

# Healthy Lifestyle as Prevention of Obesity

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#### Abstract

Obesity is a growing global health issue linked to numerous chronic diseases, including diabetes, cardiovascular disorders, and certain cancers. Adopting a healthy lifestyle is a crucial preventive strategy to combat obesity. Key components of a healthy lifestyle include a balanced diet rich in fruits, vegetables, whole grains, and lean proteins, combined with regular physical activity. Limiting the intake of processed foods, sugar, and unhealthy fats also plays a vital role. Additionally, adequate sleep and stress management are important as they influence metabolic processes and eating behaviors. By incorporating these habits, individuals can maintain a healthy weight, reduce the risk of obesity, and improve overall well-being. Public health interventions and educational campaigns are necessary to promote healthy behaviors and create supportive environments that facilitate sustainable lifestyle changes

**Article History:** 

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## **1. INTRODUCTION**

Obesity is a complex multifactorial disease that has increased significantly in the last two decades; Nearly a third of the world's population is now considered overweight or obese. Obesity affects several physiological conditions and increases the risk of other disorders such as diabetes mellitus, cancer, cardiovascular disease, and various inflammatory conditions. The multifactorial etiology includes genetic, environmental, socioeconomic, and behavioral or psychological factors.

According to World Health Organization (WHO) estimates, 1.9 billion adults worldwide were overweight in 2016, while 650 million were obese. overweight and obesity are one of the most important factors behind non-communicable diseases. The need for identification of obesity as a chronic disease that requires immediate attention, appropriate screening, treatment, and cost-effective ways to maintain weight loss.

In general, the increase in obesity rates is caused by the consumption of calorie-dense foods and a decrease in physical activity at all ages. Neighborhoods with low socio-economic status are particularly impacted by changes in eating patterns, coupled with the large number of fast food restaurants today and the scarcity of health food stores and information about healthy eating. High levels of stress and food insecurity in communities with low socioeconomic status (SES) are thought to be other factors contributing to obesity.



Causes of increasing rates of obesity such as environment, diet, stress levels. It is teenagers who are currently most easily obese and can be diagnosed with common diseases, such as diabetes 2 and hypertension as well as experiencing a number of serious health problems, such as heart disease, stroke, diabetes, asthma and several types of cancer (Suryaputra & Nadhiroh, 2012).

The high prevalence of obesity in adolescents is caused by several factors. Determining factors for obesity include knowledge, parental education, pocket money, and consumption of fast food (Ali & Nuryani, 2018). Fast food has become a lifestyle in various circles. Consuming high amounts of fast food can cause overnutrition or obesity due to the excessive fat content of fast food. Previous research results show a relationship between fast. food consumption and the incidence of obesity in adolescents (Mahyuni et al., 2017).

## 2. RESEARCH METHOD

This research method uses a questionnaire where the data from this questionnaire is processed so that this research method uses a quantitative method. We use data categories then use percentages as the results and we also use independent variables which include physical activity and Eating Behavior. There are also dependent variables including the prevalence of obesity based on our survey data. We used 30 people to fill out our questionnaire, 30 of whom were teenagers. We use adolescents because adolescents have a greater influence on obesity.

## Tabel.1

NO.	EVALUATION OF THE LAST 7 DAYS	ASSESMENT LEVEL	RESULTS
1.	In the last 7 days, during sports lessons, how often were you active in activities such as running, jumping, throwing?	Rerely	45,5%
2.	In the last 7 days, what did you usually do at lunch time (aside from eating lunch)?	Sitting (Chatting, Reading, Doing assignments)	66,7%
3.	In the last 7 days, after coming home from school/after activities. How often do you do sports, dance or play actively?	1 Times and 2-3 Times	36,4%
4.	In the last 7 days, at night, how many times did you do sports, dance or play actively?	1 Times and 2-3 Times	36,4%
5.	In the past week, how many times did you exercise, dance and play actively?	2-3 Times	54,5%
6.	After reading the following 5 statements, which statement describes yourself in the last 7 days?	Sometimes (1-2 times last week) I do physical activities in my free time (such as exercising, running, swimming, cycling, aerobics)	54,5%





