

A Decipher Longevity: Eat Seaweed for Longer Life - the Hidden Gem Butyric Acid is Key to Preventing Sarcopenia

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Abstract:

Introduction:

Seaweed's high content of butyrate-producing bacteria can be considered to prevent sarcopenia, cancer, diabetes, and novel coronavirus disease 2019 (COVID-19). More than 20% of individuals aged 75 and above experience sarcopenia, leading to frailty, the third leading cause of death in Japan because of an aging society. Due to the past lack of minerals in Japanese water and Japan's suitable geography for seaweed production, seaweed has been consumed to compensate for this deficiency, making Japanese people less susceptible to sarcopenia. The average daily intake of dried seaweed per person in Japan is 13.2g, and it is recommended to consume between 5-10g to avoid nausea or constipation. It is said that only Japanese people have intestinal bacteria that can digest seaweed, but through continuous eating or by genetically manipulating the bacteria, people can become accustomed to digesting it.

Objectives:



There are only a few alternatives, such as stinky tofu or pickled vegetables made in rice bran, and a previous study suggests that protein intake is not related to muscle mass. Given Japan's long history of exporting dried foods and the accessibility of seaweed, it is suggested that other countries should incorporate seaweed into their food culture.

Keywords: *Sarcopenia; Butyrate-producing bacteria; Seaweed; Japan*