

Longevity Summary Article

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Some years ago, I was sent by a Japanese company to meet with researchers in Okinawa, Japan. At the time, a book entitled, The Okinawan Program, presenting data collected about the great longevity of the Okinawan people, was made available on the mass market. I was given the task to convert the information in this book into a supplement protocol that would fit on 12 inches of supermarket shelf space as a means to give the Okinawan secrets of longevity to the rest of the world in an easy, silver bullet kind of way. I remember being somewhat disconcerted at the thought of reducing the wisdom of an entire culture into a few bottles of capsules. Now, my interest in this mission is renewed! I have been learning more about the rest of the world’s Blue Zones, five in total, where people live long, healthy, vibrant, and happy lives. My mission is not so much to convert this wisdom into capsule bottles but to try to learn which behaviors can be adapted by those of us who are looking to live not just longer, but more energetic, purposeful, and happy lives. As I get older, this mission takes on an even greater significance as I become aware of how our culture views aging and how that needs to change.

What are the behaviors, attitudes, and lifestyle habits that contribute to the highest concentrations of centenarians in the world? The Blue Zone populations show much less incidence of degenerative diseases and what are now called “lifestyle” diseases such as heart disease, cancer, and diabetes to name a few. How can we learn from them and reduce the impact of these diseases in our own cities and towns.

Experiential Wisdom Meets Science

We can draw upon the obvious behavior patterns documented from studying these cultures and from the social science research being done in our own country.

Let’s start with a wisdom of one of the main pillars of health... relaxation!

As a Doctor of Oriental medicine, in practice for more than 40 years, I have appreciated the wisdom of Traditional Chinese Medicine and its focus on the importance on gaining balance in life, and how this helps to create health. In TCM energetic terms, we talk about the need to balance “Yin” and “Yang” (two opposing energetic expressions), in the body and, subsequently the mind. I appreciate how this explanation can be transposed onto our present scientific understanding of autonomic nervous system (ANS) and its function. The ANS is continuously interpreting the environment in which we find ourselves, looking for cues of safety or danger, and translates these cues to guide our behavior by preparing us to respond, all in the effort to maintain balance.

There are two separate systems at work within our ANS known as our Sympathetic nervous system (SNS) and our Parasympathetic nervous system (PNS). The Sympathetic (SNS) is responsible for our “fight of flight” or action response, and the Parasympathetic (PNS) governs our “rest and digest” or relaxation response. It is typical in our culture to be over-revved, and thus, we over-use the fight-or-flight resources in our body. In a way, we are in a constant “stress response” and, whether mild or severe, it produces the same response in the body, and thus, our natural breaker switch doesn’t get the chance to turn off. If our rest-and-digest switch doesn’t get the chance to turn on and create its relaxation or recovery response, we encounter the over-production of adrenaline, nor-adrenaline and cortisol, creating a state of imbalance. When our ability to “switch off” is compromised, this affects all the systems of the body. Often this is experienced as anxiety, inability to sleep, overeating, and exhaustion. If repeated daily, over decades, this depletes us, and leads to chronic inflammation, heart disease, cancers, and other degenerative diseases.

Our bodies, our family unit, our workplaces, and our country as a whole, all have the same dynamic, behaviors associated with balance or lack of balance.

From an evolutionary view point, a million years ago on the savannahs of Africa, ancient humans might activate their fight-or-flight , (yang) resources, to hunt prey, fight tigers then return to the village, having a good meal and a laugh

with family and friends, retire to a safe cave for a good night's sleep (yin) and awake with the fight-or-flight down-regulated and relaxed and rebalanced ready to go fight tigers again.

Now let's fast forward to today in our culture: we face daily stresses including corporate deadlines, long work hours, long commutes, family obligations to kids and parents, too much stimulation from news and television, fast foods, and the list goes on. We are not good at "switching-off", or finding the yin nourishment and balance or the safe cave we need, and our bodies and minds are not calmed and renewed as they need to be.

We can see the price we pay for this imbalance in the expressions of hyper-alertness, ADD, anxiety, lack of focus, depression, and chronic inflammation. Some cultures still maintain the wisdom of having a built-in day of rest, a day for down regulation, and spiritual renewal.

Most things in the West are open 7 days a week, 24 hours a day. Growing up in England, all the shops were closed on Sundays, nobody worked on their day of rest, whether religious or not. There has been an erosion of the rhythms of family relaxation time. People are not eating meals together, and there has been a lack of bonding with friends. There has been a trend towards lack of friend time, which went from three decades ago where only 3 percent of Americans said they had no close friends, to up to 12 percent in 2021.

In the same time frame corporate cultures became much more cut-throat with the erosion of job security, retirement security, etc.

A further dimension to SNS and PSNS is the Poly Vagal theory, developed by Dr. Stephen Porges. The vagus nerve is the major constituent of the parasympathetic nervous system and 80 percent of its nerve fibers are sensory, which means the feedback is critical for the body's homeostasis.

