

溫故知新

Onkochishin

*"Learn from the old to understand the new"*

# Okinawan Centenarians

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*The Link between Traditions and Longevity*

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The natives of Okinawa are well known for preserving the island's ancestral traditions. Practicing and teaching them to younger generations has helped keep them true to their original way. A large group of Okinawans, who were born 100 years ago, are still alive today. They are the Okinawan Centenarians. This unique group of people has been living their lives almost free of disease while maintaining both physical and mental youth. Even though genetics play a role in their longevity, it is a small role that pales in comparison to the role of tradition. Okinawa is located 300 miles south of the southernmost tip of Japan within the RyuKyu chain of islands. It has now been placed at the top of the list for having the largest concentration of centenarians on the planet.



The Okinawan Centenarians have been recorded from as far back as 1872 up to date through a high-quality age reporting system

from Japan known as the “koseki”. This is a family register recording births, marriages and deaths in every town and village of Japan, including Okinawa. The law requires all households to report these events to their local municipality.

From there the records are entered into the koseki. Demographic methods indicate that this age registration system is accurate, therefore reliable. This register allowed scientists and doctors to study the Okinawan Centenarians in great numbers during the largest study based on their longevity. This was conducted over a 25 year period with 900 participants. It is known as The Okinawan Centenarian Study. It was created by a team of scientists and doctors, including the twin brothers, Bradley Willcox, an internist and Dr. Craig Willcox, respectfully, an anthropologist. They included the koseki data as a major tool, along with interviews, physical screening and testing. The results of this study show the longevity of the Okinawan Centenarians being a reflection of their many traditions, such as maintaining a uniquely healthy diet, performing in martial arts and dance and having positive social aspects with a constant strive for spiritual balance.

The team found remarkable indications on their health, such as the low levels of homeocysteine in their blood plasma. Homeocysteine is an amino acid known to cause damage to the arterial walls. Scientists concluded that the daily consumption of green/yellow vegetables along with a regular drinking of green tea is responsible for these levels. Therefore, this group has an 80% reduction of risk for coronary heart disease, stroke and Alzheimer's. Upon autopsy it was found that the Okinawan Centenarians had virtually young, clean arteries free of atherosclerosis, and low cholesterol. Decades of healthy eating habits were also shown to be responsible for the lack of inflammatory and auto-immune

diseases. Studies show that Okinawans suffer from 80% less breast and prostate cancers and 50% less ovarian and colon cancers than comparative populations across the globe. One of the most important factors is the high volume of fiber consumed in their diet. The chart below shows the order of increasing height of coronary heart disease in compared groups.

Population in order of increasing height	Age-Adjusted CHD mortality	
	( Males )	( Females )
Okinawa	33 [ baseline ( BL ) ]	15 ( BL )
Japan	51 ( ~ 1.5 × BL )	43 ( ~ 3 × BL )
US	193 ( ~ 6 × BL )	177 ( ~ 12 × BL )

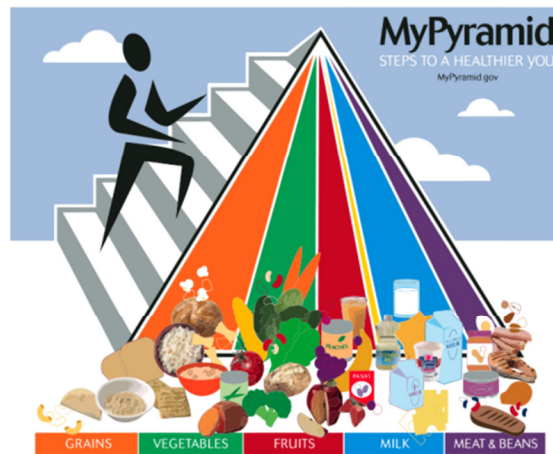
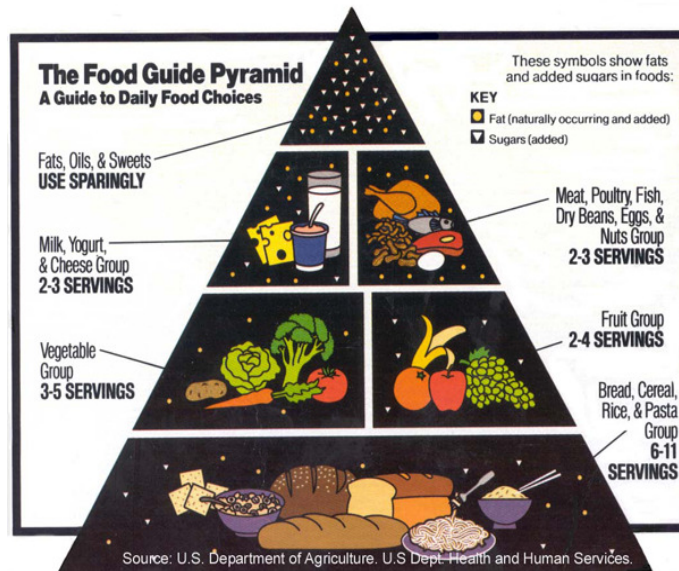
The traditional Okinawans refer to their meals as “kusuiman” or “nuchigusui”, meaning “medicine for life”. They know that food lacking nutritional quality is worthless and they simply won’t eat it. They do eat seasonally which allows changes in caloric intake and the consumption of fresh, ripe and more flavorful foods. This helps promote resistance to chronic diseases such as heart disease, Alzheimer’s and depression. The average caloric intake for the traditional Okinawan is 1800 per day. When compared to the Japanese, Okinawans eat triple the amount of green/yellow vegetables, a much smaller portion of rice, which is substituted with “imo”, an Okinawan sweet potato