7.	Have you been sick or has something prevented you from doing normal physical activity in the past week?	No	75,8%
8.	What activities do you like to do in your free time?	Watching/listening to music	75,8%
9.	How long does it take to carry out activities in number 1?	1-2 Hours/day	63,6%
10.	Do you eat while watching TV?	Yes	84,*%

## Tabel.2

No.         EVALUATION         Never         Rerely         Sometimes         Often         Very Often         Always           1.         Im afraid of getting fat hungry         21,2%         15,2%         30,3%         21,2%         6,1%         6,1%           2.         Iavoid eating when I'm hungry         24,2%         21,2%         34,4%         12,1%         3%         0%           3.         I am addicted to food         18,2%         15,2%         33,3%         27,3%         6,1%         0%           4.         felt like 1 couldn't stop red into small pieces         18,2%         18,2%         30,3%         21,2%         6,1%         6,1%         6,1%         0%           6.         I cut the food into small pieces         30,3%         33,3%         24,2%         6,1%         6,1%         0%         0%           7.         carbotydrates (such as bread, rice, potatoes)         27,3%         27,3%         21,2%         6,1%         12,1%         12,1%           9.         I feel like other people are happy if I eat more eating         24,2%         15,2%         21,2%         0%         12,1%           10.         Thave a desire to be thinner         24,2%         18,2%         30,3%         21,2%         0% <th rowspan="2">NO.</th> <th rowspan="2">EVALUATION -</th> <th colspan="6">ASSESMENT LEVEL</th>	NO.	EVALUATION -	ASSESMENT LEVEL					
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2.         hungry         24,2%         21,2%         34,4%         12,1%         3%         0%           3.         I am addicted to food         18,2%         15,2%         33,3%         27,3%         6,1%         0%           4.         force ate too much and felt like I couldn't stop pieces         12,1%         42,4%         27,3%         15,2%         3%         0%           5.         I cut the food into small pieces         18,2%         18,2%         30,3%         21,2%         6,1%         6,1%         6,1%           6.         I know the number of calories I eat         30,3%         23,3%         24,2%         6,1%         6,1%         0%           7.         carbohydrates (such as bread, rice, potatoes)         27,3%         27,3%         36,4%         9,1%         0%         0%           8.         If feel like other people are happy if I eat more eating         24,2%         15,2%         21,2%         6,1%         12,1%           9.         I feel very guilty after eating         24,2%         18,2%         30,3%         21,2%         0%         12,1%           10.         I have a desire to be thinner         18,2%         30,3%         21,2%         0%         12,1%         15,2%	1.	I'm afraid of getting fat	21,2%	15,2%	30,3%	21,2%	6,1%	6,1%
4.I once ate too much and felt like I couldn't stop12,1%42,4%27,3%15,2%3%0%5.I cut the food into small pieces18,2%18,2%30,3%21,2%6,1%6,1%6.I know the number of calories I eat30,3%33,3%24,2%6,1%6,1%0%7.axid foods with high carbohydrates (such as bread, rice, potatoes)27,3%27,3%36,4%9,1%0%0%8.I feel like other people eating24,2%15,2%21,2%6,1%12,1%9.I feel very guilty after eating24,2%15,2%15,2%0%3%10.I have a desire to be thinner24,2%18,2%21,2%12,1%15,2%11.calories when doing calories way I'm to skinny27,3%21,2%21,2%12,1%15,2%12.Other people say I'm to skinny27,3%21,2%21,2%12,1%6,1%6,1%13.I think that I have a lot of fat on my body15,2%24,2%12,2%3%18,2%14.I eat looger than other people18,2%30,3%27,3%18,2%3%0%15.I avoid foods that contain sugar21,2%27,3%27,3%18,2%0%3%16.I eat special diet foods48,5%24,2%15,2%9,1%3%0%17.I feel that food controls my life21,2%27,3%24,2%12,1%3%9,1%<	2.	-	24,2%	21,2%	34,4%	12,1%	3%	0%
