



# Ultiself's Definitive Guide to Longevity



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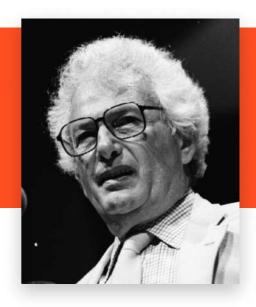


# 26 Scientifically Backed Ways to Help You Live a Longer Healthier Life



Forever young might seem like a pipeline dream to many, but, as it turns out, engaging in certain habits may add years to your life. Best of all, many of the longevity habits in this guide can also extend the likelihood of living those extra years disease-free and healthy.

Even skeptics can agree that adapting habits to increase your longevity are worth a shot. In the words of Joseph Heller - "I am going to live forever or die trying".







#### **HOW TO USE THIS GUIDE**

This guide is packed with a ton of great information and offers insight into current research on the topic of longevity. As with all habit building, you should always first create a solid foundation and then build on it. The suggestions in this guide do not replace medical advice and you should always discuss the addition of any new supplements or lifestyle changes with your doctor before trying them. Be vigilant and do your own research when implementing lifestyle changes and always listen to your body.

#### **BUILDING NEW HABITS**

First and foremost, you should aim to conquer core foundational habits before moving on to more advanced methods of biohacking. Doing so will ensure you get the most out of your efforts. Whether it's staying hydrated, getting enough sleep, or exercising regularly, using a habit-tracking app like Ultiself will help you implement these core habits that you can build upon. If you haven't already, download the Ultiself habit tracker app today and get started on building a strong core routine to help ensure your success in conquering the basic and more advanced methods of biohacking provided in this guide.







# ULTISELF'S DEFINITIVE GUIDE TO LONGEVITY

**BASIC CORE HABITS THAT MAKE YOU LIVE LONGER** 



There are 9 basic core habits included in this guide. These make up your foundation of good habit building and have each been shown to increase quality of life and longevity. A 2018 study showed that adapting the first 5 basic core habits on this list could extend lifespan by 14 years for women and 12 years for men [1]. If you are seeking straightforward ways to live a healthier and longer life, start out with all of these 9 basic core habits. Once you have a grasp of the core habits, don't stop there! Keep reading to discover all the new and exciting discoveries on ways to live a longer and healthier life.

























### 1. GET YOUR FILL WITH GOOD NUTRITION

Eating a diet high in plants and low in saturated and trans fat is essential to any healthy lifestyle. Choosing leafy greens and fresh fruits and vegetables while staying away from processed foods and sugar is one of the most basic and effective means to protect your health and extend your lifespan.





# 2. EXERCISE AT A MODERATE TO VIGOROUS LEVEL SEVERAL HOURS A WEEK

The general recommendation for exercise is 30 minutes of moderate to vigorous exercise at least 5 days a week. The definition of moderate and vigorous will depend on your health level but in general moderate activity may include a brisk walk or jogging and vigorous would be activities like sprinting or running. You should aim to get your heart rate up at least 50% higher than your resting rate for the exercise to count toward your weekly total.







### 3. MAINTAIN A HEALTHY BODY WEIGHT TO LIVE LONGER

The first 2 items on this list should do wonders for the third, but it's even possible to overeat with healthy food. Healthy body weight will differ considerably for each individual but one of the best ways to measure is to get a body fat scan, such as DEXA. Maintaining a healthy body weight can help ward off metabolic diseases, diabetes, heart disease, and even some forms of cancer.





### 4. DON'T SMOKE AND EXTEND YOUR LIFE

On average smokers die 10 years earlier than nonsmokers and have a 2 to 4-fold increase in coronary artery disease. Smoking causes damage to every organ in the body and increases the risk of 16 different forms of cancer. Staying away from cigarettes is one of the best things you can do for your health and longevity.









### 5. LIMIT YOUR CONSUMPTION OF ALCOHOL

Alcohol in moderation does not seem to have negative effects. Moderation means 2 drinks or less a day for men and 1 drink or less a day for women. However, intake beyond this it can accelerate aging by increasing the risk of disease and cognitive decline and decreasing your lifespan [2].





