



TeloYears™ Fact Sheet

TELOYEARS™ is a simple genetic test that reveals the cellular age encoded in your DNA so you can know how well you're aging. Now available from the company founded by the winner of the 2009 Nobel Prize in Medicine, TeloYears measures the length of your telomeres, the protective caps on the ends of your DNA strands that tend to shorten and fray with age. Your TeloYears test report provides your age in TeloYears, or the actual age of the typical man or woman whose telomere length is similar to yours.

Why You Should Know Your Age In TeloYears

Today we are living in a new era, a genetic information age when truly understanding how old you are can mean more than just counting how many birthdays have passed. Knowing your age in TeloYears is important because it is a simple yet comprehensive indicator of your overall wellness. Here's why. For your body to heal and function properly as you age, your cells must divide and reproduce to replace old, worn out cells. Your telomere length matters because every time your cells divide, a tiny bit of your telomeres are used up as they do their job to protect your DNA and allow your cells to reproduce without damaging your genetic information. This makes your telomere length a uniquely insightful measure of how much capacity your cells have left to reproduce, especially when compared to others your age. Years of clinical data support the link between telomeres and the aging process and many studies have been published on the role of telomere length in numerous age-related diseases.

The TeloYears genetic test reveals your "cellular" age so you can discover how well you're aging at the level of your own DNA. It looks to the level of your cells to see how much capacity they have left to thrive. But unlike other parts of your genome, telomere length changes over time. This makes TeloYears more actionable than other genetic tests, and at the same time much more personal than wearable fitness devices or step trackers. You can use your TeloYears results to set a baseline, make adjustments to your lifestyle choices such as diet, physical activity and stress management, and track your progress through retesting.

For the curious, your TeloYears test report compares your result as a percentile to others who are your same age and gender to give you the self-satisfaction of knowing where you stand today and the personal motivation for improvement. You can reference your results to decades of published clinical data on the association between telomere length and aging, lifestyle, stress and diseases such as diabetes, cardiovascular disease and cancer.

You may find it worthwhile to discover your age in TeloYears simply because it feels good to know that you have taken a proactive step to gain self-knowledge—or maybe even a pat on the back that validates the positive lifestyle you’ve already been living.

TeloYears is a simple to take, easy to understand genetic test that reveals actionable and inspiring knowledge about how well you’re aging at the level of your DNA.

What Are Telomeres?

DNA, considered the building block of life, is found in nearly every cell in our bodies in small packages called chromosomes. Telomeres are the protective caps on the ends of these chromosomes that tend to shorten and fray with age. Technically speaking, telomeres are repetitive stretches of the nucleotide base pair sequence TTAGGG at the ends of our chromosomes. But imagine our DNA as a long spiral ladder with millions of rungs. Our telomeres are the last few thousand rungs on the ends of the ladder that keep it from “unzipping” as cells divide. Like the plastic tips of shoelaces that keep them from fraying, telomeres keep chromosome ends from unraveling during cell division. They also ensure accurate replication of genetic data during division.

Why Telomeres Are Important

For our bodies to grow, function and heal properly, cells must divide to replace themselves. Telomeres are a key part of the process that ensures DNA is accurately copied as cells divide and reproduce. When telomeres are sufficiently long, cells typically divide and replicate successfully without error or damage. When we are born, our telomeres are typically at their longest. However as we age, telomeres shorten over time until they reach a critical point at which cells can no longer replicate. Cells that can no longer replicate become senescent, which is the cellular equivalent of aging. This shortening process acts as an aging clock – a biomarker for the lifetime of the cell. Thus your telomere length is an indicator of how much “cellular” reserve you have remaining.

How TeloYears Measures Your Telomeres

The lab at Telomere Diagnostics, the privately held molecular testing company behind TeloYears, has been qualified and certified to perform high-complexity clinical tests by CLIA, the governing body over lab-developed tests (LDTs), of which TeloYears is one. There, they measure the length of your telomeres using a proprietary quantitative polymerase chain reaction (qPCR) assay using DNA extracted from the white blood cells in the blood sample (just one drop of blood from your finger collected at home) you provide to determine average telomere length or ATL. Based on the typical age of men or women whose ATL is the same as yours, the test provides your age in TeloYears. Your TeloYears age may be younger or older than your actual age. To review a sample test report, please visit www.teloyears.com/how-it-works.

