

# CONSUMPTION HABITS OF FAST FOOD AND CARBONATED DRINK WITH OBESITY JUNIOR HIGH SCHOOL IN SIDOARJO

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## CONSUMPTION HABITS OF FAST FOOD AND CARBONATED DRINK WITH OBESITY JUNIOR HIGH SCHOOL IN SIDOARJO

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### ABSTRAK

Obesitas merupakan masalah yang meresahkan bagi para remaja, karena masalah ini mengurangi rasa percaya diri, membebani pikiran dan mengganggu psikologi. Salah satu faktor yang mengakibatkan prevalensi obesitas meningkat adalah adanya perubahan gaya hidup serta pola makan yang bergeser, dari pola makan tradisional ke pola makan barat, khususnya pada kalangan remaja. Makanan cepat saji dan minuman berkarbonasi cenderung dipilih para remaja karena lebih praktis dan memiliki kelas tersendiri. Selain rasanya yang enak dan lezat, jajanan ini sangat mudah didapat. Tujuan penelitian ini adalah mengetahui kebiasaan konsumsi makanan cepat saji dan minuman berkarbonasi dengan kejadian obesitas pada remaja SMP di Sidoarjo. Penelitian ini adalah penelitian analitik dengan pendekatan *cross sectional*, dengan jumlah sampel 87 responden. Teknik pengambilan sampel dengan *propotional stratified random sampling*. Data dianalisis dengan *uji chi square* dengan nilai kemaknaan  $\alpha = 0,05$ . Terdapat hubungan yang signifikan antara kebiasaan makanan cepat saji dengan kejadian obesitas pada remaja SMP di Sidoarjo ( $p = 0.005$ ). Terdapat hubungan yang signifikan antara kebiasaan minuman berkarbonat dengan kejadian obesitas pada remaja SMP di Sidoarjo ( $p = 0.001$ ). Perlunya penyuluhan kepada remaja mengenai Gizi Seimbang agar siswa dapat mengurangi konsumsi makanan cepat saji (*fast food*) dan minuman berkarbonasi, serta pihak sekolah diharapkan dapat menyediakan jajanan sehat di sekolah, sehingga status gizi siswa – siswi dapat terkontrol atau terjaga.

**Kata Kunci** : Obesitas, *Fast Food*, Minuman Berkarbonat, Remaja

### ABSTRACT

*Obesity is a troubling problem for adolescents, because this problem reduces self-confidence, burdens the mind and disrupts psychology. One of the factors that causes the prevalence of obesity to increase is a change in lifestyle and a shift in eating patterns, from traditional eating patterns to western diets, especially among adolescents. Adolescents tend to choose fast food and carbonated drinks because they are more practical and have a class of their own. In addition to its delicious and delicious taste, this snack is very easy to get. The purpose of this study was to determine the habit of consuming fast food and carbonated drinks with the incidence of obesity in junior high school adolescents in Sidoarjo. This study is an analytic study with a cross sectional approach, with a sample of 87 respondents. The sampling technique was proportional stratified random sampling. Data were analyzed by chi square test with a significance value of = 0.05. There is a significant relationship between fast food habits and the incidence of obesity in junior high school adolescents in Sidoarjo ( $p = 0.005$ ). There is a significant relationship between the habit of carbonated drinks with the incidence of obesity in junior high school adolescents in Sidoarjo ( $p = 0.001$ ). The need for counseling to adolescents about balanced nutrition so that students can reduce the consumption of fast food and carbonated drinks, and the school is expected to provide healthy snacks at school, so that the nutritional status of students can be controlled or maintained.*

**Keywords** : Obesity, fast food, carbonated drinks, adolescents

### INTRODUCTION

Adolescence is a time of rapid changes in terms of physical, cognitive, and psychosocial

growth. This period is a period of transition from children to adolescents which is marked by many changes, including the increase in muscle mass, body fat tissue and hormonal changes. These

changes affect nutritional needs. In addition, the nutritional needs of adolescents are also influenced by psychological and social factors (Susetyowati, 2016). Obesity is a troubling problem for adolescences, because this problem reduces self-confidence, burdens the mind and disrupts psychology. The desire to have an ideal body to look perfect is the dream of adolescences. This is exacerbated by various advertisements posted on social media and newspapers such as medicines, potions, food and even drinks to streamline the body (Hafid and Hanapi, 2016).