## 6. SOAKING UP SUNLIGHT CAN MAKE YOU LIVE LONGER

Many of us have grown weary of the sun due to increased awareness of skin cancers. However, it isn't actually just trying to kill us, moderate sun exposure has been linked to a longer lifespan. A 20-year study following women found that those who spent more time in the sun lived up to 2 years longer than those who reported less sun exposure, mainly due to a decrease in cardiovascular disease [3]. Don't be afraid to soak up a little sunshine.









# 7. GET THE RIGHT AMOUNT OF SLEEP- NOT TOO MUCH, NOT TOO LITTLE

A lot of people think that more sleep is automatically better, but as it turns out there is a sweet spot when it comes to sleep. Getting too little or too much can both decrease your lifespan. Research has found that people who sleep 7 hours a night live longer than those who sleep more than 8 hours or less than 6 hours. There was a 15% increased risk of mortality for those who slept more than 8.5 hours and less than 4.5 hours [4]. Try your best to develop good sleep habits and hit that 7-hour sweet spot for your nightly sleep.





### 8. GET OUT THERE AND START SOCIALIZING

As it turns out, having an active social life that is rich in social support can lead to a longer life than those who are more isolated. Research has even found that socializing is good for brain health and may reduce your risk of dementia [5]. When it comes to who you spend your time with, the general consensus is quality over quantity if you want to see health benefits.







#### 9. PRESERVE YOURSELF BY STAYING HYDRATED

We all know we feel better when we drink enough water but did you know that staying hydrated can extend your lifespan? Not only will drinking that sweet H20 help stave off wrinkles in your skin, but it can also reduce your risk of cardiovascular disease. Chronic dehydration is associated with thicker blood, elevated red blood cells, and fibrinogen, all associated with an increased risk of coronary heart disease. Simply put, staying hydrated ensures your blood circulates properly and can effectively carry nutrients to your organs and waste products away. Dehydration can also disrupt mood, cognition, memory, and organ function so make sure you drink the recommended daily amount which is 91 ounces for women and 125 ounces for men.







#### THE WAY YOU EAT CAN EXTEND YOUR LIFESPAN



With the basic core habits under control, it's time to move onto some habits that you may be less familiar with. Most people have heard about how they need to eat whole foods, plenty of plants and vegetables, and low saturated fats in order to get health benefits from food.

However, recent research has revealed that the way you eat may have an important impact on your lifespan. As it turns out, the timing of your meals, the amount you eat, and the specific foods you choose are more important than you think for staying forever young. When implementing dietary changes take caution if you have a history of diabetes, eating disorders, or any sort of dietary restrictions.















### 10. INTERMITTENT FASTING CAN MAKE YOU LIVE LONGER

Intermittent fasting has gotten a lot of attention in recent years and for good reason, not only can it be an extremely effective way to control your weight, but research done at John Hopkins has shown that it also helps cognitive performance, improves cardiovascular health, improves physical performance, reduces the risk of disease, and helps repair damaged tissue [6]. Fasting schedules with a 6-8 hour eating window and 16-18 hours fasted are enough to experience these benefits.





# 11. CALORIE RESTRICTION IS ONE OF THE MOST EFFECTIVE ANTI-AGING INTERVENTIONS

Fasting has a lot of health benefits but it seems another means to achieve longevity via food is by refraining from eating it at all. Studies have found that people who restrict their calories by an average of 15% daily have a host of benefits and even a 20% reduction in cellular oxidative stress-a hallmark of aging [7]. Calorie restriction seems to benefit sleep as well, likely due to a decrease in basal metabolic rate. Calorie restriction may not be for everyone, but it may be worth investigating for some people who are interested in the benefits.







# 12. EAT LIKE THE PEOPLE WHO LIVE THE LONGEST-BLUE ZONES DIET

When trying to discover what makes people live longer and healthier lives, one of the best methods of research is examining the diets of people in locations where lifespans are abnormally long.



In 2004 longevity expert **Dan Buettner** teamed up with **National Geographic** to identify the places in the world where people were the most healthy and lived the longest [8].

This led to the discovery of five regions of the world referred to Blue Zones, where residents lived an average of 12 years longer than Americans. They found that the people in these regions all ate a similar diet which was rich in beans and plants, with 95% of food coming from plant sources. They also ate nuts, whole grains (oats, barley), fruit, and Tumeric. They rarely ate sugar, eggs, meat, dairy, or bread. Choosing blue zone foods can be an excellent strategy for extending your lifespan.