4.       felt like I couldn't stop       12,1%       42,4%       27,3%       15,2%       3%       0%         5.       I cut the food into small pieces       18,2%       18,2%       30,3%       21,2%       6,1%       6,1%         6.       I know the number of calories I eat       30,3%       33,3%       24,2%       6,1%       6,1%       0%         7.       carbohydrates (such as arroby yif I cat more arroby yif I cat more eating       27,3%       27,3%       36,4%       9,1%       0%       0%         8.       I feel like other people are happy if I cat more eating       24,2%       15,2%       21,2%       6,1%       12,1%         9.       I feel very guilty after eating       42,4%       24,2%       15,2%       15,2%       0%       3%         10.       I have a desire to be thinner       24,2%       18,2%       21,2%       24,2%       0%       12,1%         11.       calories when doing exercise       3%       18,2%       30,3%       21,2%       12,1%       15,2%         12.       Other people eas I'm too skinny       27,3%       21,2%       27,3%       12,1%       6,1%       6,1%         13.       I think that I have a lot of fat on my body       15,2%       24,2%       <	3.	I am addicted to food	18,2%	15,2%	33,3%	27,3%	6,1%	0%
5.         pieces         18,2%         10,2%         30,3%         21,2%         6,1%         6,1%           6.         Iknow the number of calories I eat         30,3%         33,3%         24,2%         6,1%         6,1%         0%           7.         carbohydrates (such as bread, rice, potatoes)         27,3%         27,3%         36,4%         9,1%         0%         0%           8.         I feel like other people atrice, potatoes)         24,2%         15,2%         21,2%         6,1%         12,1%           9.         I feel ike other people atrice, potatoes)         42,4%         24,2%         15,2%         15,2%         0%         3%           10.         I have a desire to be thinner         24,2%         18,2%         30,3%         21,2%         12,1%         15,2%           11.         calories when doing exercise         3%         18,2%         30,3%         21,2%         12,1%         15,2%           12.         Other people say I'm too skinny         27,3%         21,2%         27,3%         12,1%         6,1%         6,1%           13.         I think that I have a lot of fat on my body         15,2%         24,2%         21,2%         3%         18,2%           15.         I avoid foods that	4.		12,1%	42,4%	27,3%	15,2%	3%	0%
b.         calories I eat $30,3\%$ $33,3\%$ $24,2\%$ $6,1\%$ $6,1\%$ $0\%$ I avoid foods with high carbohydrates (such as bread, rice, potatoes) $27,3\%$ $27,3\%$ $36,4\%$ $9,1\%$ $0\%$ $0\%$ 8.         I feel like other people are happy if I eat more $24,2\%$ $15,2\%$ $21,2\%$ $6,1\%$ $12,1\%$ 9.         I feel very guilty after eating $42,4\%$ $24,2\%$ $15,2\%$ $15,2\%$ $0\%$ $3\%$ 10.         I have a desire to be thinner $24,2\%$ $18,2\%$ $21,2\%$ $24,2\%$ $0\%$ $12,1\%$ 11.         calories when doing exercise $3\%$ $18,2\%$ $30,3\%$ $21,2\%$ $24,2\%$ $15,2\%$ $21,2\%$ $12,1\%$ $15,2\%$ 12.         Other people say I'm too skinny $27,3\%$ $21,2\%$ $27,3\%$ $12,1\%$ $6,1\%$ $6,1\%$ 13.         I think that I have a lot of fat on my body entation sugar $15,2\%$ $24,2\%$ $21,2\%$ $39,4\%$ $9,1\%$ $3\%$ $15,2\%$ $30,3\%$ $15,2\%$ <td< td=""><td>5.</td><td></td><td>18,2%</td><td>18,2%</td><td>30,3%</td><td>21,2%</td><td>6,1%</td><td>6,1%</td></td<>	5.		18,2%	18,2%	30,3%	21,2%	6,1%	6,1%
