



Knowledge and Practice of Junk Foods Among Secondary Level Students

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Article Info

Abstract

Received: August 10, 2024

Accepted: September 15, 2024

Published: October 22, 2024

Consumption of junk foods by adolescents has become a serious public health problem. Although they are aware of the adverse health consequences, most adolescents have limited information and hence change their eating behavior minimally. Socio-economic factors, influence of peers, and availability at cheaper prices stimulate the consumption of more junk food. Cultural changes due to urbanization and adoption of Western type of food habits have enhanced this problem by shifting the food preference toward junk food consumption. Some serious physical and academic consequences of junk foods consumption include obesity, diabetes, and poor academic performance. Major challenges to improvement in eating have included a lack of access to affordable healthy food and nutrition education. To promote better eating, efforts should include school-based nutrition education along with supporting policies and community involvement. These will reduce the health risks long-term by promoting efforts in knowledge gaps and socio-economic and cultural factors. Efforts to encourage healthier food environments and policy advocacy can boost adolescent health outcome.

Keywords: Adolescents, consumption, health problems, junk foods

Introduction

Adolescence is a serious period of development, involving an enormous rate of physical, emotional, and cognitive growth; it is thus the time of special vulnerability in laying the groundwork for lifelong eating patterns. To be specific, the combination of hormonal changes, increased energy demands, and continuing brain development at this age makes adolescents more vulnerable to junk foods available comfortably and tasting good. This is a period of increased sensitivity to social influences and increase rapidly autonomy-desiring dispositions that very strongly influence dietary choice.

Malik, Popkin, and Bray (2010) presented the rising consumption of junk food among adolescents is one of the critical global health issues, particularly in developing regions of South Asia. The dietary shift away from traditional nutrient-dense foods toward processed, energy-dense foods high in fat, added sugars, and sodium has serious health implications, while reading optimum health. On the same line of thought, increased levels of obesity, type 2 diabetes, cardiovascular diseases, and generally other chronic non-communicable diseases have always been related to overconsumption of junk food. With the increased prevalence of these health problems, it was paramount to develop a clear understanding of what really predisposes or compels adolescents in South Asia to high consumption of junk foods.

In South Asia, sociocultural environments are rapidly changing because of urbanization, globalization, and exposure to Western dietetics. These exposures have hastened the normalization of junk food as a desirable and status-enhancing food choice among young people (Singh, 2013). Traditional dietary patterns high in fruits, vegetables, and whole grains are now being replaced by fast foods that offer convenience and immediate satisfaction. It's not a question of taste; it actually has to do with bigger socioeconomics and cultural trends at play.

Smith and Kumar (2020) found that socioeconomics is literally at the heart of junk food consumption patterns among South Asian adolescents. Research evidence has continuously indicated a positive relationship between the intake of junk food and socioeconomic status. Studies have established that young people from high socioeconomic backgrounds consume junk food more in comparison with those from low socioeconomic

backgrounds. This positive correlation may be explained by several factors, including the obvious greater financial resources, which better expose one to junk food through buying power, and cultural factors associating consumption of such foods with higher status and modernity. Again, in most cases, it is normally hard for adolescents from low socioeconomic groups to access healthy foods due to unavailability, hence increasing the intake of junk foods, which are largely available and cheap.

Peer influence is another strong determinant in the eating behavior of adolescents. During adolescence, they are most easily influenced by their friends and social groups. According to Story, French, and Brownell (2000), peers have a large effect on food preferences. Adolescents may wish to fit in with the peer group and adopt unhealthy eating practices only as a pathway to social acceptance. This dynamic occurs far more in environments with easy access to junk food and those socially endorsing the same.

The role of marketing in decorating food choices cannot be overestimated. The universality of junk food marketing across media has created a food environment that encourages unhealthy eating behaviors among young people. The advertising of junk food as exciting, fun, or desirable, often through appeals to taste and enjoyment, will more likely contribute to its normalization in affecting the dietary choices of adolescents. The temptation and observation of junk food through media campaigns are further enhanced by the use of supports from celebrities and influencers to drive their appeal (Harris, Pomeranz, Lobstein and Brownell, 2009).