Our "fight and flight" when activated can manifest as anger, rage, irritation, and frustration. If we are having a flight response, we can have anxiety, worry, fear, and panic. Physiologically, our blood pressure, heart rate, and adrenaline increase, and we show a decrease in healthy digestion, pain threshold, and immune responses.

Secondly, we have a "freeze" state, our *dorsal vagal state*, which is our most primitive pattern, (also referred to as our emergency state). This means that we are completely shut down, we can feel hopeless and feel like there's no way out. We tend to feel depressed, conserve energy, dissociate, feel overwhelmed, and feel like we can't move forward. Physiologically, our fuel storage and insulin activity increases and our pain thresholds increase.

Lastly, our ability to "rest and digest" is a response of the parasympathetic system, also known as a ventral vagal state. It is our state of safety, social engagement, and homeostasis. If we are in our *ventral vagal state*, we are grounded, mindful, joyful, curious, empathetic, and compassionate. This is the state of social engagement, where we are connected to ourselves and the world. Physiologically, digestion, resistance to infection, circulation, immune responses, and our ability to connect are improved.

To me the interesting aspect of this is that under great *shared* stress, many people have an ability to move on without being deeply or irreparably damaged by the stressful circumstances. These are great human examples of amazing true resilience.

There are soldiers fighting in the trenches of war that experience the activation of the PNS down regulation immediately after life-threatening stress, allowing great balance without freezing into incapacitating shellshock or freezing terrifying sensations deep into the unconscious.

This demonstrates the ability of PNS (yin) resilience, when paired with the safety of social connection, and close friendships. Strong ties of close friends and shared experiences can help protect and down regulate our SNS. Even the weak ties of other unknown soldiers in a shared cause also lubricated this off switch.

There are many resilient "heroes" in many fields: emergency room doctors and nurses, healthcare workers, athletes, business leaders, firefighters, mothers, fathers, teachers, politicians, etc.

Now let's look at this framework above and apply it to health, vitality, and longevity.

Three Pillars of Longevity and Wellbeing

Relational health, physical health and mental fitness are the important pillars of Wellbeing and a long healthy and happy life. Where should we place our limited resources of time, money, and energy? What should we prioritize?

Here is a list that can help us get started and gain perspective on the broad range of factors that create wellbeing.

What reduces your chances of dying the most? (or, increases your chance of living longer and happier?)

1. Weak ties (Dr Jillian Sandstrom))
2. Strong ties (Blue Zones + Harvard Men's Study)
3. Quit Smoking
4. Quit Drinking
5. Flu Vaccine
6. Cardio Rehab (if you've had an event)
7. Exercise (Movement is key, Blue Zone)
8. Lean vs Overweight (Plant slant, 80% rule, Blue Zone)
9. Hypertension (Stress Relief, Down shift Blue Zones, DASH Diet)
10. Clean Air

This research surprised me the most is that "weak ties" is the strongest health factor! Stronger even than "close ties" of family and close friends. Then I realized, weak ties lead over time, to becoming close ties, and both stimulate the social connectivity that down regulates our fight-or-flight and keeps us out of the danger zone.

I believe these lessons have not been prioritized in our Western culture. The old mantras of "go to the gym" or "lose weight", are not found or emphasized in the Blue Zones, nor do you see them in Traditional Chinese Medicine. These "fixes" for healthy living are actually knee-jerk responses to our modern stress-filled lifestyles, that often in practice, create more stress.

The connection of close relationships and social integration accounts for the two top factors that reduce the risk of mortality. Social integration means how much you interact with people as you move through your day, including weak bonds. Rhetorically, Dr. Pinker asks: "Do you talk to the guy who every day makes you your coffee? Do you talk to the postman? Do you talk to the woman who walks by your house every day with her dog? Do you play bridge or poker, have a book club?" Along with close supportive relationships, casual daily interactions turn out to be "one of the strongest predictors of how long you'll live," far greater than diet, exercise, and other factors we assume are more important.

Let's consider "relational health" in one culture that has one of the World's five blue zones and amazingly also regularly scores in the top 15 of the happiest countries in the world. What's going on in Costa Rica? What is it about their culture? Well...strong social support is one big reason. Costa Ricans tend to have strong social

connections, both “weak ties” and “strong ties” which contribute to happiness and overall health. According to the World Happiness Report, Costa Rica ranks #1 for social support. Their healthy lifestyle tends to also prioritize healthy eating and physical activity, which are also strong contributors to a longer and healthier life. According to the Global Wellness Index, Costa Rica ranks #1 for healthy lifestyle. Costa Rican cuisine emphasizes a diet of fresh fruits, vegetables, and whole grains, and is relatively low in saturated fat.