How TeloYears Is Different from Other Consumer Genetic Tests

TeloYears is more actionable than other genetics test because unlike genetic tests that deliver overwhelming amounts of medical data or other DNA tests that provide “fixed” information about your ancestry or personal traits, telomere length can change over time and is affected by genetics, environment, stress and lifestyle choices. In fact, you can use your TeloYears results to set a baseline, take action and track your progress.

Knowledge Alone Can Be Powerful Motivation for Positive Change

By learning your age in TeloYears, you now have a simple but comprehensive measure of your age and fitness at a cellular level. Whether you are older or younger in TeloYears than your actual age, the news is good. Unlike your actual age, which moves in one direction at a constant rate, some evidence indicates that cellular aging may be slowed or even reversed. Telomeres are one of only a few examples of DNA regions that can change over time, and clinical studies over the past decades have shown that lifestyle choices play a significant role in these changes. TeloYears:

- Inspires and motivates you to get started or stay compliant with a healthy lifestyle
- Sets a baseline to quantify and track the progress of a healthy lifestyle or fitness regimen over time as telomere length changes
- Simply feels good to know you have taken a positive step to gain self-knowledge
- Reports simple and relatable information – age is easy to understand
- Uses appealing technology that brings leading-edge health data to you without leaving your home
- Is affordable and easily accessible through a single drop of blood that you collect from your finger at home.

Who Can Benefit from TeloYears?

TeloYears is a simple and accessible way to discover how well you are aging and to set a baseline for proactive improvement, whether you are:

- Dedicated to a healthy, active lifestyle and interested in telomeres as an overall biomarker of wellness
- Looking for motivation to kick-start lifestyle improvements
- Interested in the latest science and technology to track the effectiveness of your fitness and lifestyle regimen
- Bouncing back from a stressful life event such as loss of a loved one, a divorce or illness.
- Just curious about the story your DNA holds

Scientific Data and Ease of Use

There are a number of scientific studies that associate shorter telomeres with increased risk for mortality and several disease states, including cardiovascular disease (atherosclerosis, heart attack and stroke), obesity and diabetes, Alzheimer's disease, and mood disorders including, anxiety, depression and panic disorder. Other studies have found that comprehensive lifestyle changes, including increased physical activity, diet and stress management can increase average telomere length over time. (*Please see the Bibliography.*) The TeloYears genetic test is easy-to-use since it's measured using just a single drop of blood collected from your finger at home.

How to Purchase

TeloYears is available at www.teloyears.com for just \$89. Simply enter your order and payment information and, as part of the service included with your purchase price, a TeloYears doctor will electronically review and complete the order for you. At the same time, a sample collection kit will be sent directly to your doorstep. The kit includes all supplies to collect a single drop of blood from a quick poke of your finger (like the method used for at home blood glucose monitoring). Then place your sample in the enclosed prepaid envelope for free, fast and easy shipping back to the TeloYears lab.

TeloYears results will be delivered to you within two to three weeks of receiving your sample. The test report provides an individual their age in TeloYears, their average telomere length (ATL) and how it compares to others their same age and gender. The report also permits repeat TeloYears testers to track their results over time. [Click here to see an example of the TeloYears test report.](#)

Who Performs the TeloYears Test?

Telomere Diagnostics, Inc. is a privately held molecular testing company founded in 2010 by a group of four scientists including Dr. Elizabeth Blackburn, who won the Nobel Prize in Medicine in 2009 for her pioneering work in telomere biology. Our lab in Silicon Valley, California is regulated under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical testing. There, we measure parts of chromosomes called telomeres, the protective caps on the ends of DNA strands that tend to shorten and fray with age. We use our own proprietary quantitative polymerase chain reaction (qPCR) assay, which is the world's leading method of measuring Average Telomere Length (ATL). Beyond TeloYears, the company is actively developing other potential uses of ATL to address unmet clinical needs in cardiovascular disease, oncology, and reproductive health.

To Learn More and Purchase

Visit www.teloyears.com

The TeloYears test is not intended for screening, diagnosing, treating or preventing diseases or medical conditions. The test is available for individuals between the ages of 20 to 80 within the United States, except for the state of New York.

The information provided by the TeloYears test should not be used to replace medically appropriate screening tests recommended based upon actual age or other risk factors, nor should the information be used to make decisions about diagnosis or treatment of diseases or medical conditions. The Telomere Diagnostics lab is regulated under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical testing. The performance characteristics of this test were determined by Telomere Diagnostics. It has not been cleared or approved by the U.S. Food and Drug Administration.

Test reports are kept absolutely private according to our Privacy Policy and are available only in a fashion that maintains compliance with the HIPAA security rule, which regulates privacy and security of health information.