

Effect of Eight Weeks Aerobic Training with Purslane Seeds on Peroxidant and Antioxidants Indicators in Women with Type2 Diabetes

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Abstract : Aim: imbalance between antioxidant defensive system and increasing production of free radicals caused oxidative stress that can be rolled in cellular damage and occurring some of diseases such as diabetes. The aim of current study was to investigate the effect of eight weeks aerobic training on peroxidant and antioxidants indicators in women with type2 diabetes. Methodology: thirty two inactive women with type 2 diabetes were randomly assigned into four groups: 1. control, 2. Aerobic training, 3. Purslane seed and 4. Aerobic training + Purslane seed groups. Subjects were asked to accomplish eight weeks aerobic training (50 min aerobic exercise, 3 days/week, for to achieve 65-75% maximum of heart rate). Also, subjects in certain groups received purslane seeds for eight weeks. Blood samples were obtained in two sets (one session and after 8 weeks). Data was analyzed using one way ANOVA. A significant difference was accepted at $p < 0/05$ level. Results: After eight weeks of aerobic training with purslane seeds supplementation, malon dyaldehyde (MDA) concentration in training group were significantly decreased ($p < 0/000$), but A difference significant was not found in control group. Superoxide dismutase (SOD) and catalase (CAT) concentrations in training group were significantly increased ($p < 0/000$), while difference significant wasnot found in control group. Conclusion: The finding of the current study indicates that disciplined aerobic training with purslane seeds supplementation can be caused improvement in peroxidant/antioxidant balance in women with type2 diabetes.

Keywords : aerobic training, purslane seed, peroxidant/antioxidant balance, diabetes2

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