In Costa Rica's blue zones, the concepts of "Plan de Vida" and "Pura Vida" are often cited as key factors in promoting strong social ties and overall well-being, unique to Costa Rican culture.

"Plan de Vida" translates to "life plan" and refers to a sense of purpose and direction in life. In Blue Zones, people tend to have a clear sense of their values, priorities, and goals, which helps to guide their decisions and actions. This can lead to a greater sense of fulfillment and satisfaction in life, as well as a stronger connection to one's community and social networks.

"Pura Vida" is a popular phrase in Costa Rica that translates to "pure life." It embodies the country's laid-back and friendly culture, emphasizing positivity, gratitude, and enjoyment of life's simple pleasures. This attitude promotes a sense of contentment, optimism, and happiness, as well as a willingness to connect with others and form strong social ties. I've seen tense moments dissipate at the saying and remembering “pura vida.”

Together, the concepts of Plan de Vida and Pura Vida contribute to a culture in Costa Rica's blue zones that values personal growth, community involvement, and social connection. By prioritizing these aspects of life, individuals can cultivate strong relationships and a sense of belonging, which contributes to the high happiness index ranking and longevity of residents in these areas. This may well be a cultural circuit breaker accounting for lower stress levels: Costa Rica is often cited as one of the least stressful countries in the world, with a laid-back culture and a relaxed pace of life. According to the World Happiness Report, Costa Rica also ranks #15 for positive emotions.

Overall, the combination of strong social support, healthy lifestyle, access to healthcare, low stress levels, and environmental factors may all unlock the secret to the high level of happiness and longevity, in us all.

The three pillars of health, longevity and happiness are confirmed as: Relational Health, Physical Health, Mental Resilience. Relational Health has been under-rated and pushed out of consciousness by Physical and Mental.

“We need to prioritize our social relationships like our life depends on it, because it does.”

Dr. Holt-Lunstad

Work and research on the Blue Zones, by the Harvard Study of Adult Development, by Dr. Holt-Lunstad at Brigham and Young University, by Susan Pinker developmental psychologist, and by Gillian Sandstrom, Ph.D., has one thing in common: the research shows the importance of social ties and human connection in promoting health and happiness.

The experiential research from Blue Zones cultural wisdom distilled from hundreds if not thousands of years, to bodies of work from the social science and health research, all confirm the importance of prioritizing social bonds.

1. Weak ties
2. Strong ties (friends close, family closer)

3. Right tribe (Faith/civic based community)

Extensive research has demonstrated that good relational health creates better longevity than diet or even exercise!

Blue Zones research has identified several areas of the world where people live longer and healthier lives, and a common thread among these regions is the strength of social ties and community connections. The Harvard Study of Adult Development, one of the longest-running studies of adult development in history, has found that close relationships are the key to health and happiness throughout life. Dr. Holt-Lunstad's research has demonstrated that social isolation and loneliness can have negative effects on health that are comparable to smoking and obesity. Susan Pinker has explored the importance of face-to-face interactions and social networks in promoting resilience and longevity, while Gillian Sandstrom has studied the impact of social interactions on happiness and well-being.

All this research points to the importance of social ties in promoting health and happiness and emphasizes the need for individuals to cultivate and maintain strong connections with others. Whether it's through family relationships, friendships, community involvement, or other forms of social engagement, the benefits of social ties are clear. By prioritizing social connection and building meaningful relationships, individuals can live longer, healthier, and happier lives.

- The longevity research into the Blue Zones shows that, of the nine factors common to all Blue Zones longevity, one-third are relational health skills.
- In the data of the 75-year Harvard Study of Adult Development, the primary lesson also confirms good relational health keeps us happier and healthier. Close relationships, the data indicates, are what keep people happy throughout their lives. The study found strong relationships to be far and away the strongest predictor of life satisfaction, and better predictors of long and happy lives than social class, wealth, fame, IQ, or even genes. And strong relationships are not only correlated with happiness, but with physical health, longevity, and financial success, too.
- Dr. Holt-Lunstad at BYU has researched hundreds of studies and tens of thousands of people of all ages and her conclusion is that having more, and better relationships is associated with better life outcomes. People who are more socially connected live longer. Dr. Holt-Lunstad has found convincing evidence that having more, and better relationships is associated with better health while, fewer and poorer quality relationships is associated with poorer health. This is true regardless of gender, age, or geography; people who are more socially connected live longer.
- Susan Pinker is a writer who researches and describes how face-to-face contact is crucial for learning, happiness, resilience, and longevity.
- Gillian Sandstrom, Ph.D. is a senior lecturer in the Psychology of Kindness, researches the link of participants who engaged in a weak tie, an everyday social interaction by smiling, making eye contact and having a brief conversation, (thus treating them like a weak social tie), experienced greater feelings of well-being and belonging.

It makes sense to take stock of our relational health skills, and to understand our blind spots in these areas and their impact on our health.

