

**NUTRITIONAL STATUS AND
ANTIOXIDANT INTAKE ASSESSMENT
AMONG ELDERLY IN SELECTED OLD
FOLKS HOMES IN RELATION WITH MILD
COGNITIVE IMPAIRMENT**

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ABSTRACT

Mild cognitive impairment (MCI) claimed to be the pre-state of the dementia that affect elderly people. Cross sectional comparisons of nutritional status (anthropometry and diet) and antioxidants (vitamin C, vitamin E and β -carotene) intake between elderly with and without MCI were examined in 52 elderly aged 60 to 93 years from five old folks homes in Klang Valley. Convenience sampling was used in this study. The MCI was assessed using Montreal Cognitive Assessment (MoCA). The nutritional status and antioxidant intake of participants were assessed using body mass index (BMI) by measurement of weight and height and semi-quantitative food frequency questionnaire. Results showed that the prevalence of MCI was 80.8% among 52 participants. MoCA score was significantly different ($p < 0.05$) between genders and moderate negative correlated ($p < 0.05$, $r = -0.382$) with age. The mean BMI of participants was $23.4 \pm 5.3 \text{ kg/m}^2$. Majority ($n=28$, 53.8%) of participants were overweight. No significant difference was found in BMI between participants with and without MCI. The mean daily intakes of energy, carbohydrate, protein, fat, vitamin C, vitamin E and β -carotene were $1394.0 \pm 549.1 \text{ kcal}$, $174.2 \pm 66.2 \text{ g}$, $65.5 \pm 28.9 \text{ g}$, $36.1 \pm 22.1 \text{ g}$, $97.2 \pm 60.5 \text{ mg}$, $3.0 \pm 1.6 \text{ mg}$ and $2631.0 \pm 2094.9 \mu\text{g}$, respectively. Majority of participants had energy ($n=42$, 80.8%), carbohydrate ($n=43$, 82.7%), fat ($n=44$, 84.65), vitamin E ($n=52$, 100%) and β -carotene ($n=43$, 82.7%) intakes not achieving the recommended values of Recommended Nutrients Intake (RNI). Significant differences ($p < 0.05$) were found in fat and vitamin E intakes between participants with and without MCI. In conclusion, the prevalence of MCI was relatively high and the association between MCI and nutrient intakes especially fat and vitamin E should be emphasized.

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