## The Correlation between Protein Intake, Fat Intake, Body Mass Index toward Age of *Menarche*

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## **ABSTRACT**

Age of Menarche is the timing of adolescent girls experiencing menstruation. Age of Menarche is caused by several factors such as health status, environment, mass media, social economic, or health status. Age of menarche an also cause breast cancer, cardiovascular disease, metabolic disorder, also psychological disorder abnormally. This research is aimed to know the correlation between protein intake, fat intake, and body mass index with age of menarche of elementary students in the area of Lor - Patrang, Jember district, East Java. The research was conducted on September, 10th to 20th 2016. The researcher used analytical survey method with retrospective study approach toward population of 581 students. The number of sample in this research were 64 students with technique of non random sample (non probability) as accidental sampling. Independent variable in this research was protein intake, fat intake, and body mass index. Then, the dependent variable was age of menarche. The instrument of this research consisted of a semi-quantitative food frequency questionnaire (SQFFQ) to count the protein and fat intake, also mikrotoice and Bathroom scale to measure z-score from body mass index based on the age (IMT/U). SPSS 16.0 with spearmean test was used as the analytical statistic of this research. The result of this research was indicated that there is correlation between protein intake, fat intake with age of menarche which the values of p = 0,009 and 0,014 that is included into weak correlation. Then, there is no correlation between body mass index with age of menarche by value p = 0.102. Adolescent girls were expected to consume food in order to have normal age at menarche.

Keywords: Age of Menarche, Protein Intake, Fat Intake, Z-Score IMT/U