## 13. YOUR GUT BACTERIA MAY REVEAL YOUR TRUE AGE

Gut bacteria was something we once ignored but increasing research is beginning to reveal what a vital role our gut microbiome plays in our daily health.



Multiple studies have linked gut health to immunity, mood, and many other health factors but recently research was done that could even estimate a person's age based on their combination of gut bacteria [9].

This tells us that your gut has a biological age and older gut ages were more associated with increases in certain bacteria and decreases in others. More work needs to be done to discover the implications, but as it stands it seems that taking care of your gut health can have major implications on aging. Scientists recommend a quality probiotic, avoiding antibiotics (when you can), refraining from alcohol, and eating whole fermented foods, like kimchi, to assist with your gut health







#### TAKING SUPPLEMENTS TO EXTEND YOUR LIFESPAN



Diet and lifestyle choices can be important factors in increasing your lifespan, but in order to get that extra edge, you may want to consider supplements. Many compounds have been found to have an array of benefits that can improve your health, help fight disease, and help reduce the effects of aging.



Anti-aging supplementation is a fast-growing industry and some of the available compounds have very exciting science backing up their claims. When beginning any new supplement be sure to research proper dosage, any interactions they may have with your current health conditions, and interactions they may have with any medications or supplements you are taking.



#### 14. RESVERATROL- DRINK RED WINE AND LIVE FOREVER?

Ok, maybe drinking red wine won't make you live forever, but research has found that a compound found in red wine called resveratrol has many anti-aging properties.



When extracted and taken as a supplement, it reduces pro-inflammatory markers such as cytokines TNF-Alpha and IL-6 which contribute to age-related declines and have been correlated to pretty much every disease.

Resveratrol also activates sirtuins, which are normally activated in calorie restriction and have positive benefits on insulin, stress response, and lifespan modulation [10]. The recommended dose is 2000mg twice a day with a moderate but not high-fat meal [11]. There are no major side-effects of resveratrol and it has been proven safe at high doses.





# 15. COQ10 BECAUSE YOU MAY AS WELL LOOK GOOD WHILE YOU FIGHT AGING

Turning back the clock should not just be an invisible journey. One of the most exciting areas of anti-aging research is on compounds that benefit the skin.



Research has found that supplementing with Coenzyme Q10 (CoQ10) cream can reverse signs of aging in your skin, increasing thickness, elasticity, and reduce visible wrinkles.

As a potent antioxidant, it doesn't just benefit your skin but when taken orally it also has health benefits for your heart and brain. Look for a supplement that combines CoQ10 with pyrroloquinoline quinone (PQQ) to increase its bioavailability. Most people experience no side-effects with CoQ10 supplementation, but it may decrease blood pressure in some individuals.





# 16. TRY TAKING N-ACETYL CYSTEINE TO COMBAT AGE-RELATED DECLINE

N-acetyl cysteine (NAC) is one of the most powerful antioxidants available. It is able to scavenge powerful free radicals in our bodies, protecting us from oxidative damage associated with aging. Additionally, it gets rid of mucus, replenishes intracellular glutathione, prevents or diminishes liver damage [12], boosts brain health by regulating glutamate, and may significantly reduce anxiety [13]. It is considered safe with minimal side effects even at high doses.

#### 17. PROTECT YOUR BRAIN AGE WITH POLYGALA TENUIFOLIA

Polygala Tenuifolia has extensive benefits and is a powerful antioxidant that is actually complimentary to NAC, meaning that whatever NAC misses, polygala tenuifola targets and vice versa.



Therefore, taking a combination of the two supplements may be one of the most powerful ways to fight oxidative damage to your cells that occurs with stress and aging [14]. On top of these benefits, polygala tenuifola also promotes healthy aging through neuroplasticity.

As we age our levels of certain neurotransmitters start to decline and polygala tenuifola helps to increase those levels preventing some age-related decline [15]. Polygala tenuifola has no known significant side-effects and does not seem to interfere with other herbs or supplements.





# 18. VITAMIN D3 MAY ACTIVATE GENETIC PATHWAYS THAT SLOW AGING

We know that sunshine may be good for longevity, but what about vitamin D3 as a supplement?