Access and affordability are critical factors affecting the consumption of junk food. Fast food outlets have increased; convenience stores have proliferated in urban areas, while their prices generally remain low for junk foods—factors easily accessible to adolescents. This trend is of special concern in urban South Asia, a region where rapid economic development has meant increased availability of unhealthy food at low costs. At the same time, healthy choices are mostly accessible in limited supply and more expensive, rapidly creating an obesity environment that puts young people at risk of making poor dietary choices.

Because of junk food consumption among adolescents is a complex challenge across South Asia, it also calls for a comprehensive and integrated approach. It would also include individuals, family, school, and community-level interventions. School-based programs that were centered on providing nutrition education, promoting healthy eating practices, and restricting the availability of junk foods within the school premises showed some effectiveness in affecting dietary behaviors. These programs could help young adolescents to acquire knowledge and develop skills for making healthier food choices and create an enabling environment that supports positive behaviors.

This makes policy interventions very instrumental in creating a healthier food environment. From this point of view, the comprehensive public health strategy will include mainly governmental measures reducing junk food marketing to children, increasing access to healthy food choices, and promoting physical activity. Restrictions on sales of so-called junk foods at schools, implementation of taxes on sugar-sweetened beverages, and subsidies for fruits and vegetables would have the effect of shifting consumption patterns toward healthier dietary choices.

Community-level efforts to address unhealthy eating behaviors at the root include initiatives targeted at families and local organizations. The involvement of families in nutrition education programs, support for local community food initiatives, and promotion of a healthy food environment provide supports to individuals and collective dietary habit change efforts.

The purpose of this comprehensive review was to take of the literature available on issues concerning to junk food consumption by secondary-level students in South Asian countries as well as other few countries. This systematic review has attempted an assimilation of the varied findings from several studies for enhanced understanding of the interplaying factors that influence junk food consumption. Possible intervention strategies, with a highlighting of the successful approaches, will add to the formulation of well-targeted and effective solutions for this acute public health problem. On the basis of the research topic, some research questions are formulated for the study, as presented below.

- a. What is the status of junk foods related knowledge and practices among adolescents in mainly South Asian countries as well as other few countries?
- b. What are the motivating factors and health effects of consuming junk foods?
- c. What are the solutions to prevent the consumption of junk foods among adolescents in South Asian countries?

Methodology

A comprehensive review of ten relevant research articles was selected through the Keyword ‘junk foods’ on an internet search to understand the knowledge and practice regarding junk food consumption at the secondary level in mainly South Asian countries and other some countries. The relevant articles have been studied to prepare this paper. The articles debate different aspects of the subject and show valuable insights regarding awareness levels, consumption patterns, socio-economic influences, and health impacts. The selected articles which are used to prepare this paper are mentioned in appendix.

On the basis of research questions, through the articles, to identify some key findings related to junk food consumption, more specifically with respect to knowledge and awareness of its harmful effects, dominant consumption patterns, socio-cultural factors and health implications. This formed an evaluation of how well students understand the risks associated with junk food, some common trends in consuming junk food, and how cultural and socio-economic factors influence dietary behavior.

The data were then classified under thematic areas and compared across the different studies to come up with common themes and differences. The presented paper, through comparative analysis, aimed to attain a comprehensive view regarding factors affecting junk food consumption in students at the secondary level in South Asian with additional research carried out in other region.

From these analyses, synthesized the findings to provide an overview of what is currently known and practiced on junk food consumption. Further, the results of the review contributed to the development of recommendations aimed at raising awareness and encouraging adolescents to follow healthier dietary intake.

Results

Knowledge and awareness of junk foods

A critical observation drawn from the studies by Subedi et al. (2019) and Phougat (2018) is the significant gap in adolescents’ understanding of junk food. Despite a general awareness that junk food is unhealthy, there is a notable deficiency in the depth of knowledge regarding its long-term health consequences. Subedi et al. (2019) observed that while secondary school students recognized junk food as harmful, their grasp of its chronic effects on health was superficial. This incomplete understanding often results in a lack of motivation to alter unhealthy eating habits. Similarly, Phougat (2018) highlighted that school children in India, though aware of the harmful nature of junk food, had an inadequate comprehension of the specific health risks associated with its consumption.