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11.       calories when doing exercise       3%       18,2%       30,3%       21,2%       12,1%       15,2%         12.       Other people say I'm too skinny       27,3%       21,2%       27,3%       12,1%       6,1%       6,1%         13.       I think that I have a lot of fat on my body       15,2%       24,2%       21,2%       18,2%       3%       18,2%         14.       I eat longer than other people       18,2%       15,2%       39,4%       9,1%       3%       15,2%         15.       I avoid foods that contain sugar       21,2%       30,3%       27,3%       18,2%       0%       3%         16.       I eat special diet foods       48,5%       24,2%       15,2%       9,1%       3%       0%         17.       I feel that food controls my life       21,2%       27,3%       33,3%       15,2%       0%       3%         18.       I feel like other people are forcing me to eat       24,2%       27,3%       24,2%       12,1%       3%       9,1%         19.       I spend a lot of time thinking about food       15,2%       21,2%       27,3%       21,2%       0%       15,2%         20.       I feel uncomfortable after eating sweet foods       30,3%       15,2%       30,	10.		24,2%	18,2%	21,2%	24,2%	0%	12,1%
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15. $21,2\%$ $30,3\%$ $27,3\%$ $18,2\%$ $0\%$ $3\%$ 16.I eat special diet foods $48,5\%$ $24,2\%$ $15,2\%$ $9,1\%$ $3\%$ $0\%$ 17.I feel that food controls my life $21,2\%$ $27,3\%$ $33,3\%$ $15,2\%$ $0\%$ $3\%$ 18.I feel like other people are forcing me to eat $24,2\%$ $27,3\%$ $24,2\%$ $12,1\%$ $3\%$ $9,1\%$ 19.I spend a lot of time thinking about food $15,2\%$ $21,2\%$ $27,3\%$ $21,2\%$ $0\%$ $15,2\%$ 20.I feel uncomfortable after eating sweet foods $30,3\%$ $15,2\%$ $30,3\%$ $9,1\%$ $9,1\%$ $6,1\%$	14.	-	18,2%	15,2%	39,4%	9,1%	3%	15,2%
17.I feel that food controls my life $21,2\%$ $27,3\%$ $33,3\%$ $15,2\%$ $0\%$ $3\%$ 18.I feel like other people are forcing me to eat $24,2\%$ $27,3\%$ $24,2\%$ $12,1\%$ $3\%$ $9,1\%$ 19.I spend a lot of time thinking about food $15,2\%$ $21,2\%$ $27,3\%$ $21,2\%$ $0\%$ $15,2\%$ 20.I feel uncomfortable after eating sweet foods $30,3\%$ $15,2\%$ $30,3\%$ $9,1\%$ $9,1\%$ $6,1\%$	15.		21,2%	30,3%	27,3%	18,2%	0%	3%
17.       my life       21,2%       27,3%       53,3%       13,2%       0%       5%         18.       I feel like other people are forcing me to eat       24,2%       27,3%       24,2%       12,1%       3%       9,1%         19.       I spend a lot of time thinking about food       15,2%       21,2%       27,3%       21,2%       0%       15,2%         20.       I feel uncomfortable after eating sweet foods       30,3%       15,2%       30,3%       9,1%       9,1%       6,1%	16.		48,5%	24,2%	15,2%	9,1%	3%	0%
18.       are forcing me to eat       24,2%       27,3%       24,2%       12,1%       5%       9,1%         19.       I spend a lot of time thinking about food       15,2%       21,2%       27,3%       21,2%       0%       15,2%         20.       I feel uncomfortable after eating sweet foods       30,3%       15,2%       30,3%       9,1%       9,1%       6,1%	17.	my life	21,2%	27,3%	33,3%	15,2%	0%	3%
19.         thinking about food         15,2%         21,2%         21,2%         21,2%         0%         15,2%           20.         I feel uncomfortable after eating sweet foods         30,3%         15,2%         30,3%         9,1%         9,1%         6,1%	18.		24,2%	27,3%	24,2%	12,1%	3%	9,1%
$\begin{array}{c} 20. \\ \text{after eating sweet foods} \end{array}  \begin{array}{c} 50,5\% & 15,2\% & 50,5\% & 9,1\% & 9,1\% & 0,1\% \\ \end{array}$	19.	thinking about food	15,2%	21,2%	27,3%	21,2%	0%	15,2%
21.         I went on a diet         33,3%         18,2%         27,3%         12,1%         0%         9,1%	20.		30,3%	15,2%	30,3%	9,1%	9,1%	6,1%
	21.	I went on a diet	33,3%	18,2%	27,3%	12,1%	0%	9,1%

