



TAKE CHARGE OF YOUR HEALTH WITH **EPIAGE**

Your Barcode: _____

Date: _____

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Disclaimer:

The epiAge test is not intended to be health information or medical data or to be used to screen, diagnose, treat, prevent or assess the risk of any disease or condition. The epiaging service is an epigenetic age determination based on the assessment of DNA methylation in your DNA. We are not collecting genetic data. The test is available for individuals 18 years of age or older. This service has not been cleared or approved by U. S. Food and Drug Administration.



Your Result



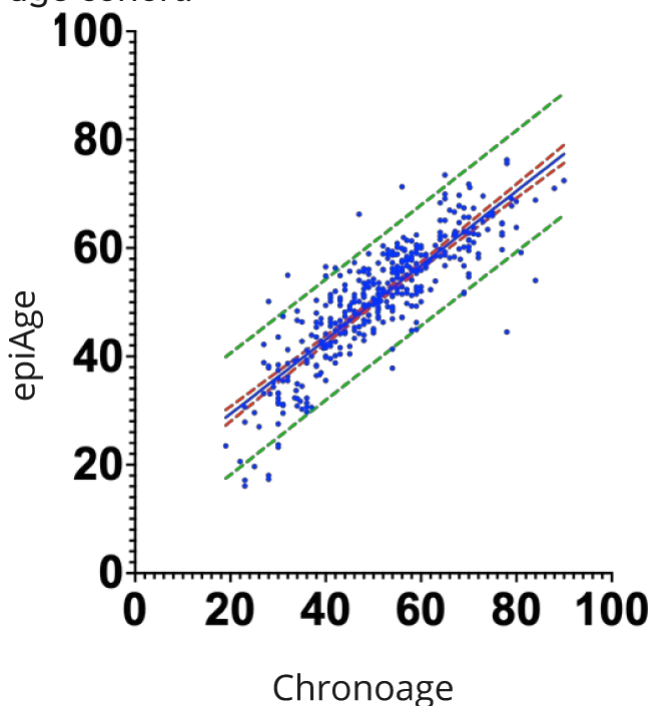
Technical
Accuracy

Your Epigenetic Age

The Epigenetic and Chronological Age difference



The plot displays results obtained from our customers who agreed to reveal their chronological age. Each spot represents one customer. Since we did not ask for your chronological age, we don't know how your DNA methylation age corresponds to your chronological age. You could use the curve below to position your result. Draw a straight line from your epiAge result and a straight line from your chronological age and mark a circle at the point where the two lines intersect. You could now compare your results to other people in your age cohort.



Legend

- Mean of the population
- 95% confidence interval of the mean
- Where 95% of the population stand

- If your spot is **within the two red lines**, there is 95% confident that your results fit the population average and your biological age is **not different** than the average person who was tested with this test.
- If you are **above the top red line**, you are **older** and if you are **below the bottom red line**, you are **younger** than the average of the population.
- If your point is **above the top green line**, you are biologically **older** than 95% of the population that we tested at your age and if you are **below the bottom green line**, you are **younger** than 95% of our customers.

HOW OLD ARE YOU?

WHY IS YOUR "EPIGENETIC AGE" IMPORTANT?



- People age at different rates. Some “look” and “feel” older than their chronological age, while other look younger than their chronological age.
- Epigenetic age is a better parameter of our wellbeing than chronological age.
- DNA is the hardware, genetics is the operating system and DNA methylation and other epigenetic factors are the software that programs our cells and our bodies to perform different physiological functions that are required for a healthy life.
- A paradigm shift in our understanding of aging is the discovery that our DNA methylation changes as we age. The rate of change in DNA methylation as we age is an indicator of our "biological aging".

HOW OLD ARE YOU? Why is your "Epigenetic age" important?



- In most people, the “epigenetic age” measured by the epigenetic clock and the “chronological age” measured by the calendar are very similar. The correlation between the two measures across the population is close to 0.8 when 1 is a perfect correlation.
- However in some people the “epigenetic age” is different from the “chronological age”. Sometimes the “epigenetic clock” moves faster than the “chronological clock”. We consider a difference that is larger than the 95% confidence interval of the population mean (or the normal distribution in the population) as a significant difference.
- Studies suggest that accelerated “epigenetic clock” might be associated with increased risks for several age-related chronic diseases such as cardiovascular disease and cancer.

<https://www.ncbi.nlm.nih.gov/pubmed/?term=epigenetic+clock+disease>

This is however still an open field and more studies are needed, and there is no clearly proven immediate correlation between older "epigenetic" age and chronic diseases.

WHAT IS THE **EPIAGE** TEST? WHAT DOES IT MEAN?



- After extensive data mining, we have discovered a single region in our genome that predicts epigenetic age using saliva.
- We prepare DNA from your saliva and measure the level of DNA methylation in several positions in a fragment of your genome using bisulfite conversion followed by next generation sequencing. A specific computer script calculates the level of DNA methylation. Your DNA methylation results are inserted into a mathematical equation that calculates the “epigenetic age” as a function of the level of DNA methylation.
- We consider it as a “red flag” when your “epigenetic age” deviates from the 95% confidence interval of the population mean.

What is the EpiAge Test? What does it mean?



- Although it is still not clear how one can decelerate his “epigenetic clock”, lifestyle changes recommended by most national medical associations are perhaps a starting point. An older age is a “red flag” that suggests that perhaps it is time to make some lifestyle changes.
- **A red "flag"** might prompt you to act on your lifestyle or consult your physician for a check up.



WHAT CAN I DO IF MY "EPIGENETIC AGE" IS OLDER?



- "Epigenetics" is different from "genetics" in a substantial way. Epigenetics is potentially reversible by dietary interventions and by life style changes. So, it might be possible to reverse the “epigenetic clock”.
- [Preliminary studies](#) show that dietary changes can cause deceleration of the epigenetic clock in certain people, however this is still an open question.
- Lifestyle changes including exercise and dietary habits have been recommended by national medical associations. So is reduction of stress in your life. These changes should be personalized and more data are needed to determine what these advisable changes should be.
- One way for us to learn about advisable lifestyle changes is sharing our experiences with others and analyzing the impact of the differences in lifestyle in a large population. This is now possible using technologies such as apps as well as artificial intelligence that could determine how different inputs like “lifestyle” habits affect the “epigenetic clock”.