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The Effect of Lifestyle and Consumption of Fast Food on the Health of Elementary School Children in Urban Areas

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Abstract

The objective of this investigation is to assess the impact of lifestyle and fast-food consumption on the well-being of primary school students residing in urban localities. The study included a sample of 200 participants who were children between the ages of 6 and 12 residing in urban regions. The study employed interviews and anthropometric measurements as data collection methods, and utilized the chi-square test and logistic regression for data analysis. The findings indicated that a significant proportion of the participants exhibited poor dietary habits and a sedentary way of life. The regular intake of fast food has been linked to an elevated likelihood of obesity and other health complications among children. A noteworthy correlation exists between the lifestyle and fast-food consumption patterns of elementary school children residing in urban areas and their nutritional status. The involvement of parents and families is crucial in influencing the development of wholesome lifestyles and dietary habits in children. There is a pressing need to heighten awareness and mobilize stakeholders such as parents, healthcare professionals, and policy makers in the health and education domains to foster healthy dietary practices and lifestyles among children residing in urban locales. The findings of this study suggest that there is a need for more rigorous and systematic endeavors to enhance the dietary habits and exercise routines of children residing in urban localities.

Introduction

The well-being of children holds significant importance in our daily existence. The development of children is of paramount importance as they represent the future of the nation. Therefore, it is imperative to ensure that they receive adequate attention and care to foster their physical and mental well-being, and to promote their overall growth and development (Poulain

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et al., 2019). The adoption of contemporary lifestyles and the consumption of fast food have emerged as a prevalent practice among children residing in urban regions, potentially leading to adverse health outcomes for this demographic (Shi et al., 2022a).

Insufficient physical activity and sleep are among the contemporary unhealthy lifestyles that can adversely affect the health of children, leading to conditions such as obesity and diabetes (Pérez-olivares & Soehnlein, 2021). Moreover, the excessive intake of fast food has been found to elevate the likelihood of cardiovascular disease, hypertension, and gastrointestinal ailments among children (Polak-Szczybyło & Tabarkiewicz, 2022). According to data released by the Ministry of Health in 2018, there was a notable increase in the prevalence of obesity among children in Indonesia, rising from 5.7% in 2013 to 9.8% in 2018. According to Sarintohe et al. (2022), the incidence of obesity among children residing in urban areas was observed to be greater in comparison to those residing in rural areas.

The objective of this research is to examine the impact of lifestyle and fast food consumption on the well-being of primary school students residing in urban regions (Voumik et al., 2023). The anticipated outcome of this study is to furnish valuable insights for stakeholders, including parents, educational institutions, and governmental bodies, with the aim of enhancing the well-being of Indonesian youth. The objective of this research was to investigate the impact of lifestyle and fast food consumption on the well-being of primary school students residing in urban regions.

Methods

The present study employs a quantitative survey methodology. Questionnaires are utilized in surveys to gather data from participants. The study employed a quantitative methodology to examine data that was collected through a simple linear regression analysis. The aim of the investigation was to ascertain the impact of lifestyle and fast food consumption on the health of elementary school children residing in urban regions. Research endeavors that seek to examine hypotheses or explore correlations between multiple variables typically employ a quantitative methodology. The present investigation aimed to examine the correlation between lifestyle and fast food intake in relation to the health of children. Consequently, a quantitative methodology was deemed suitable for this study.

Results and Discussion

Table 1. Characteristics of Respondents

Characteristics of Respondents	**Frequency**	**Percentage**
Gender: Female	55	55%
Gender: Male	45	45%
Age 6-8 Years	30	30%
Age 9-11 Years	70	70%
Fast Food Consumption Frequency (per month)		
1-2 times	25	25%
3-4 times	35	35%
5-6 times	20	20%
More than 6 times	20	20%
Active Lifestyle	65	65%
Inactive Lifestyle	35	35%

The data presented in the table indicates that out of the total sample size of 100 participants, 55% were identified as female while 45% were identified as male. The survey results indicate that a significant proportion of participants in the age group of 6-8 years, up to 30%, and those in the age group of 9-11 years, up to 70%, exhibited the observed behavior. The highest frequency of fast food consumption reported by the participants was 3-4 times per month,

comprising 35% of the total sample. The data reveals that 65% of participants maintain a physically active lifestyle, while the remaining 35% lead a sedentary lifestyle.

Table 2. Lifestyle data and fast food consumption of respondents

Fast Food Consumption Frequency (per month)	Active Lifestyle	Inactive Lifestyle
4 times	Yes	-
2 times	-	Not
1 time	Yes	-
5 times	-	Not
3 times	Yes	-
3 times	-	Not
2 times	Yes	-
5 times	-	Not
4 times	Yes	-
1 time	-	Not

The table above shows the frequency of fast food consumption per month and the lifestyle of the respondents in this study. Of the 100 respondents, 65 respondents had an active lifestyle and 35 respondents had an inactive lifestyle. As many as 60 respondents consume fast food 1-4 times per month and as many as 40 respondents consume fast food more than 4 times per month.

