**AUDIO SCRIPT**

**[M1: Male Lecturer]**

M1: Good morning, everyone. Today, I’ll be discussing diet and longevity. Diets differ considerably from country to country, and even from region to region. In 2012, the writer and explorer Dan Buettner decided to find out the answer to the question: Why do people in some parts of the world live much longer than others? So, he traveled to several countries, including Japan, Greece, and Costa Rica. He identified several “blue zones,” as he called them—regions where people live longer than average.

Let’s look at a few of these regions. First, Japan has the highest number of people over the age of 100. In 2014, there were 58,820 centenarians, as they are called, in Japan. Drs. Bradley Willcox and Craig Willcox are international experts in geriatrics—that is, aging—as well as brothers. They spent many years studying the inhabitants of the Japanese island of Okinawa. This island has a particularly high percentage of centenarians. Most of them lead active lives and live at home. Very few are in nursing homes. The Willcox study found that the high-carbohydrate, low-calorie, plant-based diet consumed by Okinawans most likely explains their long-term health. Okinawans consume an average of three servings of fish per week, lots of whole grains, vegetables, and soybean products such as tofu, and plenty of konbu seaweed. In fact, their diet is so rich in vitamins and minerals that they have no need for supplements. Many of them also practice martial arts, which is not only great exercise, but has mental benefits such as relieving stress.

Now, we know that the Mediterranean diet is one of the world’s healthiest diets. On the island of Ikaria, Dan Buettner found that one in three people live well into their 90s—higher than anywhere else in the Mediterranean region. He discovered that Ikarians have very low rates of cancer and heart disease and suffer significantly less depression and dementia than other older people. The Ikarian diet contains a lot of beans and very little meat and refined sugar. Ikarians also consume a lot of fresh green vegetables, olive oil, potatoes, and goat’s milk. Their daily caloric intake is very low—about a quarter of the average American’s. They also regularly drink an herbal tea known as “mountain tea,” which consists of wild marjoram, sage, mint, and dandelion leaves. Ikaria is a very hilly island, so people get plenty of exercise walking up and down the hills. There is also a tradition of taking daily naps. Researchers believe these naps help to reduce heart disease, the world’s number one killer. Since the population is quite small—8,300—there is a lot of contact with family and good friends, and social contact has been shown to contribute to longevity. Unfortunately, some fatty “junk” foods are making their way to the island, so it will be interesting to see how this affects future generations.

Another place Dan Buettner studied was Nicoya, a region in Costa Rica, Central America. The Nicoyans have a low incidence of heart disease. Blood tests show they have longer telomeres—the genetic biomarkers that are considered good indicators of successful aging. Nicoyans consume a mostly plant-based diet and their water is very high in calcium and magnesium. They also walk a lot and lead very social lives.

To summarize, Buettner’s research into the diets of these communities confirms the strong connection between healthy eating, exercise, and longevity. While it may not be a comprehensive survey, the fact that these communities have so many centenarians suggests that the secret to longevity is more than having good genes. Nor is it necessary to follow a rigid diet and exercise program. However, fresh food, daily exercise, and social contact are clearly the keys to a long life. Thanks, everyone. Any questions?