Despite the many, profound differences we have as human beings, we can all relate to the effects of aging. Perhaps it’s the wrinkles on our face that weren’t there just last year, or the gray streaks in our hair that seem to be multiplying day by day. Or maybe, it’s just a general feeling of slowing down.

While we may understand these things on a physical level, many of us aren’t aware of the simple biological process that is at the root of all of these changes—the telomere. Telomeres are the caps at the end of each strand of DNA that protects our chromosomes and play an essential role in how our cells age. A simple way to visualize this is to think of the plastic tips at the end of a pair of shoelaces. Without the coating, shoelaces become frayed until they can no longer do their job, just as without telomeres, DNA strands become damaged and our cells can’t do their job.

Telomeres get shorter as we age, but they can also be shortened by lifestyle factors like stress, smoking, obesity, lack of exercise, or a poor diet. Eventually, telomeres get too short and our cells stop functioning properly. When this happens, our cells can no longer reproduce, which causes them to degenerate and eventually die. Some cells, like those found in the skin, hair and immune system, are most affected by telomere shortening because they reproduce more often.

The good news is that there are things we can do address telomere shortening. These include reducing stress, quitting smoking, losing weight, exercising more, and eating a healthier diet. In addition to these lifestyle changes, decades of research is now helping us find more targeted solutions. Thanks to Nobel Prize winning science, we now know that an enzyme called telomerase, which is found only within the cells, can reverse telomere shortening. And, building on this groundbreaking discovery, we have the first research-based products that specifically target telomerase activation: TA-65MD® nutritional supplements and TA-65® for Skin.

At the Anti-Aging Center, we believe in aging successfully both inside and out. And we’re excited to offer this kind of breakthrough technology in anti-aging medicine to help you choose how you age. We can help you assess your telomere health and recommend a tailored program of lifestyle modifications and interventions like TA-65® to help you achieve your best self.