

Effect of Dealcoholized Red Wine Solids Supplementation on Antioxidative Enzyme Activities in Transgenic Mice

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In this study, we tried to figure out the effect of dealcoholized red wine solids supplementation on antioxidative enzyme activities in transgenic mice. The mice carrying the human T-lymphotropic virus type-1 transactivator gene and spontaneously develop externally visible tumors. Thirty male transgenic mice were systemically assigned into three groups. Control group(C) was not given dealcoholized red wine solids, experimental groups were given 250mL dealcoholized red wine solids/kg with amino acid diets(LW). and 750 mL red wine solids/kg with amino acid diets(HW). The activity of hepatic superoxide dismutase and glutathion S-transferase was lower in HW group than control group. Supplemented dealcoholized wine solids groups were significantly lower in activity of glutathion peroxidase(GSH-Px) and lipid peroxide than control group. No significant difference was found in liver catalase activity and glutathione. This study shows that dealcoholized red wine solids can do positive effect on antioxidative enzyme activity and reduce lipid peroxidative damage of the transgenic mice.