RAMATINA. Effectiveness of Various Antioxidant Supplements on Reducing Oxidative Status (Level of Plasma Malondialdehyde (MDA)) among Extension Students of Bogor Agriculture University. Supervised by LEILY AMALIA and IKEU EKAYANTI.

The objective of this study was to analyze the effectiveness of vitamin C, vitamin E and multivitamin-mineral supplements on level of plasma malondialdehyde (MDA) among extension students of Bogor Agricultural University. The samples were 24 students and divided into 4 groups, namely 1) control group, 2) vitamin C group (given supplement of vitamin C 500 mg), 3) vitamin E group (given supplement of vitamin E 200 IU), 4) multivitamin-mineral group (given supplement consist of vitamin C 500 mg, vitamin E 30 mg, zinc 15 mg and copper 1,5 mg). The interventions of supplements were given for 7 days. In term of intake an adequate level of energy, protein, vitamin and mineral samples. From food, they were no significantly differences among groups. Before the intervention, blood samples were taken for the analysis of early plasma level of MDA. Examination was repeated at the end of treatment. From the results of statistical analysis known that there are significant differences (p <0.05) between plasma MDA levels before and after intervention. There was no significant difference (p> 0.05) between the average reduction in level of MDA plasma in group of vitamin C, vitamin E and multivitamins, but there are significant differences (p <0.05) between the control group of intervention with vitamin C, vitamin E and multivitamin-mineral. Based on this study, it can be concluded that by consuming vitamin C, vitamin E or a multivitamin-mineral supplement every day had relatively similar effects in reducing level of MDA plasma among healthy young women.

Key words: malondialdehyde, antioxidant supplement