

# FAST FOOD INTAKE WITH THE PREVALENCE OF OBESITY IN MA MA'AHID KUDUS

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Info Artikel	Abstract
<b>DOI</b> : <a href="https://doi.org/10.26751/ijp.v9i1.2228">https://doi.org/10.26751/ijp.v9i1.2228</a>	<p><i>This is a problem that requires extra attention because the number of teenagers (16–19 years) who are obese or overweight continues to increase every year. Obesity is a significant risk factor for death worldwide. An estimated 3.4 million teenagers lose their lives due to these two causes every year. (WHO, 2014). This study aimed to determine the relationship between fast food intake and the prevalence of obesity in MA Ma'ahid Kudus. The research method used is correlational analytics with a cross-sectional time method. Using complete sampling techniques, 52 respondents were used as the sample size. The tools used were questionnaires, observation sheets, and Spearman data analysis for the Rho statistical test. The research showed that most fast food consumption was frequent, with 19 people (36.5%) and 21 (61.5%) having normal nutrition. This study concludes that the Spearman Rho test findings show a relationship between the prevalence of obesity and the use of fast food (p-value = 0.018).</i></p>
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## I. INTRODUCTION

Obesity is an abnormal or excessive accumulation of fat that can endanger a person's health (WHO, 2020). When the body uses more calories from food than it needs over a long period, it may become obese. This extra energy is stored in body tissues as triglycerides (Anggreini, 2018).

The World Health Organization (2020) stated that around 1.4 billion teenagers aged 20 years or older were overweight in 2008, with 200 million teenage boys and 300 million girls. The global obesity rate at that time was 11.9%. Obesity is a significant risk factor for death worldwide. An estimated 3.4 million teenagers lose their lives due to these two causes every year (WHO, 2020).

It is also important to remember that obesity is associated with 44% of diabetes patients, 23% of heart patients, and between 7 and 41% of cancer patients. This is normal because urban areas experiencing financial

pressure often ignore healthy lifestyles. One of the main things that prevents a person from exercising and eating healthy is their busy schedule (Departemen et al., 2010).

Every year, the prevalence of obesity continues to increase among teenagers aged 16 to 19. Java is one of the islands with a higher prevalence of obesity and overweight than the national figure. Based on 2010 RISKESDAS data, the prevalence of obesity was 19.1%; for men, it increased to 21.7%; for women, it increased to 2.8% and 16.3%.

Causes of obesity include heredity, food consumption, socioeconomics, gender, and lack of physical activity. The group most vulnerable to malnutrition is teenagers (Putri, 2015). Many people, especially students, need to remember to eat breakfast. Thus, a person's eating time only starts at noon. This often occurs due to arriving at school early, sleeping poorly, and skipping breakfast (Sulistyoningsih., 2011). They love fast food

because it is convenient and can be served anytime, anywhere, and quickly. It is also considered upscale, modern, and popular among young people. Food is served hygienically and served hygienically. What is meant by "fast food" is a type of food that is prepared, packaged and served (Lutfi, 2021)

Fast food high in calories, fat, and cholesterol is unavoidable in modern culture due to the realistic urban lifestyle. A stressful and less active lifestyle, especially in urban areas, is starting to influence the prevalence of degenerative diseases such as diabetes mellitus, hypertension, coronary heart disease, and obesity. Poor food choices and lack of nutrition knowledge are the roots of nutritional problems that ultimately affect nutritional status. Only a healthy diet, namely one based on the idea of balanced, natural, and healthy cooking, can achieve high nutritional status (Kristianti, 2019)

One of the impacts of fast food on the body is reducing energy levels. Fast food deprives the body of the nutrients it needs to maintain health, leaving it tired and lacking the energy to carry out daily tasks (Hidayah, 2012). The high sugar content in fast food makes the body's metabolism uncontrolled. When consuming refined sugar, the pancreas releases large amounts of insulin to prevent dangerous blood sugar spikes. Additionally, fast food often needs more carbohydrates and protein. After eating, blood sugar levels will drop drastically. Fast food is a contributing factor to obesity and subpar performance. Large amounts of fat are also found in fast food, and fat accumulates throughout the body. Obesity can occur due to increased intake. Being overweight increases your chances of developing major chronic diseases, including diabetes, heart disease, and arthritis (Dorland, 2012).

Based on the findings of various studies, teenagers who are obese consume more calories from Western fast food (266 kcal) than teenagers who are not obese (140 kcal), with a value of ( $p=0.001$ ) (Banowati, L, 2011). The amount of energy consumed in various fast foods, including fried chicken, burgers, nuggets, sausages, and other fast foods, is significantly correlated with fast

food eating behavior, according to research conducted in 2015 by Wandasari.

Based on the initial survey and interviews conducted with ten students on November 14, 2023, at MA Ma'ahid Kudus, the results were that five students were obese with a BMI  $>30$ , 1 student was overweight with a BMI of 26, 2 students had normal nutritional status with a BMI of 18.5 and 22.9 then two students experienced underweight nutritional status with a BMI of 15.8 and 16.7. 7 out of 10 students said they often eat fast food, and three other students rarely eat it. According to them, fast food is delicious food that is served quickly. Apart from that, schools being close to fast food restaurants is one of the factors that causes students to eat fast food often.

This is what underlies the author's interest in conducting this research, with the aim of the research to find out further whether there is a relationship between fast food intake and the prevalence of obesity in teenagers at MA Ma'ahid Kudus.

## II. RESEARCH METHODS

Correlational analytical research, which examines the relationship between the independent variable and the dependent variable to see whether there is a relationship between the two, is the research methodology used in this research (Nursalam, 2011).

