



The Blue Zones are regions around the world where it is believed that people live longer than average. There are five officially designated blue zones: (1) Okinawa, Japan; (2) Sardinia, Italy; (3) Icaria, Greece; (4) Nicoya, Costa Rica and (5) Loma Linda, California U.S.¹ Residents of blue zones live in very different parts of the world, but they share common lifestyle habits that lead to longer, healthier lives.

The Blue Zone Projects is a community well-being improvement plan designed to change the way people experience the world around them. The Blue Zones Project focuses on the “life radius,” the area closest to the home, where most people spend about 90% of their lives³. Rather than relying on individual behavior change, the Blue Zone Projects creates surroundings that default to healthy behaviors. This is done by making environmental changes that strengthen social ties, reshape places to offer more opportunities and by sharpening policies that support healthy behaviours.³

What Are Blue Zones and How Can They Help Us Live Longer?

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In this issue we will take a look at Blue Zones around the world and discuss what benefits Blue Zones have to offer. The concept of Blue Zones grew from demographic work where blue circles were drawn on a map highlighting villages with the highest concentration of centenarians. National Geographic explorer and journalist, Dan Buettner, and a team of scientists then used these techniques to identify five regions in the world with extraordinary longevity and vitality¹.

Region #1: In Sardinia, a village in the mountainous region of Ogliastra, Italy resides the longest-lived people in all of Italy, perhaps all of the world. This region consists primarily of rocky, sun-beaten terrain, cut with deep valleys that have never been suitable for large-scale farming¹. Over the centuries, shepherding offered the best profession, and it was one low in stress that required miles and miles of walking each day. Walking provides the type of low-intensity exercise that yields great cardiovascular benefits without the joint pounding

injuries that result from long distance running. In Sardinia, the rate of centenarians exceeds America's by a factor of 30.

The Sardinian diet also plays a large role in increased longevity. Their diet is largely plant-based with an emphasis on beans, whole grains, and garden-fresh vegetables washed down with flavonoid-rich wine¹. Meat is eaten occasionally, usually at the family Sunday dinner, and the primary dairy products consumed are goat milk and cheeses from the local herds. A final protective factor appears to be attitude. In America, youth is celebrated, and aging is dreaded. In Sardinia there are no long-term care facilities. Younger generations feel an affectionate debt to the parents and grandparents that raised them. Is there a link between attitude and longevity? Absolutely! Seniors who live at home are more likely to receive better care and remain engaged longer.

Region #2: For nearly a millennium, the Pacific archipelago of **Okinawa**, 1000 miles from Tokyo, has maintained a reputation for extreme longevity and having one of the highest ratios of centenarians per population worldwide. The people of Okinawa still suffer from the same diseases that kill Americans, but at much lower rates¹.

The simplest way to imagine Okinawa is to picture it as a Japanese Hawaii, an exotic group of islands in a warm, temperate climate. One of the benefits of the temperate Okinawa climate is that people there are able to grow vegetables in their gardens all year long. This availability of fresh vegetables greatly reduces the need to pickle foods as they do in Japan's northern islands¹. In turn, this means an Okinawa diet of considerably less salt, and salt heavy diets that pickled foods contribute are known to cause high blood pressure which weakens cerebral arteries and causes micro tears that are precursors to stroke.

The dietary culture of Okinawa also includes the practice of '*hara hachi bu*', or only eating until one is 80% full¹. This provides benefits beyond just less calories. Reducing food consumption at each meal slows down the body's metabolism in a way that produces fewer damaging oxidants.

Region #3: The American Blue Zone is made up of some 9000 Seventh Day Adventists who live in and around **Loma Linda, California**, just 60 miles east of Los Angeles¹. For the past half century, members of this community, whose faith endorses healthy living, have participated in a ground-breaking health and dietary study of Californians over the age of twenty-five. As a group, they lead the nation in longest life expectancy. Despite its location in the smoggy orbit of greater

Los Angeles, Loma Linda appears to be one of the few places in the United States where a Blue Zone has taken root¹. Seventh Day Adventists follow a faith that expressly discourages smoking, alcohol consumption, or eating meat as well as other rich foods and caffeinated drinks. These habits in moderation are also paired with a healthy respect for science and medical care. Loma Linda is also home to Loma Linda University and Medical Center, a modern facility whose physicians and researchers have played key roles in the Adventists Health Study that has collected a huge body of data on Adventist behaviors.

