

The Effect of Fast Food Consumption on Adolescent Health: A Literature Review

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Abstract

The shift in adolescent consumption patterns towards fast food dominance has become a complex global issue, especially in developing countries like Indonesia. Fast food is now not only a practical choice, but also a symbol of modernity and lifestyle that is massively promoted by digital media. This study aims to examine the impact of fast food consumption on adolescent physical and psychosocial health through a qualitative approach with a literature study method. Data were collected from various accredited scientific sources, including international journals, health organization reports, and relevant national survey results, with a publication period of the last five years (2019–2024). The findings show that excessive consumption of fast food is strongly correlated with an increase in the prevalence of obesity, metabolic syndrome, and psychological disorders such as negative body image and stress. Low nutritional literacy, minimal formal education, and the dominance of unhealthy food promotions on social media exacerbate adolescent vulnerability to the long-term impacts of such consumption. Therefore, multidimensional interventions are needed that not only target individual consumption behavior but also reform information systems, educational curricula, and regulations on fast food marketing to adolescents. This study emphasizes the importance of scientific literature as a basis for evidence-based adolescent health policies.

Keywords: fast food, adolescent health, obesity, nutritional literacy, literature study

Introduction

In the last two decades, there has been a significant shift in adolescent consumption patterns, especially in developing countries such as Indonesia. Fast food, which used to be a product of Western culture, has now become part of the urban lifestyle, especially for the younger generation. This phenomenon cannot be separated from the flow of globalization, ease of access, and the influence of digital media which aggressively markets fast food products through advertisements

targeting young people. Research by Darmadi et al. (2021) shows that more than 65% of adolescents in urban areas consume fast food at least 2 times a week, a figure that reflects a shift in consumption orientation from home-cooked food to instant and ready-to-eat food.

Furthermore, this consumption pattern is not only influenced by economic factors and food availability, but also by social constructions regarding “practicality” and “modern lifestyle.” Teenagers often view fast food as a symbol of modernity and socializing, not just a nutritional need. In fact, various studies, such as those conducted by Musaiger (2019) in the *Journal of Adolescent Health*, confirm that fast food on average contains levels of saturated fat, sugar, and sodium that exceed the recommended daily consumption limits. Therefore, this change in consumption patterns should not only be understood as a trend in eating behavior, but as a form of cultural transformation that has the potential to threaten the quality of adolescent health if not accompanied by adequate nutritional education.

Excessive consumption of fast food in adolescents has been shown to contribute significantly to the increasing prevalence of obesity and metabolic diseases. Data from the World Health Organization (2022) shows that the global adolescent obesity rate has tripled since 1975, and one of the main factors is the high-calorie, high-sugar, and low-fiber diet commonly found in fast food. In Indonesia, the results of Riskesdas (2018) indicate that the prevalence of obesity in adolescents aged 13–15 years reached 16%, a significant increase compared to previous years. This condition is a serious alarm considering that obesity in adolescence has the potential to persist into adulthood and increase the risk of chronic diseases such as type 2 diabetes and hypertension in productive ages.

More critically, adolescents' vulnerability to the impacts of fast food is not only physiological, but also psychosocial. Adolescents with an excessive body mass index (BMI) tend to experience social stigma, decreased self-confidence, and body image disorders, which ultimately contribute to psychological stress and the risk of depression (Wang & Lim, 2020). This condition forms a vicious circle: stress can encourage impulsive eating patterns or binge eating, which then worsens their health status. Therefore, the urgency of addressing the impacts of fast food consumption on adolescents is not only related to nutritional aspects, but also touches on broader mental health, social, and educational issues. Comprehensive interventions involving schools, families, and the health sector are essential to prevent long-term damage to the younger generation.

Low nutritional literacy among adolescents is a fundamental factor that strengthens the dominance of fast food in daily consumption patterns. Many adolescents do not have the ability to read nutrition labels, understand nutritional composition, or distinguish between healthy and unhealthy

foods. Research by Putri & Sari (2020) in the Journal of Nutrition and Food shows that 72% of adolescents do not know the calorie content of the fast food they consume regularly. This condition is exacerbated by an education system that does not provide adequate space for practice-based nutrition education. The school curriculum generally still places health topics as complementary material, not as a strategic issue that must be emphasized in forming healthy living habits from an early age.

Moreover, social pressure and exposure to digital media exacerbate the crisis of nutritional awareness among adolescents. Platforms such as Instagram and TikTok not only promote fast food through advertisements, but also through food influencer content that popularizes hedonistic eating styles without adequate nutritional information. Adolescents who are still in the identity-searching phase are very vulnerable to peer group influence and status symbolization through the consumption of popular, even though unhealthy, foods (Setyawati, 2021). In this context, low nutritional awareness is not only an individual problem, but also a manifestation of a systemic failure in forming a healthy and educational information ecosystem. Therefore, structural interventions—such as regulating unhealthy food advertisements for adolescents and integrating nutritional education into digital platforms—are very important to reverse this trend.