This research uses a cross-sectional approach to examine the dynamics of the correlation between risk factors and their impacts, namely approaching, observing, or collecting data simultaneously. Each research subject is only observed once, and their character or variable status is measured. It can be reviewed. Fast food consumption and obesity prevalence were recorded simultaneously in this study. This research included 52 students in class 11 of MA Ma'ahid Kudus. The total sampling method was used for the sampling technique. Selection in this way is a sampling technique where the number of samples is the same as the population (Sugiyono, 2017)

Class 11 students at MA Ma'ahid Kudus, both male and female, met the inclusion criteria for this study. The exclusion criteria in this study were students who refused to be respondents, students who did not go or there were obstacles during the research, and students suffering from chronic diseases such as hypothyroidism or hyperthyroidism, DM, and heart valves.

The scale, microtia, and questionnaire are the instruments used in this research. This study used univariate and bivariate analyses as the starting point for data analysis. To determine whether there is a statistically significant relationship using the SPSS program, statistical analysis was carried out using the Kendall-Tau method at a confidence level of 95% (0.05) to test the hypothesis. The authors emphasize the moral dilemmas associated with distributing checklists for this research, such as informed consent, anonymity (without identifying identities), and confidentiality (confidentiality)

### III. RESULTS AND DISCUSSION

The research was conducted on January 23, 2024, at MA Ma'ahid Kudus. Total sampling was taken in class XI.

#### A. Univariate Analysis

##### 1. Fast Food Intake

**Table 1.** Frequency Distribution According to Fast Food Consumption of Class XI MA Ma'ahid Students

Fast Food Consumption	frequency	Per cent
Never	16	30,8%
Seldom	17	32,7%
Often	19	36,5%
Total	52	100%

#### B. Bivariate Analysis

##### 1. The relationship between fast food consumption and the prevalence of obesity

**Table 3.** Distribution of fast food intake and prevalence of obesity at MA Ma'ahid Kudus

BMI	eating frequency						Total		P Value
	Never		Seldom		Often		N	%	
	N	%	N	%	N	%			
Thin	7	63,6	1	9,1	3	27,3	11	100	0,018
Normal	6	28,6	9	42,8	6	28,6	21	100	
Overweight	1	16,7	1	16,7	4	66,6	6	100	
Obesitas	2	14,3	5	35,7	7	50	14	100	

The results from Table 1 show that the highest frequency of fast food consumption is in the frequent category. There are 19 (36.5%) class XI students at MA Ma'ahid Kudus.

This study shows how fast food affects the body, namely how its high sugar content can have an uncontrolled effect on metabolism. Because fast food does not contain adequate, healthy amounts of protein and carbohydrates, consuming refined sugar causes the pancreas to secrete large amounts of insulin, which prevents dangerous blood sugar spikes and makes you quickly feel tired after eating.

#### 2. Obesity

**Table 2.** Frequency Distribution of Nutritional Status of Class XI MA Ma'ahid Students

Body Mass Index	Frequency	Per cent
Thin	11	21,2%
Normal	21	61,5%
Overweight	6	11,5%
Obesitas	14	26,9%
Total	52	100%

Based on Table 2, the results show that the highest BMI frequency is in the normal category, 21 (61.5%) class XI students at MA Ma'ahid Kudus.

Genes and the environment work together to cause obesity. It's not just a matter of consuming more calories than you burn while exercising; obesity is also caused by consuming more calories than expended through physical activity. Obesity in adolescents is now increasingly widespread because behavior is ingrained in societal norms and is difficult to limit (WHO, 2020).

Total	16	16	20	52
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Based on Table 3, the results of the analysis of the relationship between the frequency of fast food intake and the prevalence of obesity showed that there were 7 (63.6%) of the 16 respondents who never consumed fast food with thin nutritional status, there were 9 (42.8%) of the 16 respondents who rarely consumed fast food had normal nutritional status, and there were 7 (50%) of the 20 respondents who frequently consumed fast food with nutritional quality related to obesity.

The frequency of consumption of fast food intake with the incidence of obesity at MA Ma'ahid Kudus has a significant relationship; this is shown by the results of the Spearman statistical test, which produces a P value of 0.018 (<0.05).

Rationally, the research results obtained when collecting data on respondents showed that because of fast food's high-calorie content, respondents who frequently consumed it were obese.

Parents need more time to make breakfast for their children, so they give fast food options such as sausages, nuggets, instant noodles, and others. This causes respondents to consume fast food because they do not eat breakfast and instead have snacks in the canteen or other places close to the school. In line with research by Syafriani (2018), the availability of cheap, fast, and unhealthy food is one of the factors causing the obesity epidemic. This is because working parents have less time to prepare food for their families, and it is easy for respondents to buy fast food in the school canteen or fast food restaurant next door. Research shows that 20 parents (38.5%) work as private employees, the majority of parents' jobs. Research by Rahayu (2014) shows that 62.5% of students' parents work in the private sector.

#### IV. CONCLUSION

The research results showed that 50% of MA Ma'ahid class XI students were obese because they often consumed fast food

The research results showed that 78.6% of MA Ma'ahid class XI students who were obese were female

The results of the test of the relationship between fast food consumption and the incidence of obesity in adolescents at MA Ma'ahid Kudus show that from the Spearman statistical test, the P value obtained is 0.018 (<0.05), so it can be concluded that there is a significant relationship between the frequency of fast food consumption. Food with the incidence of obesity at MA Ma'ahid Kudus.

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