

Five 'Simple yet Effective' Tips to Boost Your Longevity

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STORY AT-A-GLANCE

- > Simple changes can significantly influence overall health and longevity. Nearly 70% of people across five generations said they would like to live 100 years, but not if they had terrible health, were a burden on their family, or if they had serious cognitive loss
- > Training specialist David Wiener found five effective choices to help achieve that goal, beginning with keeping your brain active using games, concentration skills, keeping a gratitude journal, going for daily walks and reaching out to loved ones
- > Fresh air and sunshine can help lift your mood and optimize your vitamin D levels, which decreases your risk of metabolic syndrome, Type 2 diabetes and heart disease. Sleep reduces your risk of heart disease and stroke
- > Chronic stress can lead to medical conditions that shorten your lifespan. Exercise is generally acknowledged as leading to a healthier life, but exercising in the late morning hours can support greater benefits than exercising at other times of the day
- > Each of these five simple strategies can make a significant difference in your overall health and longevity. Perhaps the most important factor, however, is reducing your linoleic acid (LA) intake, as LA is a potent metabolic poison when consumed in excess

Longevity and the Fountain of Youth have been a focus of human thought and experiment for centuries. Researchers are fascinated by the topic. A quick search on PubMed reveals over 62,000 results for research studies that include the term "longevity"¹ and over 150 studies listed on ClinicalTrials.gov.² The financial company Edward Jones³ published a 2022 study in which they asked five generations of Americans whether they wanted to live to age 100. Nearly 70% of them said "yes," but included that they would not want the added longevity if they had terrible health, were a burden on their family or had serious cognitive loss. The researchers wrote, "The real answer to our question seems to be, 'Yes, but it depends on staying healthy, engaged and purposeful."⁴

The Edward Jones report noted that the number of people who are 65 and older has nearly tripled in the last 50 years and it is projected to reach 86 million by 2050. They note that together with living longer and more people retiring, this stage in life appears to be far more important than in previous decades, and with far more social and marketplace implications.

A reporter from the online magazine Express⁵ spoke with David Wiener, training specialist at AI-based fitness and lifestyle coaching app Freeletics. He shared tweaks you could include in your lifestyle choices that would be simple, but effective in helping you to meet this goal — living a longer, healthier and more engaged life.

One thing he did not address, however, was diet. As detailed in "Linoleic Acid – The Most Destructive Ingredient in Your Diet," linoleic acid, an omega-6 fat, acts as a metabolic poison when consumed in excess.

So, if you want to live a long, healthy life, this really ought to be your starting point. LA intake above 10% is highly likely to cause problems. Ideally, you want to keep it well below 5%. If your LA intake has been high, make sure you're getting enough vitamin E, as it protects polyunsaturated fats like LA from lipid peroxidation. That said, let's take a look at Wiener's suggestions, all of which are good.

Keep Your Brain Active and Sharp

Wiener describes keeping your brain active as being one of the "best ways"⁶ of increasing life expectancy and maintaining your cognitive ability. "By challenging your brain with mental exercises, it is believed you could maintain individual brain cells and

stimulate communication between them to help them work more effectively," Wiener told Express. He went on,⁷

"While most people's jobs keep them mentally active and alert, learning a new hobby or skill, volunteering or mentoring are additional ways to keep your mind sharp, more specifically learning a language has shown to be greatly beneficial too."

Your brain is one of the most important organs in your body. Exercising your brain, in the same way that you would exercise your body, plays a significant role in longevity and independence. Taking care of your brain includes engaging in stimulating activities that not only make your brain work but also bring you joy.

Some of the activities that Dr. Laurie Archbald-Pannone, a geriatric medicine physician and associate professor of medicine at the University of Virginia, recommends include keeping a gratitude journal, going for a daily walk and reaching out to friends and family.

Denise Park, Ph.D., professor and director of research at the Center for Vital Longevity in the School of Behavioral Sciences at the University of Texas in Dallas, spoke with Forbes Magazine⁸ about a study in which she and her team engaged a group of older individuals to learn two new activities — digital photography and quilting.