1. **Right Tribe.** Creating and nourishing social circles that support healthy behaviors is crucial. We know from the Framingham study that smoking, obesity, happiness, and even loneliness are contagious, and other research demonstrates that behaviors like viruses flow through social circles. Finding new playmates, such as recreational groups around golf, tennis, pickleball, etc. gives us both exercise and develops friendships. Friend groups around book clubs, bridge, poker, choirs, etc. all share a common interest that becomes an opportunity to develop and deepen friendships.

2. **Faith-based community.** Belonging to a civic- or faith-based organization, creates strong social relationships, with a framework of shared beliefs.
3. **Strong Ties.** Close supportive relationships with family and close personal friends, gives us a conscious and unconscious support network of those who have our backs in a crisis, lend us money, talk-through anguished feelings, support us through illness or surgeries. Along with close supportive relationships, casual daily interactions turn out to be one of the strongest predictors of how long we'll live.
4. **Loved Ones First.** Caring for children is important on many levels. Nourishing this primary relational unit, has many benefits that support us in the present and that can reflect on us later in our lives. Let's work to keep our close relationships, closer. Fresh evidence shows that these in-person friendships create a biological force field against disease and decline. It's not the number of close friends you have, or whether you're in a committed relationship, but the quality of our close relationships that matter.
5. **Weak Ties.** A fascinating predictor of longevity that's quite surprising, even more than "strong ties". Casual daily interactions turn out to be "one of the strongest predictors of how long you'll live," far greater than diet, exercise, and other factors we assume are more important. This social integration means how much do we interact with people as we move through our day, weak bonds. Such as "Do you talk to the guy who every day makes you your coffee? Do you talk to the postman? Do you talk to the woman who walks by your house every day with her dog?"

Blue Zone Power 9 Principles

Cultural wisdom proven over hundreds, if not thousands of years, researched from 5 of the healthiest cultures around the world, condensed into nine healthy lifestyle habits

1. MOVE NATURALLY

2. KNOW YOUR PURPOSE

The Okinawans call it "Ikigai" and the Nicoyans call it "plan de vida;" for both it translates to "why I wake up in the morning."

3. DOWN SHIFT (STRESS)

Cut inflammation, stress-relieving strategy that works for you and make it a routine. Cultivate the Rest and relax response, Rest and Digest, PSNS. (Switch-on healing and detoxification.)

4. 80% RULE

Saying "Hara hachi bu," the 2,500-year-old Confucian mantra, before meals

5. PLANT SLANT (BIOME/FIBER) (China Study, Okinawan Program)

While most people in the Blue Zones areas only consume small amounts of meat on rare occasions, all of them eat a rich array of fresh fruits and vegetables, which are packed with disease-fighting nutrients.

6. WINE @ FIVE (not for everyone obviously)

Limit your daily intake to one glass for women and two glasses for men.

7. RIGHT TRIBE

To create social circles that support healthy behaviors. Ikarians enjoy tight-knit communities that socialize frequently, while Okinawans build "moai" groups of five friends that commit to each other for life.

Research from the Framingham Studies shows that smoking, obesity, happiness and even loneliness are contagious.

8. BELONG

Faith-based community. Belong to a civic- or faith-based organization since strong social relationships can add years to your life.

9. LOVED ONES FIRST

Caring for children is important for many reasons, too, and many people in the Blue Zones areas go out of their way to invest time and love their children to ensure they'll be more likely to care for them when the time comes.

One of the longest-running studies on happiness and longevity.

The project has followed 724 men (including JFK) since they were teenagers in 1938. (Approximately 60 men, now in their 90s,) the longest-running study on happiness. The Harvard Study of Adult Development identified 3 factors that create longevity and happiness. The extensive research found that specific traits and behaviors were linked with increased levels of happiness across the entire group. Those in the studies were chosen from poor and rich communities in Boston.

Stay connected. They found a strong association between happiness and close relationships like spouses, family, friends, and social circles.

1. Social connections are good for us, and loneliness kills.

2. Keeping your close relationships, closer. It's not the number of close friends you have, or whether you're in a committed relationship, but the quality of your close relationships that matters.

3. Good relationships don't just affect our bodies; they protect our brains. The same study also showed that being in a securely attached relationship to another person in your 80's is protective, that the people who are in relationships where they feel they can count on the other person in times of need, those people's memories stay sharper and longer. "Those in the study that were the happiest in retirement were those that actively worked to replace workmates with new playmates" according to psychiatrist Robert Waldinger, the director of a 75-year-old Harvard study on adult development. The research found three primary lessons about relationships.

People who are more socially connected to family, to friends, and to community are happier, they're physically healthier, and they live longer than people who are less well connected. And the experience of loneliness turns out to be toxic. The quality of close relationships matters. It turns out that living during chronic conflict is bad for our health. Relationships with people who have our backs provides protection for our brains, and people in relationships where they feel they can't count on the other person, experience earlier memory decline.

