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Is diet the key to longevity?

A narrative review of the dietary patterns of the Blue Zones

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Aim

The purpose of this review was to gather the current literature concerning the relationship between longevity and the local nutrition patterns in the Blue Zones.

Background

Research has shown that Okinawa, Sardinia, Nicoya, Ikaria, and Loma Linda (known as the Blue zones) are inhabited by long-lived populations. Their unique traditional eating habits seem to have a key role for their peoples' long lifespan.

Methods

A detailed literature review was performed of the Hellenic Association Of Geriatrics And Gerontology and Pubmed databases. The search strategy spans from 2003 to the present day and the included articles were published in Greek and English language.

Results

Several factors are associated with longevity in the Blue Zones, but the eating habits play a major role.

Ikaria and Sardinia both have high adherence to the Mediterranean diet which is associated with lower all-cause mortality. Sardinians consume Cannonau wine, which has two or three times the level of flavonoids of others. Interestingly, the Nutrition Transition effect had a positive impact on the traditional diet as it was enriched with poultry and sheep/goat meat intake preserving muscle mass and functionality in daily tasks. Ikarians diet is characterized by olive oil, Greek coffee and fish consumption which is associated with improved endothelial and kidney function among the elderly.

Unlike any other longevity diet, the Nicoya diet is more abundant in traditional foods like rice, beans and animal protein with a lower glycemic index and higher fiber content.

People in the Loma Linda area follow a vegetarian diet low in sugar and salt which includes nuts, fruits, legumes, and refined grains.

Finally, Okinawa has a unique food pattern which includes high intake of vegetables and soy products, and its main feature is the caloric restriction. Their local products include sweet potatoes, tofu, curcumin, Ishimaki tea, shell ginger, seaweeds, known for their anti-obesity, antioxidant and anti-aging properties.

Conclusions

Low fat products and flavonoids are common elements in all of the above-mentioned diets, and they are highly associated with longevity.

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