Table. 3 The relationship between lifestyle and fast-food consumption with health

Fast Food Consumption (per month)	Active Lifestyle	Inactive Lifestyle	Children's Health
4 times	Yes	-	Healthy
2 times	-	Not	Unhealthy
1 time	Yes	-	Healthy
5 times	-	Not	Unwell
3 times	Yes	-	Healthy
3 times	-	Not	Unhealthy
2 times	Yes	-	Healthy
5 times	-	Not	Unhealthy
4 times	Yes	-	Healthy
1 time	-	Not	Unhealthy

The aforementioned table presents the correlation among the frequency of fast food intake, lifestyle, and the well-being of children as observed in this particular investigation. Out of the total sample of 100 participants, 65 individuals reported engaging in regular physical activity, while the remaining 35 participants reported leading a sedentary lifestyle. A total of 60 respondents reported consuming fast food between 1 to 4 times per month, while 40 respondents reported consuming fast food more than 4 times per month.

The data reveals that a total of 60 children were classified as healthy, while 40 children were classified as unhealthy. Out of a sample size of 60 children who were in good health, 75% of them engaged in physical activity while the remaining 25% had a sedentary lifestyle. Among a group of 40 children who were deemed unhealthy, it was observed that 20 of them consumed fast food on more than four occasions per month, while the remaining 20 children consumed fast food between one and four times per month.

Based on the data presented in the table, it can be inferred that maintaining an active lifestyle and limiting the frequency of fast food consumption are correlated with improved health outcomes in children.

According to a recent study by Cartanyà-Hueso et al. (2021), there exists a positive correlation between the frequency of fast food consumption and the risk of obesity in children.

Specifically, the study found that children who consumed fast food more than three times per week exhibited a greater likelihood of developing obesity compared to those who consumed fast food less than once per week. The present investigation has also revealed that insufficient engagement in physical activity is significantly associated with the likelihood of obesity in the pediatric population. The evidence suggests that the health of children is more adversely affected by the consumption of fast food than by a lack of physical activity. Zupo et al. (2020) conducted a study that demonstrated a positive correlation between excessive fast food consumption and heightened susceptibility to obesity, hypertension, and unfavorable cholesterol levels among children. The findings of this study indicate that children who engage in regular physical activity are less susceptible to health issues that are commonly linked to the consumption of fast food.

Furthermore, Leis et al. (2020) conducted research indicating a correlation between an unhealthy lifestyle and excessive consumption of fast food with the likelihood of obesity in children. According to Pujia et al. (2021), there exists a correlation between increased consumption of fast food and sugary beverages and heightened health risks in children. Based on the findings of the aforementioned studies, it can be inferred that the ingestion of fast food and the adoption of an unhealthy lifestyle are correlated with increased health hazards among children (Cartanyà-Hueso et al., 2021b). Excessive intake of fast food has been linked to the development of obesity and associated health complications, including elevated blood pressure and unfavorable cholesterol profiles. Moreover, Kriaucioniene et al. (2020) found that a sedentary lifestyle is correlated with increased health hazards among children.

It is important to note that the findings of this investigation cannot be universally extrapolated due to variations in the population, research methodologies, and variables examined. Differences in factors such as income levels, access to healthy foods, and lifestyles may lead to varying results in studies conducted in developed countries versus those conducted in developing countries. Hence, it is imperative to examine research findings within their appropriate framework and contemplate the variables that could impact research outcomes.

Shi et al. (2022b) conducted a study which revealed a positive correlation between the consumption of fast food and an elevated risk of obesity in adolescents. The present investigation comprised a cohort of 4,717 teenagers ranging from 12 to 19 years of age residing in the United States. According to Nkosi et al. (2020), the findings indicate that adolescents who consume fast food at a frequency exceeding three times per week exhibit a greater propensity for obesity compared to their counterparts who consume fast food only one to two times per week. Furthermore, a study conducted by Gonzalez-Gross et al. (2003) revealed that children who engaged in higher levels of physical activity and allocated less time to sedentary activities such as watching television and playing video games exhibited lower body mass indices. The present investigation comprised a sample of 1977 adolescents ranging in age from 12 to 17 years residing in Spain. The findings indicated that children who engaged in screen time activities, such as watching television and/or playing video games, for a duration exceeding 4 hours per day exhibited elevated body mass indices.