What are the qualities we need to cultivate to nourish warm relationships around us?

It turns out there are eight emotionally intelligent actions to cultivate better relationships. Simply put, great relationships are built on trust. The Harvard study identifies what you can do to cultivate stronger, deeper trust--leading to more meaningful relationships.

1. Communicate
2. Be authentic.
3. Be helpful.
4. Be honest.
5. Be dependable.
6. Show appreciation.
7. Show empathy.
8. Apologize

"We need to prioritize our social relationships like our life depends on it, because it does."

Research at *Brigham Young* by Dr. Juliana Holt-Lunstad's researched tens of thousands of middle-aged people, in a series of studies, over 7 years. How often they visited Doctor, studying their diet exercise, alcohol, etc. all were studied in the research of Brigham Young Dr. Juliana Holt-Lunstad's. She is focused on the long-term health effects of social connection and her work has been seminal in the recognition of social isolation and loneliness as risk factors for early mortality.

Brigham Young Dr. Juliana Holt-Lunstad's research is focused on the long-term health effects of social connection and her work has been seminal in the recognition of social isolation and loneliness as risk factors for early mortality.

"Not only are we at the highest recorded rate of living alone across the entire century, but we're at the highest recorded rates ever on the planet," said Tim Smith, co-author of the study. "With loneliness on the rise, we are predicting a possible loneliness epidemic in the future." Social isolation exceeds the health risks associated with obesity, inactivity, excessive drinking, air pollution and smoking over 15 cigarettes a day, according to [a 2010 review of 148 studies](#) by psychology professor Julianne Holt-Lunstad of Brigham Young University.

Dr. Holt-Lunstad has found strong evidence that having more, and better relationships is associated with better health while fewer and poorer quality relationships is associated with poorer health. This is true regardless of gender, age, or geography; **people who are more socially connected live longer**. Lacking social connection significantly increases the risk of heart attack, stroke, and Type II Diabetes. Social isolation slows wound healing, increases risk of dementia and Alzheimer's, and even increases the rate of cellular aging.

Air pollution increases your risk of early death by 5%, obesity by 18%, physical inactivity (not exercising) by 22%. **Loneliness increases your risk of early death by 26%**, (Holt-Lunstad, 2015 & 2010) yet poor social interaction were the top predictors of death. The study analyzed data from a variety of health studies. Altogether, the sample included more than 3 million participants from studies that included data for loneliness, social isolation, and living alone.

Previous research from Holt-Lunstad and Smith puts the heightened risk of mortality from loneliness in the same category as smoking 15 cigarettes a day and being an alcoholic. Those findings were referenced in a campaign Oprah launched called [#JustSayHello](#). Social connections also have a biological impact — a lack of proximity to

trusted individuals can trigger a heightened physiological state of alert and threat, which then can lead to signaling increases in heart rate and blood pressure, circulating stress hormones or inflammation. When inflammation is chronically heightened, it “can put us at increased risk for a number of chronic illnesses,” Holt-Lunstad said, “but also can increase your risk for mental health issues such as depression, and cognitive health issues, such as mild cognitive impairment, dementia and Alzheimer’s disease.”

What reduces your chance of dying the most?

(Amended slightly from Dr. Holt-Lunstad research)

1. Weak ties
2. Strong ties
3. Quit Smoking
4. Quit Drinking
5. Flu Vaccine
6. Cardio Rehab (if you’ve had an event)
7. Exercise
8. Lean vs Overweight
9. Hypertension
10. Clean Air

Connection in the form of close relationships and social integration accounts for the two top factors that reduce the risk of mortality. Social integration means how much you interact with people as you move through your day, including weak bonds. Rhetorically, Dr. Pinker asks: “Do you talk to the guy who every day makes you your coffee? Do you talk to the postman? Do you talk to the woman who walks by your house every day with her dog? Do you play bridge or poker, have a book club?” Along with close supportive relationships, casual daily interactions turn out to be “one of the strongest predictors of how long you’ll live,” far greater than diet, exercise and other factors we assume are more important.

Now that we spend, on average, more time online than on any other activity (around 11 hours a day), Dr. Pinker dug deeper to see if connecting online is just face-to-face connection. The short answer is no. She says: “Face-to-face contact releases a whole cascade of neurotransmitters, and like a vaccine, they protect you now in the present and well into the future. So simply making eye contact with somebody, shaking hands, giving somebody a high-five is enough to release oxytocin, which increases your level of trust, and it lowers your cortisol levels. So, it lowers your stress. And dopamine is generated, which gives us a little high and it kills pain.”

