## How to increase your lifespan naturally

### Why do we age?

The aging process is complex; however, scientists have discovered a key component. It's the shortening of human telomeres – caps that protect our chromosomes from deterioration – has been associated with aging and disease. Telomeres shorten every time a cell divides until the cell finally dies. This information was first discovered by a group of scientists at Geron Corporation of Menlo Park, California. These experts now believe that telomeres have a significant impact on the cellular aging process.

#### What lifestyle changes enhance longevity?

### There are six factors that will enhance your longevity:

The best way to protect your telomeres is simple: embrace the healthiest lifestyle you can, starting today. The length of your telomeres depends on it. If you're doing most things right, keep up the good work, but feel free to keep tweaking further. If you're not currently on the healthiest course, there's still time to turn the ship around, the sooner the better. Start with the essentials:

Eliminate destructive substances – like tobacco, sugar, processed foods, and alcohol. Beyond being destructive for your overall health, they're notorious aging accelerators because they stimulate the production of cortisol, which is a catabolic hormone. Cortisol tears your body down.

Embrace meditation and relaxation – stress is a telomere-shortener, so add a 5-20 minute (or more) daily meditation or restorative yoga practice to your routine and enjoy the anti-aging benefits.

**Exercise regularly** – particularly as you move into middle age. Research has found that regular activity accounted for significantly longer telomeres and those longer telomeres found in active adults accounted for the cellular equivalent of being 9 years younger.

**Drop extra weight** – one more reason to trim down. Studies **indicate that shorter telomeres are associated with <u>higher body mass index</u>es, so commit to trying to get to a healthy weight.** 

**Prioritize sleep** – During sleep, your body is busy clearing out cellular debris and making repairs. It's the "glymphatic system" in your brain that handles the maintenance duties. When you don't sleep well or for long enough, less cleaning occurs and damaged proteins and other toxins build up over time leaving you more vulnerable to rapid brain aging and neurological disease. If you get less than 7 hours a night sleep, your cells cannot kick out viruses effectively making you more prone to getting sick.

**By cleaning up your dietary act and environment -** you may be able to actually lengthen your telomeres. Your telomere-supportive mission: go heavy on antioxidant-rich and anti-inflammatory foods at every meal and follow these basic guidelines:

- Lean heavily on fresh, organic or farmers' market produce.
- Eat quality animal protein, opting for high-quality grass-fed, pasture-raised animals.
- Opt for low-in-mercury, small, oily fish like sardines and mackerel to boost omega-3s levels.

- Dump processed foods, sweets, simple carbs and telomereshortening sugary sodas.
- Eat the rainbow, load up on healthy fats, and dig into good stuff like leafy greens, avocado, seaweed, asparagus, artichokes, Brussels sprouts, berries, nuts and seeds (walnuts, pumpkin seeds, pistachios, cashews, almonds, and pecans, to name a few- omega 6 oils).
- Drink green or rooibos tea (red tea or red bush tea; created by fermenting the leaves, which turns them a red-brown color; from western coast of South Africa). Take advantage of their natural antioxidant boosting benefits.
- Drink filtered water regularly. If you don't filter your water, your organs will.
- Reduce your exposer to EMFs: turn off your router at night, place a diode on the back of your smartphone, wear shungite and the X-49 patch.

#### What proven supplements will increase your longevity?

To lengthen telomeres, you can adopt a plant-rich diet.

Perhaps the most important additions to any telomere-conscious diet are antioxidants like vitamins C and E. Antioxidants combat free radicals that damage DNA and parts of cells, including telomeres. Citrus fruits are fantastic sources of vitamin C, while vitamin E is available in leafy greens, cereals, and olive oil. Flax is one of the best diet additions because it is bursting with omega-3s, which help prevent inflammation and build cell membranes. A study from 2010 found that high levels of omega-3s resulted in significantly slower telomere shortening. Also organic, cold pressed omega 6 oils have been scientifically

documented to combat inflammation and repair cell membranes. Professor Peskin's book, PEO Solution, provides all the hard core scientific documentation on the omega 6 oils. Omega 6 oils are much more important than omega 3s. The body cannot survive with a severe deficiency of omega 6 oil. Not so with a deficiency of omega 3s.

Conditions like diabetes appear to have complex relationships with telomere length, so eating foods high in omega 6 oils (walnuts, sunflower seeds, safflower oil, hemp seeds, avocados, eggs, pumpkin seeds, almonds and cashews) that prevent insulin resistance may also benefit your telomeres. This includes foods with soluble and insoluble fiber, such as oats or lentils and a supply of organic, cold pressed omega 6 oils. Omega 6 oils not only rebuild cell membrane walls but also dissolve out plaque from coronary arteries as well as the other 70,000 miles of blood vessels.

All the lifestyle changes listed above help prevent telomere shortening, but do you know how to lengthen telomeres? Telomeres can actually regain portions of their lost length with the help of a unique enzyme. This enzyme, telomerase, is responsible for maintaining the length of telomeres. Without telomerase, telomeres progressively shorten until they die or cease functioning. However, by activating telomerase, it is possible to actively restore telomeres and allow for many future cell divisions. This essentially slows your internal clock, inhibiting and even reversing many of the harmful effects of aging.

Ten nutrients support telomere length, cell health, and DNA health to support longer telomeres. One of the most important of these is <u>ac-11®</u>, an extract from a tropical woody vine called Uncaria tomentosa (or <u>cat's claw</u>). Cat's claw can benefit conditions like Parkinson's disease, rheumatoid arthritis, certain cancers, and viral illnesses thanks to powerful antioxidant and neuroprotective qualities. In clinical pilot studies, cat's claw **directly contributed** to improvements in telomere length and reversed common signs of aging.

Other key nutrients that may activate telomerase include astragalus root extract, milk thistle seed extract, Korean ginseng extract, and L-citrulline. Each of these activators also has multitudes of other beneficial effects. For example, L-citrulline is an amino acid that promotes blood flow by creating nitric oxide, which helps fight heart disease and clogged arteries. Foods high in citrulline include watermelon, cantaloupe, cucumbers, chickpeas, and squash.

Many telomere supplements focus solely on telomerase activation, which is only truly effective in stem cells. To have a noticeable effect on your longevity and overall health, a supplement must combine telomerase activators with key vitamins and other nutrients to help repair DNA and maintain the telomere length already present.

# Lengthening Telomeres Made Easy

Leading a healthy lifestyle that's restful, free of stress, includes a healthy diet, full of exercise and taking specific supplements is the best way to prevent telemere shortening.