According to the World Health Organization (WHO) in 2010 overweight and obesity are risk factors for the 5th leading cause of death in the world. It is estimated that around 2.8 million people in the world die from complications of obesity (WHO, 2010). To monitor a person's nutritional status related to excess and underweight, BMI (Body Mass Index) can be used (Supariasa, 2012). Based on the results of the 2013 Basic Health Research on the nutritional status of Indonesian adolescents, the prevalence of obesity for adolescents aged 13-15 years is 2.5% (Kementrian Kesehatan RI, 2013). There are 13 provinces with obesity prevalence above the national level, one of which is East Java Province (Balitbang Kemenkes RI, 2013). Basic Health Research Data for East Java Province (Riskesdas East Java, 2013) shows 11.3% of adolescents aged 13-15 years in Sidoarjo are overweight (Dinas Kesehatan Jawa Timur, 2018)

One of the factors that causes obesity prevalence to increase is lifestyle changes and shifting eating patterns, from traditional to western diets, especially among teenagers (Setyawati and Rimawati, 2016). Adolescent lifestyles have changed in terms of food choices, preferring foods that contain unbalanced nutrition (energy, salt, high fat and cholesterol and low in fiber), such as consuming fast food, which is a result of increased prosperity. and the effects of westernization (Bowman et al., 2004).

Adolescences have been able to determine the food they want to consume, tend to have irregular eating patterns who prefer food outside the home and are curious about new foods, one of which is fast food and carbonated drinks (Lestari and Asthingsih, 2019). Adolescences tend to choose fast food and carbonated drinks because they are more practical and have a class of their own. In addition to its delicious and delicious taste, this snack is very easy to get (Pamelia, 2018). The

purpose of this study was to determine the habit of consuming fast food and carbonated drinks with the incidence of obesity in junior high school adolescents in Sidoarjo.

## METHOD

This research is an analytic study, with a cross sectional approach. This research was conducted at SMP Negeri 3 Sidoarjo in March 2022. The population is all students of SMP Negeri 3 Sidoarjo as many as 916 people. The research sample was adolescences who met the inclusion and exclusion criteria as many as 87 people who were carried out by proportional stratified random sampling. The inclusion criteria for this study were active students at SMP Negeri 3 Sidoarjo and willing to be respondents. The exclusion criteria in this study were students who were sick.

Data collection on consumption habits of fast food and carbonated beverages was carried out using a Semi Quantitative – Food Frequency Questionnaire (SQ – FFQ) questionnaire. Data collection on the incidence of obesity was carried out by measuring body weight using a stepping scale with a research capacity of 150 kg and an accuracy of 0.1 kg and measuring height using a microtoise with a capacity of 200 cm with an accuracy of 0.1 cm which was carried out twice to avoid bias. Data were analyzed by chi square test with a significance value of = 0.05.

## RESULTS

Table 1 shows most of the respondents aged 11-12 years, namely 34 respondents (40%). Most of the respondents were female by 53 respondents (61%). Most of the respondents' fast food consumption habits are in the frequent category, with 52 respondents (60%) and the consumption habits of carbonated drinks in the rare category are 49 respondents (56%). Most of the respondents as many as 52 (60%) respondents classified as obese.

**Table 1. Age, Gender, Fast Food Consumption Habits and Carbonated Drinks and the Incidence of Obesity**

Variabel	n	%
Age (in years)		
11 - 12	34	40
13 - 14	30	34
15 - 16	23	26
Gender		

Male	34	39
Female	53	61
Fast Food Consumption Habits		
Rarely	41	47
Often	46	53
Carbonated Drink Consumption Habit		
Rarely	49	56
Often	38	44
Kejadian Obesitas		
Normal	35	40
Obesity	52	60

Based on Table 2, it is known that there are no respondents who have a frequency level of consumption of fast food in the never category with normal nutritional status. For respondents who have an infrequent consumption of fast food at 85% with normal nutritional status, those who have a frequent consumption of fast food are 91% with obesity nutritional status. Based on the chi square statistical test, the p value = 0.005 is smaller than 0.05, which means that there is a relationship between fast food habits and the incidence of obesity in junior high school adolescents in Sidoarjo.

