

スポーツ科学研究, 11, 35-68, 2014 年

Effects of lifestyle intervention on biomarkers of depression and oxidative stressMasaki Takahashi, Takashi Arao
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The purpose of this study was to investigate the effects of 12 weeks of lifestyle intervention on depression and oxidative stress status in middle-aged and older adults. Twenty-seven middle-aged and older adults are placed on a health promotion program including exercise, nutrition, and social participation. This program will be provided the health education classes related to topics of exercise, nutrition, and social participation every month. Blood samples will be taken at baseline and after 12 weeks. Fasting serum biomarkers of depression, oxidative stress, and antioxidant capacity markers will be measured. In addition, depressive symptoms will be evaluated using the 20-item version of

the center for epidemiologic studies depression scale (CES-D). Presence of significant depressive symptoms is defined by the established cut-off point of CES-D score >16. We are currently conducting to assess the baseline values and preparing the post-intervention measurement on December. At baseline, nine participants were defined the presence of significant depressive symptoms. It would be interesting to assess whether this intervention effect differs according to depression status. We hypothesize that this program would improve depression and oxidative stress status, especially in participants who exhibit higher depression scale score at baseline.