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## Effects of Hatha Yoga and Vitamin C Intake on Blood Lipid Profile, Lipid Peroxidation and Total Antioxidant Status in Middle-aged Women

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The purpose of this study was to investigate effects of Hatha yoga and vitamin C intake on blood lipid profile, lipid peroxidation and total antioxidant status in middle-aged women. 32 subjects were middle-aged women. The period of Hatha yoga program was 12 weeks, 3 times a week and each time 60 minutes with RPE (13~15) for intensity were treated and subjects were given vitamin C at 1,000mg of pill after dinner a day during the 12 weeks. The conclusions of this study are as follows; Blood Lipid profile HVG significantly decreased in T-C, HDL-C, LDL-C and TG. HG decreased in T-C, HDL-C, LDL-C, TG. VG decreased in TG and increased in T-C, HDL-C, LDL-C. CG increased in HDL-C and decreased in T-C, TG, LDL-C. Lipid Preoxidation HVG, HG, VG significantly decreased and control group increased. In the comparison between groups, HVG significantly decreased more than CG. Total Antioxidant Status four groups all significantly increased.

Key words: Hatha yoga, blood lipid profile, lipid preoxidation, total antioxidant status

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## Quality Properties of Traditional Brewage according to Concentration of the Black Garlic

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Black garlic has recently received attention as a various health functional matters, and it was demanded for processing food. This study was performed for searching the optimum concentration for fermentation of black garlic wine and investigated its quality properties. Alcohol contents of black garlic wine were significantly increased for 8 days and pH was gradually increased according to concentration of the black garlic. Reducing sugar contents in each concentration adding the black garlic has maximum level when it fermented for 24 hour, and then rapidly decreased during fermentation periods. The main components of organic acids were lactic, citric, malic and oxalic acid. Also lactic acid contents was increased according to concentration of the black garlic and the others organic acid contents were decreased. Pyruvic acid and total polyphenol contents, and DPPH (1,1-diphenyl-2-picryl-hydrazyl) free radical scavenging activity of black garlic wine were increased according to concentration of the black garlic. The highest overall acceptability values was the addition of 5% black garlic concentration.

Key words: Traditional Brewage, Black garlic wine, Fermentation.