**Table 2 Relationship of Fast Food Habits With Obesity Junior High School In Sidoarjo**

Category	Consumption Frequency		n (%)	p
	Rarely	Often		
Normal	35 (85,4%)	5 (11%)	40 (46%)	0,005
Obesity	6 (14,6%)	41 (91%)	47 (54%)	
Total	41 (100%)	46 (100%)	87 (100%)	

Based on Table 3, it is known that there are no respondents who have a frequency level of consumption of fast food in the never category with normal nutritional status. For respondents who have a frequency level of consumption of carbonated drinks rarely is 61% with normal nutritional status, those who have a frequency level of consumption of carbonated drinks are 81% with nutritional status obesity. Based on the chi square statistical test, the p value = 0.001 is smaller than 0.05, which means that there is a relationship between carbonated drinking habits and the incidence of obesity in junior high school adolescents in Sidoarjo.

**Table 3. Relationship Between Carbonated Drinking Habits with Obesity Junior High School In Sidoarjo**

Category	Consumption Frequency		n (%)	p
	Rarely	Often		
Normal	30 (61%)	7 (18,4%)	37 (42%)	0,001
Obesity	19 (39%)	31 (81,6%)	50 (58%)	
Total	49 (100%)	38 (100%)	87 (100%)	

## DISCUSSION

The results showed that most of the students, including those who had a frequent consumption of fast food, were 91%. Based on the chi square statistical test, the p value = 0.005 is smaller than 0.05, which means that there is a relationship between fast food habits and the incidence of obesity in junior high school adolescents in Sidoarjo. In a previous study showed that adolescents who have a fast food consumption diet often are 61.8%. The results of this study indicate that there is a relationship between diet and obesity with a p-value of 0.018 (Wulandari et al., 2016).

The cause of the consumption of fast food with more nutrition is likely due to the number of portions of food consumed in excess (Sagala et al., 2017). In general, additives are added in fast food processing to maintain the taste and taste of the food (Malatuzzulfa, 2018). Fast food has a relatively high composition, high in calories, protein, sugar and salt, but low in fiber. If consumed too much will result in unbalanced nutritional quality and increase the risk of obesity (Afifah et al., 2017). Various types of fast food, in terms of packaging and processing technology, include fried food, canned food, processed meat, instant noodles and frozen food (Widyastuti, 2017). The advantages of fast food are that its presentation does not take a long time, can be found easily and is considered prestigious food for adolescents (Sagala et al., 2017). Overweight and obesity in adolescents can increase the risk of chronic diseases such as cardiovascular disease and cancer in later life (Nisa et al., 2021).

Most of the students, including those who have a frequent consumption of carbonated drinks, are 81% with obesity nutritional status. Based on the chi square statistical test, the p value = 0.001 is smaller than 0.05, which means that there is a relationship between carbonated drinking habits and the incidence of obesity in junior high school adolescents in Sidoarjo. This study is in line with research, which states that there is a relationship between carbonated drinks and obesity with a p-value of 0.015 < 0.05 (Asrin et al., 2013).

The habit of consuming carbonated drinks or what is often known as soft drinks, included in the diet label can actually increase the occurrence of obesity. In fact, the risk is higher compared to people who prefer fried foods (Faridah, 2017). Carbonated drinks are non-alcoholic drinks that have undergone a carbonation process and contain carbon dioxide gas (CO<sub>2</sub>) which gives an extra

sparkle effect with a touch of soda when drinking it (Astuti et al., 2018). The CO<sub>2</sub> content is injected into a closed, pressurized container. With this pressure, the injected CO<sub>2</sub> gas can dissolve into carbonated drinks (Simanjuntak et al., 2016). Carbonated drinks are included in the category that contains simple carbohydrates. If consumed in excess, it can trigger an increased risk of obesity, and even other diseases such as diabetes and tooth decay (Qoirinasari et al., 2018).

## CONCLUSION

<sup>23</sup>  
<sup>1</sup> Based on the results of the study, it is known that there is a relationship between fast food habits and the incidence of obesity in junior high school adolescents in Sidoarjo (p = 0.005). There is a relationship between the habit of carbonated drinks with the incidence of obesity in junior high school adolescents in Sidoarjo (p = 0.001). The need for counseling to teenagers about balanced nutrition so that students can reduce the consumption of fast food and carbonated drinks, and the school is expected to provide healthy snacks at school, so that the nutritional status of students can be controlled or maintained.

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PAGE 1

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PAGE 2

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PAGE 3

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PAGE 4

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PAGE 5

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