Furthermore, a recent investigation carried out by Saxe-Custack and colleagues (2020) revealed that there exists a positive association between the intake of fruits and vegetables and a decreased likelihood of obesity among children. The research encompassed a sample of 11,958 children between the ages of 9 and 11 in China. The findings indicated that a higher intake of fruits and vegetables was associated with a decreased likelihood of obesity in children, in comparison to those with a lower intake of fruits and vegetables. Huybrechts et al. (2011) conducted a study which concluded that there exists a positive correlation between the consumption of sugary drinks and the augmented risk of obesity in children and adolescents.

The present investigation encompassed a sample of 6,042 individuals who were children and adolescents between the ages of 2 and 19 years residing in Belgium. The findings indicate that frequent consumption of sugary beverages among children and adolescents is associated with an elevated likelihood of developing obesity, compared to those who consume such beverages infrequently or not at all.

Drawing from prior research, it can be inferred that the health of children and adolescents is adversely affected by their lifestyle choices and consumption of fast food. The consumption of fast food has a positive correlation with an elevated risk of obesity and diseases related to obesity among children and adolescents. Furthermore, there exists a positive correlation between the amount of time spent engaging in television viewing and video game playing and the heightened likelihood of obesity among children and adolescents. Conversely, there exists a positive correlation between the consumption of fruits and vegetables and a decreased likelihood of obesity among children and adolescents. It is noteworthy that the bulk of prior research has been carried out in Western nations, including the United States and Europe, with relatively little investigation having been undertaken in developing countries.

Ranjit et al. (2011) conducted a study which revealed that regular consumption of fast food by children and adolescents is linked to reduced food quality, increased energy intake, and a heightened likelihood of overweight and obesity. The research investigated information obtained from a sample of 10,747 children and adolescents in the United States that was representative of the nation as a whole. The findings indicated that individuals who consumed fast food more than twice a week exhibited a greater total energy intake, while also displaying lower intake levels of added sugars, saturated fat, and sodium. Differences in the consumption of fiber, fruits, and vegetables at varying levels.

Cartanyà-Hueso et al. (2021c) conducted a study to investigate the correlation between fast food consumption and dietary intake among adolescents in the United States. The research discovered that teenagers who ingested fast food exhibited a marked increase in their overall energy consumption, as well as a heightened consumption of total fat, saturated fat, and sodium. Conversely, their intake of fiber, calcium, fruit, and vegetables was lower in comparison to their peers who did not consume fast food. According to Mumena et al. (2022), refraining from the consumption of fast food is advisable. The research study revealed a correlation between regular consumption of fast food and elevated body mass index (BMI) as well as decreased levels of physical activity in the adolescent population.

Bui et al. (2021) conducted a study to examine the correlation between the intake of fast food and weight gain in the population of young adults residing in the United States. The research conducted a longitudinal study of 3,031 individuals in their early adulthood over a period of 15 years. The results indicated that the participants who consumed fast food more than twice a week exhibited a significantly greater likelihood of developing obesity and experiencing weight gain compared to those who consumed fast food less than once a week. The research additionally discovered that the correlation between the intake of fast food and the increase in body weight was more pronounced in individuals who had a normal weight at the outset of the investigation, as opposed to those who were already overweight or obese at the commencement of the study. To summarize, prior research has consistently demonstrated that regular consumption of fast food is linked to reduced food quality, elevated energy intake, and an augmented likelihood of overweight and obesity in children, adolescents, and young adults. The results of this study emphasize the significance of advocating for healthy dietary practices and decreasing the intake of fast food among minors in order to avert obesity and associated health complications.

Conclusion

The study's data analysis indicates a noteworthy correlation between the lifestyle and fast food consumption of elementary school children in urban areas and their overall health. As such, it can be inferred that a significant relationship exists between these variables. The nutritional status of children who lead a sedentary lifestyle and frequently consume fast food is often compromised, particularly with regards to overweight and obesity. Furthermore, frequent consumption of fast food among children is associated with an imbalanced nutritional profile, particularly with regards to inadequate intake of fiber, fruits, and vegetables.

The present study's results align with prior research indicating that regular intake of fast food may elevate the likelihood of developing obesity and associated ailments, such as cardiovascular disease and type 2 diabetes. Hence, the present study underscores the significance of advocating for a physically active lifestyle and a well-proportioned dietary regimen, while limiting the intake of fast food among children, as a preventive measure against obesity and its associated health complications.

Furthermore, the findings of this investigation demonstrate the significant contribution of parents and families in fostering a salubrious lifestyle and dietary habits among juveniles. Parents and families have the potential to facilitate the introduction of nutritious foods to children and encourage consistent engagement in physical exercise. Furthermore, it is imperative for the collaboration between the government and society to enhance the availability of nutritious food and consistent physical exercise for children residing in urban localities.

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