The studies suggest that the educational strategies implemented in schools and communities often fail to bridge this knowledge gap. Most adolescents know that junk food is unhealthy but are not fully aware of how regular consumption can lead to severe health issues such as obesity, diabetes, and cardiovascular diseases. This superficial awareness might contribute to a false sense of security, where occasional satisfaction is perceived as harmless. The findings indicate a need for a more comprehensive approach to nutritional education, one that not only informs about the general risks of junk food but also provides a detailed understanding of its long-term impacts on health. Interactive and engaging educational methods, including practical demonstrations and visual aids that illustrate the physiological effects of junk food, could be more effective in closing this knowledge gap.

Consumption patterns

The studies by Thapa et al. (2021) and Mohd Nizam et al. (2019) underscore the multifaceted nature of junk food consumption among adolescents. Thapa et al. (2021) found that socioeconomic status, peer influence, and the availability of junk food significantly affect adolescents’ eating patterns in Pokhara Valley, Nepal. Adolescents from lower socioeconomic backgrounds often rely on junk food due to its affordability and accessibility, while those from higher socioeconomic groups may consume junk food due to its availability and peer influences. Similarly, Mohd Nizam et al. (2019) observed that fast food consumption among Malaysian adolescents is driven by the low cost and high availability of these foods, reflecting a broader trend in South Asia.

These studies indicate that economic factors play a crucial role in shaping dietary choices. For lower-income adolescents, junk food represents a more affordable and accessible option compared to healthier foods,

which may be priced higher. Peer influence also contributes to the constancy of junk food consumption, as adolescents are often influenced by their peers' eating habits. The high intake of junk food among adolescents from different regions highlights the need for interventions that address both individual behavior and broader socioeconomic factors.

Socio-cultural influences

Socio-cultural factors play a significant role in shaping adolescents' food preferences and consumption patterns. Khan et al. (2020) and Stone et al. (2020) highlight the impact of urbanization and cultural changes on junk food consumption. Khan et al. (2020) report that urbanization in Bangladesh has led to a shift from traditional diets to Westernized diets, resulting in increased consumption of junk food among urban adolescents. Stone et al. (2020) similarly found that cultural and social changes, including the influence of Western food habits, contribute to higher intake of processed foods among minority ethnic groups.

These studies suggest that socio-cultural changes, such as increased urbanization and exposure to Western food culture, drive the rise in junk food consumption. As traditional diets are replaced by more processed and convenience foods, adolescents are increasingly exposed to and influenced by junk food. This trend underscores the need for public health strategies that address the cultural and social factors influencing dietary choices.

Health implications

The health implications of junk food consumption among adolescents are well-documented and severe. Martin et al. (2021) link high junk food intake with negative impacts on academic performance and behavior. Adolescents who consume large amounts of junk food are more likely to experience poor concentration, lower academic achievement, and increased absenteeism from school. Kapoor et al. (2020) provide additional evidence that junk food consumption is associated with a range of health issues, including obesity, cardiovascular diseases, and diabetes.

These findings underscore the urgent need for interventions to address the health risks associated with junk food consumption. The adverse effects on both academic performance and physical health highlight the importance of promoting healthier eating habits and managing diet-related health conditions.

Access and affordability

Access and affordability are key factors influencing junk food consumption among adolescents. Nyangena et al. (2019) highlight that street-vended foods, which are often unhealthy, are more affordable and accessible compared to healthier options. This trend is particularly pronounced in low-income communities, where the price and availability of nutritious foods can be significant barriers to adopting healthier eating habits.

The findings suggest that improving access to nutritious foods and reducing the availability of low-cost, less healthy options are critical for addressing junk food consumption. Supporting local food markets and promoting healthy food selling options can help improve access to nutritious foods in economically disadvantaged areas.

Educational interventions

Educational interventions play a key role in improving dietary practices among adolescents. Phougat (2018) and Martin et al. (2021) demonstrate that school-based nutrition education programs can effectively increase awareness and promote healthier eating habits. Phougat (2018) highlights the importance of comprehensive nutrition education programs that include practical activities, such as cooking classes and interactive workshops, to help students understand the benefits of healthy eating. Martin et al. (2021) further show that nutrition education is associated with improved dietary practices and reduced consumption of unhealthy foods.