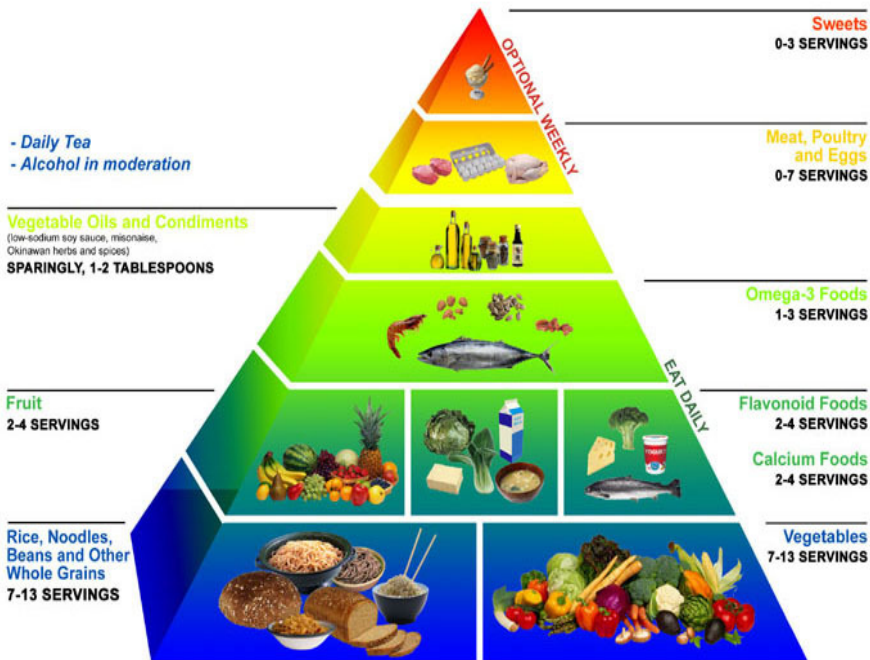
and a quarter the amount of sugar, salt and grain. Dairy foods are not consumed regularly and fish is eaten in small quantities of less than half a

serving a day. The smallest amount of goat is served only during great celebrations such as weddings and births. Even then, the goat meat is eaten in shaved amounts. Although the Okinawans eat pork as a whole, using the entire pig, they cut slivers of it to be added for flavoring soups and other dishes. The ratio of their daily dietary consumption is 85% carbohydrates, 9% protein and 6% fat. Although this seems to be a high- carbohydrate intake according to American standards, the average lifespan for Okinawans is 82.6 years. The average life expectancy of Americans is 78.2 years. Understanding how meat creates a state of acidosis in the human body, which can lead to cancerous tumor growth, Okinawans eat it so rarely, that when compared to Americans, Okinawans annual consumption comes to an average of 7.9 lbs. of pork while Americans annual consumption of pork is an average of 46.5 lbs.. With pork being the only meat consumed regularly throughout the year, the Okinawan intake remains at 7.9 lbs. When adding the other meats consumed annually by Americans, there are an additional 62.4 lbs. of beef and 73.6 lbs. of poultry, bringing a total of 182.5 lbs. of meat consumed annually by Americans. These numbers show an extreme difference between the two populations dietary lifestyles and perhaps an explanation for the tremendous cancer rates among the American people.

The U.S. government has changed its food pyramid formula three times.