Research has shown us that vitamin D3 supplementation may activate genetic pathways that slow down the aging process by reducing toxic compounds in the body and promoting longevity [16]

Vitamin D deficiency has been linked to a number of diseases and research suggests dietary supplementation as an effective means to help combat age-related disease [17]. Taken in appropriate doses vitamin D3 is safe. Some people may experience symptoms like appetite changes, kidney stones, or extreme thirst if dosage is too high. Discontinue use and talk to your doctor if these oocur.





#### 19. NAD+ BOOSTERS MAY KEEP YOU YOUNGER

Nicotinamide Adenine Dinucleotide (NAD+) is a compound found in cells that have been found to promote brain health and cellular regeneration while also reducing inflammation.



NAD+ levels decline with age but you can boost your NAD+ levels by supplementing with nicotinamide riboside (NR) and nicotinamide mononucleotide (NMN).

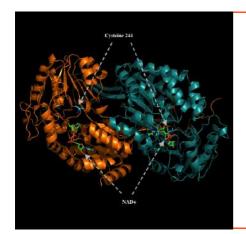
NR supplementation has been shown to reverse cellular damage, increase mitochondria, and improve neurogenesis and synaptic plasticity in the brain. Similarly, NMN, a vitamin B3 derivative, has been shown to improve metabolism, eye function, insulin sensitivity, and reduce age-associated gene expression [18]. Both NMN and NR are available as supplements and may prove to be the next big thing in anti-aging compounds. There are no known negative side effects other than some mild gastrointestinal upset in some users.





#### 20. LONGEVITY BOOSTING PEPTIDES

Peptides are branches of amino acids with peptide bonds that target specific areas of the body. Peptides such as CJC-1295 and Ipamorelin have gained popularity in anti-aging clinics for their ability to boost levels of Human Growth Hormone (HGH) [19].



HGH declines with age and increased availability of HGH in the body leads to improvements in muscle growth, metabolism, skin, bone density, and much more.

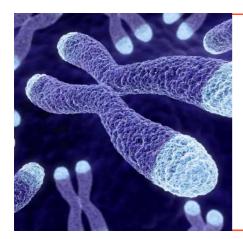
Other peptides, such as BPC-157 have gained a reputation as a "wolverine peptide" due to it's ability to quickly heal tendons, ligaments, and bones. It has also been demonstrated to vastly improve gut, gum, and eye health [20]. Peptides are an exciting area of anti-aging research and may offer one of the most innovative forms of interventions to combat age-related decline. Consult a physician before using peptides and have them monitor you for any side-effects.





#### 21. LENGTHEN YOUR TELOMERES

Telomeres are cap-like features at the end of chromosomes that help protect cells when they divide. Over time, they become shorter and telomere length appears to be an indication of age and general health.



A peptide called Epitalon, discovered by former USSR scientists, has been found to be able to increase telomere length, thus reducing biological age [21]. Supplements such as L-Carnosine [22] and TA-65 [23] have also been shown to prevent damage and promote telomere length.

One current study in humans is using viruses to deliver a gene called TERT which has been shown to extend telomeres [24]. You can also protect your telomeres through diet, studies have also found that diets high in Omega-3 fatty acids offer significant protection [25]. Overall, currently available supplements and ongoing research on TERT and telomere-lengthening peptides offer an exciting prospect in anti-aging supplementation. More research is needed to determine the potential benefits and side effects of lengthening telomeres.





#### 22. HORMONE REPLACEMENT THERAPY

As we age there is a natural decline in our body's ability to produce hormones.



Research has shown that hormone replacement therapy may increase the lifespan of menopausal women by 41 months or longer [26]. As for men, low testosterone is associated with an increase in many diseases, such as cardiovascular disease, and hormone replacement therapy may help reduce these risks in those who need it [27].

Hormone replacement therapy can have several risks depending on the individual, compound used, dosage and regimen. Always seek the guidance of a physician when undergoing hormone therapy and discuss the potential risks and benefits with your physician.





#### 23. METFORMIN

Metformin is a commonly prescribed drug for diabetes that may have some longevity benefits.



In addition to controlling blood-sugar and insulin sensitivity, Metformin has been shown to have metabolic benefits and influence cellular processes associated with aging such as inflammation, fatty liver, apoptosis, autophagy, and development of several types of cancer [28], [29].

However, recent research has shown that in non-diabetic people, taking metformin may diminish health benefits of aerobic exercise [30]. More research is needed on the topic but those considering taking Metformin strictly for longevity benefits should be aware that there is a risk of it negating the very important benefits of exercise.





