries from the LLFS study may help scientists to develop interventions that would enable people to fight against age related diseases and lead longer and healthier lives.

We therefore want to repeat our original examination in order to follow the development, in both those who have maintained their good health and in those who have been less fortunate. It is important to us that both groups are included to ensure that we can gain a better understanding of the processes involved in achieving a long and healthy life.

For more information about the LLFS Study, which is funded by the National Institute on Aging of the National Institutes of Health, contact our research assistants at the Columbia Field Center by toll-free telephone at 1-800-304-4317.

We look forward to visiting you and/or speaking to you soon!