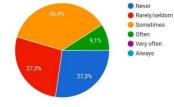




22.	I like my stomach empty	24,2%	12,1%	42,4%	15,2%	6,1%	0%
23.	I stimulate myself to vomit food after eating	51,5%	21,2%	18,2%	6,1%	0%	3%
24.	I enjoy new types of food	3%	13,1%	30,3%	30,3%	12,1%	12,1%
25.	I exercise self-control over food	9,1%	9,1%	57,6%	18,2%	0%	6,1%

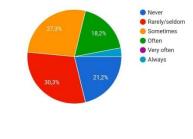
## 4.RESULTS AND DISCUSSION 4.1 RESULTS

This research identifies obesity as a global health problem driven by factors such as unhealthy lifestyle habits, high-calorie diets, low levels of physical activity, and various social, economic and psychological influences. Among today's teenagers, it is the ones who have a big influence on obesity With this, our research explores how eating behavior and physical activity contribute to obesity in adolescents.





The results from our survey involved 10 questions for physical activity and 25 questions for eating behavior. In physical activity, the majority chose "no" for the context of whether or not there was anything hindering them when doing their activities with a percentage of 75.8%. This was followed by 66.7% of respondents who chose to sit and read/do assignments in their free time during the day. In table 1, it turns out that 75.8% of respondents chose to watch/listen to music for their free time activities. and as many as 84.8% of respondents have the habit of eating while watching.

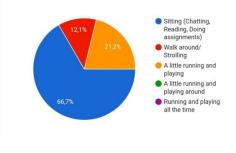




In terms of eating behavior, 30.3% of respondents were afraid of becoming fat, so of the 30.3%, 36.4% of respondents reported that they sometimes avoided foods containing carbohydrates and 30.3% reported that they rarely avoided foods that contained carbohydrates. contains sugar. Then as many as 30.3% of respondents chose never and sometimes felt uncomfortable after eating sweet foods. and as many as 57.6% of respondents sometimes control themselves over food.









## **4.2 DISCUSSION**

This discussion focuses on the relationship between physical activity and eating behavior in adolescents with obesity. Firstly, many respondents chose "no" regarding whether or not there were obstacles to carrying out activities, but many respondents also chose to sit and read or do assignments in their free time. where we discussed that there are still many teenagers who have no obstacles to their physical activity but choose to sit and read/do assignments as their free time activities, both of these relationships can trigger obesity

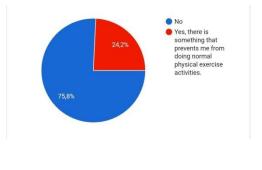


Figure 4

Even though as many as 30.3% of respondents are afraid of becoming fat. then 30.3% of respondents chose to rarely avoid foods that contain sugar, but 30.3% also chose that sometimes they felt uncomfortable after eating sweet foods, this made us discuss that sweet foods among teenagers are very difficult to avoid. Eating sweet foods can be one of the causes of obesity. From the results of this data and discussion, we see that there is a lot of imbalance between eating habits and physical activity in teenagers which can lead to obesity.

## **5. CONCLUSION**

The conclusion we can draw is that this research highlights the many imbalances between eating behavior and physical activity in adolescents which can be the main cause of obesity. Eating behavior and physical activity are effective approaches to preventing obesity. Good eating behavior includes a balanced and not extreme diet, while physical activity includes regular exercise, apart from these two there are other effective approaches such as stress management and getting enough sleep. Therefore, public health interventions such as nutritional education, physical activity promotion, and healthy environmental campaigns are needed to encourage sustainable lifestyle changes.





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