The researchers found the adults improved their memories over three months. Park talked about finding the optimal amount of challenge to maintain a healthy mind, noting that too much is stressful but too little does not encourage gain. "Adding novel behaviors that you never performed before helps build new neural circuits that will be built to handle that challenge," she said.⁹

Finding games that stimulate different functions can also support your social life. Engaging in stimulating brain activity with others helps to reduce isolation and the brain exercise helps give you a sense of control as well as helps support the creation of new brain connections. Dr. Zaldy Tan is an expert in senior care and the director of the Cedars-Sinai Memory and Aging Program. Tan identified types of brain activities that help challenge and exercise your mind. Tan suggests games that challenge:¹⁰

- Verbal memory such as a crossword puzzle
- Concentration skills such as online brain games
- Visual-spatial working memory skills such as a jigsaw puzzle
- Tactile skills that use procedural memory such as knitting or model building
- Tactile, visual, motor and auditory skills such as dancing

Get Outside to Enjoy the Fresh Air and Sunshine

It's no secret that being outside in the fresh air is healthy. Wiener recommends gardening and taking walks to help boost your time outside and optimize your vitamin D levels.¹¹ One meta-analysis of 28 studies demonstrated a substantial decrease in heart disease, metabolic syndrome and Type 2 diabetes in middle age to elderly people with high levels of vitamin D.¹²

Optimal levels of vitamin D also support healthy function of your muscles and immune system, as well as bone health by helping your body to absorb calcium.¹³ However, depending on where you live and the time of the year, it's not always possible to get outside for a little sunshine.

It is important to note that vitamin D supplements may help to raise your vitamin D serum measurements, but they don't give you everything you need. As Wiener points out, sunshine also influences your sleep, which I discuss just below. "This is because sunlight also regulates another hormone in the body called melatonin that controls your sleep cycle," Wiener said.

Red and Near-Infrared Light Therapy

If sunshine is not an option, then red and near-infrared light, which are subsets of natural sunlight, may help you get some of the same benefits. During an interview with Ari Whitten, author of "The Ultimate Guide to Red Light Therapy," we reviewed the mechanics and benefits of red light and infrared light. Whitten has a degree in kinesiology, exercise science and movement science, and has studied natural health and nutrition for over 20 years.

Over the last few decades, there have been more than 5,000 studies published about red and near-infrared light therapy, also called photobiomodulation. Researchers have noted an impact on a wide range of conditions, including combating wrinkles and cellulite, improving hair regrowth and sports performance, increasing strength and benefits for individuals with Alzheimer's and Parkinson's disease.

Red and near-infrared light operates through several mechanisms of action in the body to produce positive effects. As Whitten and I discussed in the interview, it helps support mitochondrial health and stimulate mitochondrial biogenesis, modulates gene expression and helps structure water that surrounds your cells. Each of these mechanisms offers significant benefits to your overall health.

Sleep: Prioritize Quality and Quantity

Wiener notes that research has consistently demonstrated sleeping less than six hours each night presents a significant risk for heart attack and stroke. Taking care to get at least seven to eight hours of quality sleep each night can help support longevity.

Nearly every facet of your biology is affected when you don't get enough sleep, which is demonstrated by the long list of health effects linked to sleep deprivation. You'll find a list and studies in the article linked below. Some of the effects include reduced athletic performance, increased risk of neurological issues, increased risk of Type 2 diabetes, weakened immune function and an increased risk of high blood pressure, heart attacks and cardiovascular disease.

Unfortunately, many people still see a lack of sleep as a badge of honor. To them, it signifies a sign of drive, ambition and achievement. Worse, good sleep may be characterized as a sign of sloth. In 2018, Joe Rogan interviewed professor Matthew Walker, Ph.D., founder and director of the University of California Berkeley's Center for Human Sleep Science.

