Association between Healthy Eating Index-2015 Scores and the Probability of Sarcopenia in Community-Dwelling Iranian Elderly

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Abstract : Objective: Sarcopenia (SPA) is associated with frailty and disability in the elderly. Adherence to current dietary guidelines in addition to physical activity could play a role in the prevention of muscle wasting and weakness. The Healthy Eating Index-2015 (HEI) is a tool to assess diet quality as recommended in the U.S. Dietary Guidelines for Americans. This study aimed to investigate whether there is a relationship between HEI scores and the probability of SPA (PS) among the Tehran elderly. Method: A previously validated semi-quantitative food frequency questionnaire was used to assess HEI and the dietary intake of randomly selected elderly people living in Tehran, Iran. Handgrip strength (HGS) was measured to evaluate the PS. Statistical evaluation included descriptive analysis and standard test procedures. Result: 201 subjects were included. Those probably suffering from SPA (as determined by HGS) had significantly lower HEI scores (p = 0.02). After adjusting for confounders, HEI scores and HGS were still significantly associated (adjusted R2 = 0.56, slope β = 0.03, P = 0.09). Elderly people with a low probability of SPA consumed more monounsaturated and polyunsaturated fatty acids (P = 0.06) and ingested less added sugars and saturated fats (P = 0.01 and P = 0.02, respectively). Conclusion: In this cross-sectional study, HEI scores are associated with the probability of SPA. Adhering to current dietary guidelines might contribute to ameliorating muscle strength and mass in aging individuals.

Keywords : aging, HEI-2015, Iranian, sarcopenic

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