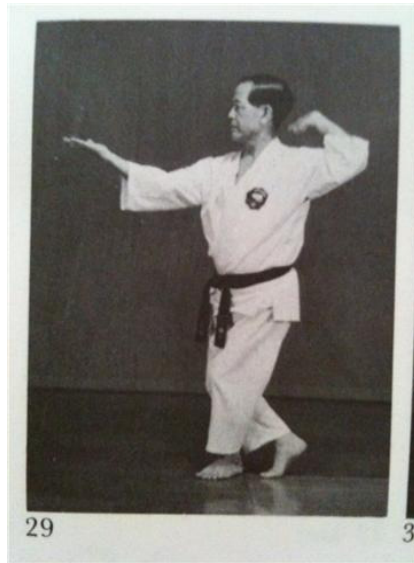


The Okinawans have a food pyramid as well.



However, they were taught how to maintain a healthy body and mind by their ancestors, through traditions such as “Hara Hachi Bu”. This is an Okinawan rule, when translated, means 80%. To describe this rule is simple. “Eat until the body is 80% satisfied.” In other words, don’t keep eating until you are 100% full. I have personally practiced this rule, going to the extent of putting the phrase, “Hara Hachi Bu” on my refrigerator as a reminder. From my own experience, I have learned how difficult this can be for someone living in the western world, not being taught this tradition while growing up. It takes extreme self-discipline and perseverance in order to maintain this way of life. I was also able to learn that after getting through the first few days of transition, I was able to hear my body

and understand it. This leads to eating only when hungry and knowing when to stop.



Exercise is a daily routine not only for the young, but for the older Okinawans as well. Members of each family participate in karate beginning at a very young age. This form of focused exercise has been created through the natural instinct of human survival. Karate has been shown to promote an increase in bone density, a decrease in heart rate, blood pressure and rested breathing rate. It also helps induce the relaxation response in the body. The integration of the mind, body and spirit connection is practiced diligently and eventually evolves with long-term training. Karate has made its way into the daily curriculum in schools from elementary up to high school. The island has many dojos for training, while some tend to train on mountain tops, in the rivers, on the beach and at home as well. Two styles in particular are Shorin Ryu and Goju Ryu. They are fine examples of Okinawan traditional karate. While





comparing the two, one will notice how they are different from each other.

Shorin Ryu, created for small-framed men, displays explosive speed in delivering a strike with natural breathing, stances and movements of kata. Goju Ryu, created for men of greater stature, one will see that the movements are slower with exaggerated stances while artificial breathing techniques are used, which are believed to help rid the body of toxins. These differences in styles are obvious, yet both help to keep the body and spirit well balanced and pure.

Karate is taught as an honorable art. Training must always begin and end with respect. The Okinawans show their respectful intentions by bowing to each other at these times. Karate is an empty hand fighting style using unarmed self-



defense techniques. This was of great importance to the Okinawans since the Satsuma clan of Japan invaded them in 1609, taking away their weapons. Eventually, the Okinawan farmers figured out a way to improvise, using their everyday farm tools as weapons instead. They trained in hidden locations giving them a way to protect their families and land from sword carrying Samurai warriors. This went on for over two hundred years until the end of the Satsuma occupation in 1875. The outcome of this terrible time for Okinawa was a resilience that they still carry with them today. This part of history plays a significant role in the spiritual and physical endurance of the Okinawan people. They had no choice but to remain physically superior for the survival of their families.

The Okinawans are humble people whom display common courtesy for each other, especially for their elders. This behavior is unique compared to western civilization, where the elderly are put into nursing facilities and forgotten about where they must spend the rest of their lives separated from society, while suffering from diseases of frailty and dementia. This cultural difference has shown to be responsible for the elderly of Okinawa lacking in depression and brain deterioration. They are included, if not the spotlight of all social events and family gatherings. Once the elders reach an age that is considered old, they are no longer addressed by their names. Instead, they are called “Ojiichan” (grandfather) and “Obachan” (grandmother), respectfully, even by strangers



They are treated with polite kindness everywhere on the island, which results in a high drive to keep on living.

The elders are also celebrated during “Keirokai”, or “Respect for the Elderly Party”, an annual holiday that includes dance performance and music. The elders are active



participants, performing dance rituals using eye and hip movements while keeping the upper body still. These movements tell the story of the music being played. It takes great lower body strength to be able to initiate these moves for the endurance of an entire festival or parade. The elders also play musical

instruments, such as the sanshin, a three stringed instrument. Playing instruments like the sanshin has been shown to promote accuracy in dexterity, small motor skills and brain function.

The traditional Okinawan people are spiritual people who incorporate meditation, reflection and prayer into their disposition. They experience life without the stress of rushing to be on time. They even have a saying that translates to "Living on Okinawan Time". The slower pace and spiritual beliefs provide them with a sound mind. There is believed to be a powerful link between spiritual well-being and physical health. People are less likely to become ill while they are happy and content. Living on Okinawan time allows the people of the island to maintain a relaxed attitude towards arriving late and being on time. This includes all occasions from business meetings to weddings.