Dr. Pinker concludes that women may live longer than men because they prioritize face-to-face relationships and develop them over their lifetimes. She states, “fresh evidence shows that these in-person friendships create a biological force field against disease and decline” and calls for each of us to do what we can to build “in-person interaction into our cities, into our workplaces, into our agendas [because it] bolsters the immune system, sends feel-good hormones surging through the bloodstream and brain and helps us live longer. I call this building your village and building it and sustaining it is a matter of life and death.”

You might imagine each of your relationships as a bridge you build between yourself and another person. Any strong bridge must be built on a solid foundation--and for relationships, that foundation is trust. Without trust, there can be no love, no friendship, no lasting connection between people. But where there is trust, there is motivation to act. If you trust someone to look after your best interests, you will do almost anything that person asks of you.

Health Risks of Loneliness. There is strong evidence that many adults aged 50 and older are socially isolated or lonely in ways that put their health at risk. Recent studies found that:

- Social isolation significantly increased a person's risk of premature death from all causes, a risk that may rival those of smoking, obesity, and physical inactivity.¹
- Social isolation was associated with about a 50% increased risk of dementia.¹
- Poor social relationships (characterized by social isolation or loneliness) were associated with a **29% increased risk of heart disease** and a **32% increased risk of stroke**.¹
- Loneliness was associated with higher rates of depression, anxiety, and suicide.
- Loneliness among heart failure patients was associated with a nearly 4 times increased risk of death, 68% increased risk of hospitalization, and 57% increased risk of emergency department visits.

1. Physical Health

Exercise. Move naturally such as gardening, yard work, walking to work are how the Blue Zones exercise, although in our culture joining a gym may really help. Want to feel better, have more energy and even add years to your life? Just exercise. The health benefits of regular exercise and physical activity are hard to ignore. Everyone benefits from exercise, regardless of age, sex, or physical ability. Need more convincing to get moving? Check out these seven ways that exercise can lead to a happier, healthier you.

1. Exercise controls weight
2. Exercise combats health conditions and diseases
3. Exercise improves mood
4. Exercise boosts energy
5. Exercise promotes better sleep
6. Exercise puts the spark back into your sex life
7. Exercise can be fun ... and social!

Aerobic activity. Get at least 150 minutes of moderate aerobic activity or 75 minutes of vigorous aerobic activity a week, or a combination of moderate and vigorous activity. The guidelines suggest that you spread out your exercise over the course of a week. To provide even greater health benefit and to assist with weight loss or maintaining weight loss, at least 300 minutes a week is recommended. But even small amounts of physical activity are helpful. Being active for short periods of time throughout the day can add up to providing health benefit.

Strength training. Do strength training exercises for all major muscle groups at least two times a week. Aim to do a single set of each exercise using a weight or resistance level heavy enough to tire your muscles after about 12 to 15 repetitions.

Diet. Plant slant, eat more plants. While most people in the Blue Zones areas only consume small amounts of meat on rare occasions, all of them eat a rich array of fresh fruits and vegetables, which are packed with disease-fighting nutrients.

Two Week Diet-Detox program <https://www.darcywellness.com/diet-detox-program>

Our medical elite tells us to eat five portions of fruit and vegetables a day and that this alone will lower cancer rates in the U.S. by 40%! Yet, when we look at what we are serving our children in the schools of America, we can easily get the disconnect that, we as a nation, have around food. This must change, and it CAN change...it can change in your circle of friends and within your circle of loved ones by making a change right now for yourself! We have seen many people on the typical all-American diet who start their change with this program and shift into the adventure of energy, weight loss, greater vitality, and greater health.

You will find that by choosing the healthiest of foods you will gain increased energy, strengthen your immune system, and find motivation to establish some healthy new eating habits. These healthy eating habits are what will nourish you, going into the future. We have run this program for over 30 years in our clinic. We now offer this life-changing experience on-line or with one-on-one with our nutritionists. We provide recipes, shopping lists and our decades of experience to make this detox as effortless and fun as possible.

Sleep. In 2014, the CDC (Center for Disease Control) declared sleep deprivation to be a public health epidemic.

Mind-Body program to improve your Sleep over 5 weeks <https://www.darcywellness.com/insomnia-relief-program>

One in every two Americans experienced some difficulty falling asleep last year; one in three experienced insomnias on a regular basis. Some turn to over-the-counter medicines to help them sleep, while 10 million rely on prescription medicine. Many drugs that help induce sleep are not designed for long-term use, having serious side effects, leaving a hung-over feeling in the morning, and further disrupting sleep patterns. Other surveys have found that 27% of Americans reported using complementary medicines for fatigue, and 26% have used them for insomnia. Close to 40% of American adults say that daytime sleepiness interferes with their daily activities for at least a few days a month, and about 20% say it affects their daily activities a few days a week, according to a 1998 poll cited in the study. The two main causes being psychological, or stress induced and interaction of foods, drinks, medications.