As explained by Walker,¹⁴ your brain doesn't shut down while you're asleep. Instead, some parts become far more active than when you're awake. During REM sleep, the visual, motor kinesthetic, emotional and memory centers increase activity, while the area that rules rationality and logical thinking, decreases. There are several common factors that Walker calls the "enemy of sleep." These include:

- Alcohol and caffeine These and other substances, such as sleeping pills, interfere with sleep quality and sleep time
- Artificial lighting We have effectively electrified the night, and light at night damages your health by degrading your sleep
- Loneliness, anxiety and depression The longing for connection and the effects of mental illness can often interfere with or cause people to forego sleep
- Long work hours The international business environment, increased global competition and longer commuter times are just a few of the factors contributing to the increase in work hours and stress-related burnout
- Overcommitment Schedules are filled from morning to night, and many people are unwilling to trade entertainment or socializing with family and friends for sleep

Wiener and Walker make several recommendations to achieve quality sleep each night. You'll find those and more in "Sleep – Why You Need It and 50 Ways to Improve It."

Use Stress Reducing Strategies to Lower Cortisol Secretion

As Wiener stated, stress can trigger the release of high cortisol levels.¹⁵ A fight or flight response can raise your blood pressure and give you the resources you need in the moment. But chronic activation of the system causes the consistent release of

hormones that produce harmful physiological changes.¹⁶ This leads to the storage of abdominal fat, insomnia, low energy and changes in appetite.

Additionally, it can lead to high blood pressure, heart disease, metabolic syndrome, arthritis, Type 2 diabetes and obesity. Each of these chronic diseases can lead to premature death. The fight or flight response is modulated by the sympathetic and parasympathetic nervous systems, which are part of the autonomic nervous system. This system controls functions in the body that happen automatically, such as heart rate and blood pressure.

The sympathetic nervous system signals the fight or flight response to begin, and once the danger has passed the parasympathetic nervous system helps apply the brakes to the hormone release. In chronic stress, your sympathetic nervous system is revved up, which has a detrimental effect on your health. But, by using controlled breathing techniques, you can create physiological change that lowers your heart rate and blood pressure and improves immune function.

Breathing techniques can help modulate the autonomic nervous system, several of which you can read about in "Have You Tried Box Breathing?" Box breathing is a basic tactical breathing technique used by Navy SEALS to remain calm under duress.¹⁷

Other Ways to Normalize Cortisol

Two other factors that will have a significant impact on your cortisol level is low-carb diets and fasting. Both are sure-fire ways to increase cortisol and should be avoided if you're trying to optimize your mitochondrial function.

If you don't get enough glucose from your diet, your body must produce glucose by activating stress hormones like glucagon, adrenaline, and cortisol, which make glucose by sacrificing the protein stored in your muscle, bones and brain.

To avoid this, you'll want to make sure you're getting at least 150 grams of glucose a day, ideally from ripe fruit. My carb intake is currently between 400 to 450 grams a day, and I feel great.

If you have a healthy gut, you'll be able to incorporate more fruit fiber without a problem. If your gut is impaired, however, the extra fiber can feed endotoxin-producing bacteria in your gut, which will suppress your mitochondrial function even further. In this case, start by introducing things like pulp-free orange juice.

You Get Greater Benefits When You Exercise in the Morning

Exercise is generally acknowledged as leading to a healthier life, but did you know that there are certain times of the day when you experience greater benefits? Wiener¹⁸ recommends exercising in the morning to take advantage of fat oxidation that naturally occurs during the morning hours before having your first meal.

A 2022 paper¹⁹ found an association between the time of day you exercise and the risk of coronary heart disease and stroke. The 86,657 men and women who participated were free of cardiovascular disease at the beginning of the study.

The researchers compared the peak time of activity across a 24-hour period and found those who were most active during the late morning had a significantly lower risk of stroke and coronary artery disease compared to people who had a pattern of midday activity.

You can use each of these five simple strategies to make a significant difference in your overall health and longevity. While they may seem simple and easy – almost too easy – they are highly effective and help you take control of your health.

Sources and References

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