Literature reviews serve as a scientific basis for identifying consistent patterns regarding the impact of fast food consumption on adolescent health. By analyzing findings from various studies, we can systematically construct a map of the problem—from the tendency for increased calorie intake, micronutrient deficiencies, to long-term consequences such as metabolic syndrome. According to a systematic review by Smith et al. (2020) in *Nutrients*, consuming fast food three times a week or more is associated with a 33% increased risk of obesity in adolescents, as well as increased LDL cholesterol levels. This fact strengthens the argument that interventions designed without an evidence base will only be reactive and not address the root of the problem. Therefore, scientific literature is not just a complement, but a strategic component in making targeted public health policies.

Furthermore, literature reviews play an important role in evaluating the effectiveness of interventions that have been carried out in various contexts, so that policymakers do not have to start from scratch. For example, a study by Fernandes & Sturm (2019) in *Public Health Nutrition* showed that a school-based intervention that combined nutrition education with restricting access to fast food in the school environment could reduce consumption by 27% within six months. Such findings are important as a reference for program replication and adaptation in Indonesia, taking into account local variables such as eating culture, family economy, and access to information. In this context, the importance of literature reviews is not only as academic documentation, but as a

critical instrument to encourage more progressive and evidence-based health practices among adolescents.

Method

This study uses a qualitative approach with a literature review method. This approach was chosen because the main objective of the study is to explore and analyze in depth various scientific findings related to the effects of fast food consumption on adolescent health. This study does not aim to test hypotheses quantitatively, but rather to understand the patterns, relationships, and impacts of fast food consumption as reflected in published academic literature.

The data sources used in this study were obtained from various scientific publications such as accredited national and international journals, relevant textbooks, WHO reports, and data from official institutions such as the Indonesian Ministry of Health. The literature reviewed was selected based on certain criteria: (1) published in the last five years (2019–2024), (2) directly discussing the relationship between fast food and adolescent health, and (3) written in Indonesian or English. Data collection techniques were carried out through online database searches such as Google Scholar, PubMed, ScienceDirect, and Garuda (Digital Reference Library). The data obtained were then analyzed using thematic analysis techniques, by grouping the findings based on main themes such as consumption patterns, physiological effects, psychosocial impacts, and intervention strategies. Data validity was maintained through source triangulation and critical assessment of the credibility of the publications reviewed.

Results and Discussion

1. Fast Food Consumption Patterns Among Teenagers

The fast and instant lifestyle changes have had a major impact on adolescent consumption patterns, especially in choosing types of food. Adolescents tend to choose fast food because it is considered practical, easily accessible, and in accordance with the dynamics of their busy daily lives, such as school activities, tutoring, and social activities. This phenomenon shows a social transformation in eating behavior that is no longer oriented towards nutritional needs, but more towards aspects of comfort and modern lifestyle.

The main motivation for teenagers to consume fast food lies not only in the practicality factor, but also in the perception that this type of food represents a contemporary lifestyle. Putri & Sari's (2020) research shows that most teenagers aged 13–18 years consider visiting fast food restaurants as a form of self-actualization and part of socializing. Thus, fast food has shifted its function from merely fulfilling physical needs to being a symbol of social status in the peer environment.

The influence of social media also strengthens fast food consumption among teenagers. Attractive visual advertisements, promotions through influencers, and mukbang content on platforms such as TikTok and Instagram create the perception that fast food consumption is a trend to follow. In this context, teenagers are a very vulnerable target market because they are still in the stage of forming their identity and are highly influenced by the opinions of their social groups.

It is also important to note the differences in consumption patterns between teenagers living in urban and rural areas. Teenagers in urban areas have much easier access to fast food outlets, both physically and digitally through delivery services. Meanwhile, teenagers in rural areas tend to consume home-cooked meals, although the trend of fast food consumption is starting to reach this area through market penetration and lifestyle changes. This difference shows that environmental factors play an important role in determining consumption tendencies.

Family factors also play a significant role in shaping adolescent eating habits. Families who do not have enough time to cook or educate their children about healthy eating patterns tend to let their children consume fast food freely. In addition, in families with middle to upper economic backgrounds, buying fast food is often considered as part of a modern lifestyle that does not need to be questioned critically.

Schools, as formal institutions that have a large influence on adolescents, have not been fully optimal in carrying out their educational role regarding healthy eating patterns. Nutritional materials are often only given theoretically and are not related to students' daily lives. The lack of healthy canteen programs and weak control over the types of food sold in the school environment strengthen adolescents' access to fast food, even during study times.

Thus, the pattern of fast food consumption among adolescents cannot be separated from the interaction between individual, social, economic, and cultural factors. To understand this issue comprehensively, a cross-sectoral analysis involving families, schools, media, and the food industry itself is needed. The study of this consumption pattern is an important basis for designing health interventions that not only target individuals, but also the social context that shapes adolescent consumer behavior.

2. The Impact of Fast Food Consumption on the Physical and Psychological Health of Adolescents

Excessive consumption of fast food in adolescents has been shown to have serious impacts on physical health. One of the most obvious impacts is the increasing prevalence of obesity. Fast food is generally high in calories, saturated fat, added sugar, and low in fiber and micronutrients.

