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# Correlation Between Physical Activity Adequacy and The Incidence of Obesity and Non Obesity in Adults at Wiyata Dharma Private School Medan

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**Abstract:** The prevalence of obesity is increasing worldwide. Based on World Health Organization (WHO) data, more than 1,9 billions of adult in the world were overweight and 600 millions of them were obese in 2014. The prevalence of obesity in Indonesia is also increasing, from 21,7% in 2007 to 28,9% in 2013. Obesity has become a global epidemic and is a health problem due to its associated morbidity. Globally, there is an increased intake of high calorie food and decrease in physical activity due to various ease in lifestyle. Physical inactivity is a risk factor for obesity. The objective of this research is to investigate the correlation between physical activity adequacy and the incidence of obesity and non obesity especially in adults (above 18 years old). This research was an analytical observational research with case-control study design. A total of 64 respondents were taken using consecutive sampling during September 2015 in Wiyata Dharma Private School Medan. Nutritional status data were obtained by measuring respondents, body height and weight and were converted into Body Mass Index (BMI), while physical activity data were obtained through direct interview using WHO Global Physical Activity Questionnaire(GPAQ) Statistical analysis was performed by using Chi-square ( $\chi^2$ ) test. The results showed that there is a significant correlation between physical activity adequacy and the incidence of obesity and non obesity ( $p \geq 0,05$ ) with an Odds Ratio of 3,667 (95% CI 1,303;10,321).

**Keywords:** Physical activity, obesity.

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