You can empower yourself to learn natural ways to balance your life and nourish your sleep patterns slowly reducing dependency on harsh sleep pharmaceuticals.

Stop Smoking. Smoking Cessation program can help over 21 days. <https://www.darcywellness.com/smoking-cessation-program>

Hypertension, Lower Blood Pressure Program.

<https://www.darcywellness.com/blood-pressure-relief-program> High Blood Pressure Relief Program guides you through the DASH diet, and natural supplements support lowering blood pressure. Obviously work with your Medical Doctor, but there is a lot that you can do to naturally support their recommendations.

1. Maintain a Healthy Weight. DASH Diet. Follow a healthy eating plan, which includes foods lower in salt.
2. Exercise: Maintain moderately physically active life on most days of the week.
3. Alcohol in Moderation:
4. Dietary Supplements: Consider a regimen of dietary supplements targeted at lowering blood pressure.

5. Pharmaceuticals: Finally, if working with your healthcare practitioner, if all else fails and you have high blood pressure and are prescribed medication, you must take it as directed.
6. Acupuncture: Consider supportive therapies like Acupuncture and Nutrition
7. Check Your Blood Pressure regularly.

Medical evaluation with your Medical Doctor.

Get a regular checkup Wellness visit and work-up.

Wellness evaluation with a wellness practitioner Get a lifestyle evaluation of your diet, exercise, which could lead to a targeted plan of nutrition, dietary supplements and vitamins, stress, basic preventative medicine, consider a wearable device like a Fitbit, to understand your sleep patterns, blood oxygen, resting and variable heart rates, etc.

2. **Mental Fitness**

Stress relief impacts physical and mental health and mental performance dramatically. It becomes a marker of resilience or a risk factor.

Mind-Body program to improve your Stress over 5 weeks <https://www.darcywellness.com/stress-relief-mind-body-program>

Learning a 20-minute Stress Relief Technique can improve how your body and mind responds to stress by slowing your heart rate, reducing your blood pressure, slowing your breathing rate, increasing blood flow, improving the immune system, lessening muscle tension and much more. We know stress is harmful to our health ... the toll it can take on our quality of life can be devastating. Learning how to switch-off stress daily protects us on many levels. Decades of studies on the impact of negative stress has shown that it can change us genetically, change our brain chemistry, suppress our immune system, and create a pro-inflammatory and pro-angiogenic (supportive of cancer growth) condition in our bodies.

The good news is we know how to switch stress response off! Look at the studies that proved just 20 minutes a day of stress reduction audio can have profound impact over 5 weeks.

- 80% Lowered High Blood Pressure, 16% off BP Medications
- 64% Decreased Stress
- 31% Improvement in Severe PMS
- Increased Fertility.
- Chronic Pain Patients Reduce their Physician Visits by 36%.
- 100% of Insomnia Patients Reported Improved Sleep and 91% Either Eliminated or Reduced Sleeping Medication Use.
- 57% Reduction in PMS
- Increased Self-Esteem:
- More Effective at School Inner city middle school students improved grade score,

Know your Purpose, The Okinawans call it “Ikigai” and the Nicoyans call it “plan de vida;” for both, it translates to “why I wake up in the morning.” Work with your life coach to develop and understand your life purpose for your 2.0

progress. Your life purpose consists of the central motivating aims of your life—the reasons you get up in the morning.

Purpose can guide life decisions, influence behavior, shape goals, offer a sense of direction, and create meaning. For some people, purpose is connected to vocation—meaningful, satisfying work. For others, their purpose lies in their responsibilities to their family or friends. Others seek meaning through spirituality or religious beliefs. Some people may find their purpose clearly expressed in all these aspects of life. Purpose will be unique for everyone; what you identify as your path may be different from others. What’s more, your purpose can shift and change throughout life in response to the evolving priorities and fluctuations of your own experiences.

Questions that may come up when you reflect upon your life purpose are: Who am I? Where do I belong? When do I feel fulfilled?

Life Coach Evaluation may help you define your goals and develop a purpose plan.

Resources and References

TED Talk

https://www.ted.com/talks/robert_waldinger_what_makes_a_good_life_lessons_from_the_longest_study_on_happiness

<https://www.cdc.gov/aging/publications/features/lonely-older-adults.html> Those who had retired were 40 percent more likely to have had a heart attack or stroke than those who were still working. The increased risk was the highest during the first year after retirement and leveled off after that.

<https://www.thestreet.com/retirement-daily/tools-resources/retirement-remix-chapter-3-retirement-can-be-bad-for-your-health> TED Talk

[Susan Pinker, Developmental Psychologist, On Living Longer](#) TED Talk

https://www.ted.com/talks/susan_pinker_the_secret_to_living_longer_may_be_your_social_life?language=en TED Talk

Dr. Julianne Holt-Lunstad describes the vital importance of social relationships for lasting health. TED Talk https://www.ted.com/talks/julianne_holt_lunstad_is_social_disconnection_comparable_to_smoking

PODCAST

Jillian Sandstrom *Weak Ties* https://gilliansandstrom.com/talking2strangers_research/

<https://hiddenbrain.org/podcast/relationships-2-0-the-power-of-tiny-interactions/>

Jillian Sandstrom *Weak Ties* research addresses this apparent contradiction by focusing on the micro level, examining how seemingly insignificant social interactions and everyday behaviors can influence and improve well-being.

