

Abstract

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Dietary ratio of n-6 to n-3 polyunsaturated fatty acids and periodontal disease in community-based older Japanese: A 3-year follow-up study.

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OBJECTIVE: The longitudinal relationship between dietary n-6 to n-3 PUFAs ratio and periodontal disease in 235 Japanese subjects for whom data were available for the years 2003-2006 was investigated.

METHODS: PUFAs intake was assessed at baseline with a brief-type self-administered diet history questionnaire. Full-mouth periodontal status, measured as the clinical attachment level (CAL), was recorded at baseline and once a year for 3 years. The number of teeth with a change in the loss of CAL ≥ 3 mm at any site over a year was calculated as 'periodontal disease events'. Poisson regression analysis was conducted, with dietary n-6 to n-3 PUFAs ratio as the main predictor, to estimate its influence on periodontal disease events.

RESULTS: A high dietary n-6 to n-3 PUFAs ratio was significantly associated with greater number of periodontal disease events.

CONCLUSION: The findings suggest the dietary n-6 to n-3 PUFAs ratio is associated with periodontal disease among older Japanese.

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