The religion of the traditional Okinawan is of Animistic or Shamanistic belief. A huge part of Okinawan Centenarians feeling balanced and protected comes from the belief that the many spirits that are said to inhabit the earth, such as the tree spirit, the rock spirit, the heart spirit and the house spirit are ancestral. The Okinawans perform rituals for these spirits whom they call "Kami." The rites are considered prayers or wishes for protection from ill- fated occurrences, such as a boulder hanging on the edge of a cliff, hovering over a farmer's home. In this case, the farmer would address the rock spirit during prayer and ask for the boulder not to fall on his house. Another example would

be a young woman who would pray to the heart spirit for the love of a certain young man. Generally, Kami, possessing supernatural powers, would ward off misfortune if pleased by the ritual performed in their name. Having such a deep



faith in their beliefs, the traditional Okinawans carried with them, bravery and trust, knowing they had protection from their ancestors who are now in the form



of Kami.

Thanks to the documentation of the Japanese koseki and the results from The Okinawan Centenarian Study we are able to finally lift some of the mystery to the longevity of the traditional Okinawan people. Even though there remains

a large group of Okinawan Centenarians, an unfortunate situation will mark this group as the last of their kind. Some recent changes to the Island are interfering with the traditional Okinawan way of life. For one, the western culture has been introduced to Okinawa through the U.S. military bases now located on the island since the end of WW2. Secondly, the grease soaked fast-foods of America have been brought over as well, catering to the Okinawan youth. Eating these foods containing zero nutritional value has caused a new rise of ailments in the young people of the island that until now, were unheard of. They now resemble the American youth who tend to be on the lazy side, greatly due to the poor American diet. This new generation is completely different from their traditional ancestors and is now living sedentary lives. They have picked up other western habits like smoking and using drugs. They have been studied during the past few decades with findings of certain diseases well known for infecting the American population. While the last of the centenarians remain true to their traditions, the youth of Okinawa is failing its job to carry them down to their children and the results are devastating. Records of cancer, diabetes, stroke, coronary disease, high cholesterol, acne and osteoporosis are some of the many diseases now included in the health history of the new Okinawan. We can only try to remember the Okinawan Centenarians whose traditions helped them to remain healthy for decades. Just as American influence made its way to Okinawa, we can embrace the traditional Okinawan knowledge and welcome it as an influence for us and for our generations to come.



I became aware of “Hara Hachi Bume” in 2011, after watching a doctor on television explain how the traditional eating habits of Okinawans helped to result in the existence of the Centenarians living on the island today. I was so intrigued by hearing about this form of self-discipline, I knew that in order to further understand this method; I had no choice but to practice it myself. Beginning this way of life in the spring of 2011, I continued eating smaller portions, waited for my body to signal hunger before eating and refrained from going back for a second plate of food. I began to focus on eating the proper amount of food needed for removing my hunger. I began to notice how waiting for the hunger to dissipate while drinking water during and after each meal proved to be very helpful. The most important and hardest lesson for me to learn was how to transform myself from a person who has always used my sense of taste as the sole indicator of being satiated, to someone who has the ability to use the signals of the body, listening to it and knowing when it has been enough food. This meant that no matter how good the food tasted, I had to use self-discipline to move my attention from my taste buds to my stomach. I noticed how being full wasn’t such a great feeling after all. The sensation of going through the days with simply not being hungry, opposed to being completely full all the time, made me feel a new respect for myself and I felt thankful to have learned about this important tradition of the Okinawan culture. After months of practicing “Hara Hachi Bume,” I became curious. I wanted to see evidence that this way of life made an impact on my health as it did for the Okinawans.

Anticipating this evidence, I went to see my doctor for blood work. I was hoping for a healthy reward after all the self-discipline I put into this “experiment.” Sure enough, I was able to reap some healthy rewards. I have included my blood work requisitions. The first one is from May of 2011, right before I started “Hara Hachi Bume.” Next is from September of 2012, after over a year of practice.

Overview of Blood Work Comparisons:

Test	2011	2012	Reference Range
Glucose	86	70	65-99
Total Chol	254	203	125-200
HDL (Good)	94	91	>or = 46
Triglycerides	59	54	<150
LDL (Bad)	148	101	<130
Vitamin D	45	68	18-72

Not only does the blood work show an improvement in my cholesterol health, an increase of 23pg/ml in Vitamin D took place as well. As difficult as it may be to maintain this “way of life,” evidence shows that it is important to my health to do so.