

Comparative Study

Am J Clin Nutr. 1995 Dec;62(6):1221-7. doi: 10.1093/ajcn/62.6.1221.

Antioxidant status in long-term adherents to a strict uncooked vegan diet

A L Rauma ¹, R Törrönen, O Hänninen, H Verhagen, H Mykkänen

Affiliations

Affiliation

1 Department of Clinical Nutrition, University of Kuopio, Finland.

PMID: 7491884 DOI: 10.1093/ajcn/62.6.1221

Abstract

Antioxidant status was investigated in 20 Finnish middle-aged female vegans and in one male vegan who were following a strict, uncooked vegan diet ("living food diet"), by means of a dietary survey and biochemical measurements (blood concentrations of vitamins C and E and betacarotene, and the activities of the zinc/copper-dependent superoxide dismutase and seleniumdependent glutathione peroxidase). Values were compared with those of omnivores matched for sex, age, social status, and residence. Antioxidant supplementation was used by 4 of 20 female vegans and by 11 of 20 control subjects. Based on dietary records, the vegans had significantly higher intakes of beta-carotene, vitamin E, vitamin C, and copper, and a significantly lower intake of selenium than the omnivorous control subjects. The calculated dietary antioxidant intakes by the vegans, expressed as percentages of the US recommended dietary allowances, were as follows: 305% of vitamin C, 247% of vitamin A, 313% of vitamin E, 92% of zinc, 120% of copper, and 49% of selenium. Compared with the omnivores, the vegans had significantly higher blood concentrations of beta-carotene, vitamin C, and vitamin E, as well as higher erythrocyte superoxide dismutase activity. These differences were also seen in pairs who were using no antioxidant supplements. The present data indicate that the "living food diet" provides significantly more dietary antioxidants than does the cooked, omnivorous diet, and that the long-term adherents to this diet have a better antioxidant status than do omnivorous control subjects.

PubMed Disclaimer

Related information

MedGen

PubChem Compound (MeSH Keyword)

LinkOut - more resources

Full Text Sources

Silverchair Information Systems

Medical

MedlinePlus Health Information