## The Relationship Between Physical Activity and Sleep Duration with The Incidence Of Obesity In High School Students in Kaliwates District

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## **ABSTRACT**

Obesity can occur due to an imbalance between incoming energy and expended energy, lack of structured physical activity in both daily activities and physical exercise, unhealthy eating patterns and insufficient consumption of fiber (fruits and vegetables). In addition, adequate quality and sleep patterns are necessary to maintain a good level of health. If the duration of sleep is less, it will cause various kinds of degenerative diseases and chronic diseases such as obesity, heart disease, cancer, etc. The purpose of this study was to analyze the relationship between physical activity and sleep duration on the incidence of obesity in high school students in Kaliwates District. This type of research is an descriptive analytic study with a cross-sectional research design. The sample used in this study were high school students in the Kaliwates District of 103 people with the sampling technique using purposive sampling. Data collection used public health center data, data for each school, body weight and height measurements, the Global Physical Activity Questionnaire (GPAQ), and the Pittsburgh Sleep Quality Index (PSQI) questionnaire. Statistical analysis using SPSS 22.0 with Chi-Square correlation test. The results of this study indicate that there is a significant relationship between physical activity (p-value = 0.006) and sleep duration (p-value = 0.033) with the incidence of obesity in high school students in Kaliwates District.

**Keywords**: obesity, physical activity, sleep duration