#### THE FUTURE OF ANTI-AGING RESEARCH



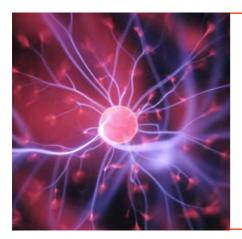
Anti-aging supplementation is exciting, but things begin to get even more exciting when we look at ongoing scientific research with implications on the future of anti-aging interventions. Innovative anti-aging research continues to be growing in popularity with new discoveries happening constantly. While the majority of exciting breakthroughs aren't currently ready for human application, they may be in the not so distant future.





#### 24. REPROGRAMMING WITH STEM CELLS

Researchers have succeeded in reprogramming aging cells in mice using stem cells.



These Pluripotent cells return to an embryonic age, essentially reverting back to brand new. The reprogrammed mice lived 30% longer than the other mice [31].

Targeting cell health can have a whole host of implications for humans since aging cells are the cause of age-related decline. Stem cells continue to offer an exciting area of intervention that may prove to be a vital avenue for anti-aging and health therapy in the future.

#### 25. FIGHT DISEASE WITH SENOLYTIC AGENTS

Drugs that may be very important in anti-aging are senolytics.

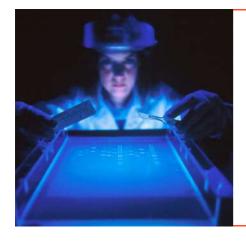
Senolytics target senescent cells, human cells that release factors causing inflammation, dysfunction, and disease. Clinical trials have already begun using the senolytics compounds Dasatinib and Quercetin [32] showing excellent promise for their ability to specifically eliminate senescent cells in humans. Research continues in this area and several senolytic compounds may be available in the near future.





#### 26. EDITING GENES TO MAKE THEM YOUNGER

Gene therapy is a promising and innovative way to address the problem of age-related decline.



Editing genes aims to change the pathways of multiple genes leading to disease [33].

One of the more popular approaches for genetic manipulation is an indirect method that uses a virus to encode genetic material that fine-tunes the activity of specific genes. As scientists continue to isolate various genes involved with aging and disease, these therapies could be administered in a vaccine form and used to combat a variety of diseases and age-related decline. It may be several years before such therapies become available for human-use but multiple studies are ongoing in this very exciting area of research.





#### FINDING HELP FOR ANTI-AGING

Many of the methods and compounds used to address anti-aging are outside of the standard scope of practice for most family doctors. For this reason, if you are seeking medical guidance on your anti-aging journey it's best to seek out assistance from an anti-aging clinic.

Anti-aging clinics are popping up all over the world and vary in their approaches. In the United States, the American Academy of Anti-Aging Medicine is an organization that promotes and trains physicians specializing in anti-aging medicine. You can also check for local clinics and groups in your area that specialize in anti-aging therapies.

#### IF ALL ELSE FAILS - CRYONICS- AUSTIN POWERS DID IT!



If you are serious about "living forever", there's currently only one available option- cryonics. Cryonics is the storage of a human body at low temperature freezing with hopes that technology will advance to the point that it can be revived in the future. There is currently no evidence that we'll be able to do that, but computers used to take up entire rooms and the most exciting feature on a cell phone 20 years ago was the game snakes, so who knows! Currently, there are many companies worldwide offering cryopreservation and over 250 bodies are currently being cryopreserved in the United States with thousands more signed up to join them. So, if all else fails, you can always put your faith in scientists and opt to freeze your corpse. In the meantime, use this guide and others from Ultiself to help you fight aging.





## Conclusion

Whether or not you seek professional assistance, there's no reason you can't begin fighting aging today. By following the advice from anti-aging researchers and sites such as <a href="https://www.Ultiself.com">www.Ultiself.com</a> you can find many tools that may help you live a longer healthier life.

Begin with the basic core habits and as you master those consider adding anti-aging diets and supplements. You can also check out the <a href="Ultiself Ultimate Guide to Nootropics">Ultiself Ultimate Guide to Nootropics</a> for a list of supplements that may help you maintain and enhance your brain health as you age.

As research continues to explore ways to turn back the clock we can implement daily habits that may help us fight age-related decline. At the end of the day, it's not just about living longer but living a full and healthy life.







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