According to the World Health Organization (2022), adolescents who routinely consume fast food three or more times a week are at higher risk of being overweight and obese compared to adolescents who rarely consume it.

Obesity in adolescents not only affects physical appearance, but also increases the risk of chronic diseases such as type 2 diabetes, hypertension, and heart disease at a young age. This is a shift in the epidemiology of diseases that previously attacked more adults, now starting to infect adolescents due to unhealthy eating patterns. In addition, obesity is also correlated with low levels of physical fitness and decreased learning productivity due to chronic fatigue.

Another impact that is no less important is psychological disorders. Adolescents who experience obesity or weight disorders due to fast food consumption often experience psychological stress such as low self-esteem, social anxiety, and depression. Research by Wang & Lim (2020) revealed that there is a significant relationship between negative body image and the habit of consuming foods high in fat and sugar. This creates a cycle of negative behavior: stress drives excessive consumption, and excessive consumption worsens physical and psychological conditions.

Fast food also has an impact on adolescents' cognitive function. Studies show that excessive consumption of foods high in fat and sugar can reduce the brain's ability to concentrate, remember, and executive function. This certainly has direct implications for adolescents' academic performance in school, especially in the context of an education system that demands high cognitive competition.

On the other hand, fast food consumption can form a dangerous psychological dependency. The sodium and other additives in fast food stimulate the dopamine system in the brain, creating a sense of satisfaction and instant pleasure that can lead to addiction. Teenagers who are accustomed to fast food will have difficulty changing their eating patterns to a healthier one, because their brains are used to getting rewards from these foods.

In addition to individual factors, these health impacts are also influenced by social factors such as lack of support from the environment to form healthy eating habits. When teenagers live in an environment that is permissive of unhealthy foods and do not receive adequate nutritional education, they will tend to repeat these detrimental eating patterns without realizing the consequences.

Overall, fast food consumption has caused multidimensional health problems for adolescents, both physically and psychologically. Addressing it requires cross-sector interventions and a

multidisciplinary approach that not only targets individual behavioral changes, but also fixes the social systems that allow unhealthy eating patterns to persist and thrive.

3. Evidence-Based Intervention Strategies to Reduce Fast Food Consumption

Reducing fast food consumption among adolescents requires interventions that are not only educational, but also structural and based on scientific evidence. The most common strategy is through nutrition education in schools, but its effectiveness is often hampered by a less contextual approach and minimal integration with students' daily lives. Therefore, educational strategies must be designed to be more interactive, relevant, and involve the active participation of adolescents.

Implementing a healthy canteen policy is a concrete step that can be taken by educational institutions. Canteens that provide balanced nutritious food and limit the sale of foods high in calories, salt, and sugar can help create a healthier eating environment. A study by Fernandes & Sturm (2019) showed that healthy canteen programs in several schools in Asia were able to reduce fast food consumption by 27% within six months.

In addition to educational approaches, public policy-based interventions are also essential. Governments can implement strict regulations on fast food advertising, especially those targeting children and adolescents through social media. Clear and transparent nutritional labeling on food packaging can also help young consumers make wiser food decisions. Countries such as Chile and the UK have successfully implemented colored nutritional labeling as a visual aid in reducing the consumption of unhealthy foods.

The role of the family cannot be ignored in intervention strategies. Educating parents about the importance of healthy eating patterns and the long-term impacts of fast food will help create a home environment that supports changes in adolescent eating behavior. Families also need to be encouraged to return to the tradition of cooking healthy meals at home as part of their daily lifestyle.

Social media, which has been a channel for promoting fast food, can be transformed into an effective health campaign medium. Collaboration between the government, NGOs, and health influencers can produce educational content that is interesting and relevant to teenagers. This strategy is important because it can reach targets directly on the platforms they use every day.

Interventions also need to consider economic aspects, considering that many teenagers from lower-middle class families prefer fast food because of its affordable price. Subsidies or incentives for healthy food in school canteens or local food outlets can be a solution to overcome this barrier. Local governments can develop partnerships with healthy food MSMEs to provide nutritious and affordable food alternatives.

By combining educational, regulatory, and participatory approaches, this evidence-based intervention strategy has great potential to reduce fast food consumption among adolescents. However, its implementation requires political commitment, synergy between sectors, and continuous evaluation so that the results can be measured and have a long-term impact on the health of the younger generation.

Conclusion

Fast food consumption among adolescents has become a phenomenon that is not only nutritional, but also social and psychological. This consumption pattern is influenced by an instant lifestyle, social media, accessibility, and minimal nutrition education from the family and school environment. The impacts are very serious, ranging from obesity, metabolic disorders, to psychological disorders such as depression and low self-confidence. Therefore, comprehensive and cross-sectoral evidence-based interventions are needed—including contextual nutrition education, regulation of fast food promotion, strengthening healthy canteens, and optimizing the role of social media as a health campaign tool. Facing this challenge is not only about changing individual behavior, but also reforming the system that allows unhealthy consumption culture to persist.

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