ANTI-OXIDATIVE EFFECT OF VELVET ANTLER EXTRACT IN AGING MURINE MODEL

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Abstract - Velvet antler has been used in traditional Chinese medicines and health food over 2100 years. The Formosan sambar (Rusa unicolor swinhoei) is a subspecies of sambar found in Taiwan. This study deal with the improvement anti-oxidative effects of Formosan sambar deer velvet antler extract (VA) for the aging. In this study, male C57BL/6 mice are divided into six groups. One is the aging mice group (64 weeks old), and the other group is the young control. The agingexperimentgroups are dividedinto administered various (0, 1.23, 2.46, 4.92 mg/kg)doses of VA for 8 weeks. The results showed that VA supplementation can effectively improve of forelimb grip strength and forced swimming test, and increase SOD in serum biochemical analysis.On the other hand, VA supplementation significantly decreased blood lactic acid, blood urea nitrogen, creatinine phosphate kinase and MDA in liver. Our results demonstrate that VAprofound anti-aging effect and could be an effective candidate for preventing aging and aging-related chronic diseases via anti-oxidative activity.

Keywords - Aging, Anti-oxidation, Forelimb grip strength, Forced swimming test, Velvet antler