Blue Zone #4: Costa Rica-In 2002, population data revealed that men in Nicoya, Costa Rica seemed to be living longer than those in more developed countries around the world¹. In fact, a Costa Rican man at the age of 60 had about twice the chance of living to 90 than men living in the United States, France or even Japan, despite the fact that Costa Rica spends only about 15% of what America does on health care.

Like the other regions, people in Costa Rica eat a diet that consists primarily of vegetables with meat in moderation. They also eat an abundance of fresh fruit, much of which is grown around their yards. One fruit commonly found in the Costa Rican diet is the maranon, a red-orange fruit with five times the vitamin C found in oranges and known to have protective qualities against certain types of cancers¹. The final dietary factor associated with Nicoya is the mineral content of the water. The hardness (calcium and magnesium content) is higher in Nicoya than anywhere else in Costa Rica, and it is believed this high calcium-rich water contributes to their longevity. The heart is a muscle, and all muscle contractions depend on calcium. Inadequate calcium leads to weak muscles, including the heart.

Blue Zone #5: Ikaria, Greece is a small island in the Aegean Sea, first investigated by National Geographic for the island's extraordinary longevity in 2010. Ikaria lies about 30 miles off the western coast of Turkey and in ancient times, was considered a health destination for the Greeks and Romans who came to soak in the hot mineral springs of the area¹.

Ikarians also eat a version of the Mediterranean diet rich in olive oil, vegetables, low in dairy and meat, with some alcohol daily. In addition to vegetables and some fruit, the Ikarian diet also includes over 150 varieties of greens that grow wild in the area. Some of these greens contain more than ten times as many antioxidants as red wine. In the villages, they drink a "mountain tea" daily¹. This brew is made from whatever herbs or greens may happen to be in season, and these herbal teas show strong antioxidant properties and are rich sources of polyphenols. Additionally,

most of these greens and herbs act as mild diuretics, so they help flush the body of natural waste products.

All of the Blue Zones have unique cultural and geographic features that lead to increased longevity. What can we glean from this? What factors can we borrow, what steps can we take to help us live our longest, best life? To begin with you can visit the Blue Zones website at www.bluezones.com and use the Vitality Compass to help you calculate your potential life expectancy at your current age and the number of extra years you can gain if you tweak some of your behaviors. The site also custom-creates a list of suggestions to help you with your plan. **In essence**, Blue Zones share certain characteristics of the land and human behaviors that all work together to make their environments healthier for humans.

The nine common habits they share are:

1. **Move More Naturally** – rather than hitting the gym, their environments constantly nudge them to move more. They grow gardens and do most of the work by hand rather than using mechanical conveniences.
2. **Have a Sense of Purpose** – in Japan it is called “ikigai” in Costa Rica it is “plan de vida.” Whatever it is called, experts estimate having a sense of purpose can add up to seven years of quality life.
3. **Down Shift Stress** – use stress relieving, down-shifting methods to shake off the stress of the day.
4. **Follow the 80% Rule** – Blue Zone residents tend to stop eating when they feel 80% full. They also eat their heaviest, largest meal in the late afternoon or early evening and then don’t eat again for the rest of the day.
5. **Plant Slant** – beans are the staple of the diet with meat eaten only 5 to 6 times per month. Meat serving sizes are only 3 to 4 ounces (about the size of a deck of cards).
6. **Wine at Five** – people living in blue zones drink alcohol (preferably red wine) regularly and in moderation.
7. **Faith Counts** – people living in blue zones tend to belong to faith-based organizations and those that regularly attend services can add up to 4 years to their lives.
8. **Family First** – successful centenarians in blue zones put their families center to their lives, keeping parents and grandparents close, committing to long term life partners and investing heavily in their children.
9. **The Right Tribe** – turns out both good and bad habits are contagious. Those who are able to find a network of support with people that favor healthy habits and activities favor longer, healthier lives.

References

¹Buettner, Dan (2008). The Blue Zones: 9 Lessons for living longer from the people who have lived the longest. National Geographic Partners, LLC., Washington, DC.