<https://pubmed.ncbi.nlm.nih.gov/24769739/>

<https://www.fastcompany.com/90668296/america-needs-a-chief-friendship-officer> One in five Americans has no close social connections, a double digit increase from 2013. Fifteen percent of men have **no close friendships** at all, a fivefold increase since 1990.

Social Support. A meta-study covering more than 300,000 participants across all ages reveals that adults get a 50 percent boost in longevity if they have a solid social network <https://www.scientificamerican.com/article/relationships-boost-survival/>

USA 31% Lonely of our population reporting some level of loneliness. Loneliness stats by country <https://www.statista.com/statistics/1222815/loneliness-among-adults-by-country/#:~:text=Feeling%20of%20loneliness%20among%20adults%202021%2C%20by%20country&text=According%20to%20a%20global%20survey,often%2C%20always%2C%20or%20sometimes>

Research from Brigham Young University shows that loneliness and social isolation are just as much a threat to longevity as obesity. <https://news.byu.edu/news/prescription-living-longer-spend-less-time-alone>

A study published in the journal *Aging* in 2018 found that social networks and support were positively associated with longevity in Costa Rica's Nicoya region, which has a high concentration of centenarians.

A study published in the journal *Frontiers in Psychology* in 2019 found that Costa Ricans have a high level of resilience, which may help to mitigate the negative effects of stress.

According to the Happy Planet Index, which measures well-being and environmental impact, Costa Rica ranks #1 in the world. The country has made a commitment to sustainability, with a goal of becoming carbon neutral by 2021.

The Men of the Harvard Grant Study:^[3]

- **Alcoholism is a disorder of great destructive power.**
 - Alcoholism was the main cause of divorce between the Grant Study men and their wives.
 - It strongly correlates with neurosis and depression that followed the alcohol abuse.
 - Together with associated **cigarette smoking, alcoholism was the single greatest contributor to early morbidity and death.**
- **Financial success depends on warmth of relationships** and, above a certain level, not on intelligence.
 - Those who scored highest on measurements of "warm relationships" earned an average of \$141,000 a year more at their peak salaries (usually between ages 55 and 60).
 - No significant difference in maximum income earned by men with IQs in the 110–115 range and men with IQs higher than 150.
- **Political-mindedness correlates with intimacy:** aging liberals have more sex.
 - The most-conservative men ceased sexual relations at an average age of 68.
 - The most-liberal men had active sex lives into their 80s.

- **Men with relationship satisfaction were healthier in old age:** Those that thrived in their relationships at 50 were more physically healthy at 80 years old.^[7]
- The **warmth of childhood relationship with mothers** matters long into adulthood:
 - Men who had "warm" childhood relationships with their mothers earned an average of \$87,000 more a year than men whose mothers were uncaring.
 - Men who had poor childhood relationships with their mothers were much more likely to develop dementia when old.
 - Late in their professional lives, the men's boyhood relationships with their mothers—but not with their fathers—were associated with effectiveness at work.
 - The warmth of childhood relationships with mothers had no significant bearing on "life satisfaction" at 75.
- The **warmth of childhood relationship with fathers** correlated with:
 - Lower rates of adult anxiety.
 - Greater enjoyment of vacations.
 - Increased "life satisfaction" at age 75.

According to [The Atlantic](#), George Vaillant's main conclusion is that “the warmth of relationships throughout life has the greatest positive impact on life satisfaction”. “the study shows: "Happiness is love. Full stop."^[8]

Definitions: Health, Energy, Vitality, Longevity and Wellbeing

- Health: The condition of being sound in body, mind, or spirit especially freedom from physical disease or pain.
- Energy: The strength, and vitality required for sustained physical or mental activity. Chinese: (*Qi*) vital life force
- Vitality: A lively and animated character: power of enduring: capacity to live and develop physical or mental vigor especially when highly developed.
- Longevity: Health span: years lived with health and vitality.
- Wellbeing: The state of being happy, healthy, or prosperous

"Happiness is the new rich. Inner peace is a new success. Health is new wealth. Kindness is the new cool." – Anonymous.

"Health is a priceless wealth. Invest while you can." – Bryant McGill.

"Less pharma, more farms. Less pills, more plants. less GMO, more organic". – Anonymous

"Some people are so poor all they have is money." - Bob Marley

"True wealth is having your health and knowledge of self." - Benjamin Franklin