The effectiveness of educational interventions underscores the need for schools to incorporate comprehensive nutrition education into their curriculum. Programs that engage students through interactive and practical activities can enhance their understanding of healthy eating and support the development of lifelong healthy habits.

Policy and regulation

Policy and regulatory measures play important role in shaping dietary practices and addressing junk food consumption among adolescents. The studies by Kapoor et al. (2020) and Thapa et al. (2021) highlight the impact of regulatory policies on reducing junk food consumption. Kapoor et al. (2020) discuss the effectiveness of policies that restrict the marketing of unhealthy foods to children and regulate the availability of junk food

in schools. Thapa et al. (2021) emphasize the need for comprehensive policy measures that address both the supply and demand of junk food, including implementing taxes on sugary drinks and providing subsidies for healthy foods.

These findings suggest that a combination of policy measures, including restrictions on marketing, availability regulations, and economic incentives, can be effective in reducing junk food consumption and promoting healthier dietary practices.

Discussion

Knowledge and awareness of junk foods

The studies reveal a contradiction in dietary education for adolescents. Although there is some level of awareness about the unhealthiness of junk food, this awareness does not translate into a deeper understanding of the long-term health consequences. Subedi et al. (2019) and Phougat (2018) highlight that while students acknowledge junk food as harmful, they lack comprehensive knowledge about the mechanisms through which junk food affects health. This gap suggests that current educational strategies may be insufficiently addressing the complexity of junk food's impact on health.

The superficial understanding of junk food's effects may lead adolescents to underestimate the risks associated with its consumption. This incomplete knowledge can prevent them from making informed dietary choices and might lead to continued unhealthy eating habits. To address this issue, educational programs should focus on delivering more detailed and reciprocal content about the adverse effects of junk food. Incorporating practical activities, such as cooking classes and demonstrations of the nutritional content of various foods, can help students grasp the consequences of their dietary choices more effectively. Additionally, involving parents and caregivers in educational initiatives could reinforce healthy eating habits at home.

Consumption patterns

The consumption patterns observed in the studies reveal a complex interplay of socioeconomic, peer, and environmental factors influencing adolescents' dietary choices. Thapa et al. (2021) and Mohd Nizam et al. (2019) highlight that while socioeconomic status influences junk food consumption, the impact varies depending on regional and cultural contexts. In lower-income settings, the affordability and accessibility of junk food make it a prevalent choice, while in higher-income settings, peer influence and availability drive consumption patterns.

Addressing these consumption patterns requires a multifaceted approach. Interventions should focus on reducing the affordability of junk food and improving access to healthy food options, particularly in low-income areas. Additionally, strategies that grasp peer influence to promote healthier eating habits could be effective in changing consumption patterns. Schools and communities should collaborate to create supportive environments that encourage healthier food choices and provide resources for making nutritious decisions.

Socio-cultural influences

The socio-cultural influences on junk food consumption reveal the impact of broader social changes on adolescents' eating habits. The shift from traditional diets to Westernized diets in urban areas, as observed by Khan et al. (2020), reflects a broader trend of increasing processed food consumption driven by cultural changes. Stone et al. (2020) further highlight the role of cultural influences in shaping food preferences among minority ethnic groups.

Public health strategies should consider these socio-cultural factors when designing interventions. Promoting the benefits of traditional, nutrient-dense diets and challenging the notion that processed foods are a necessary part of modern life can help counteract the rise in junk food consumption. Engaging community leaders and cultural groups in promoting healthy eating practices can also support efforts to shift dietary norms and improve public health outcomes.

Health implications

The studies on health implications illustrate the significant impact of junk food consumption on adolescents' overall well-being. The association between high junk food intake and poor academic performance, as reported

by Martin et al. (2021), underscores the broader consequences of unhealthy eating habits. Kapoor et al. (2020) further demonstrate the link between junk food consumption and serious health conditions, reinforcing the need for comprehensive strategies to address these issues.

Effective interventions should focus on promoting balanced diets and increasing awareness of the health risks associated with junk food. Schools and communities need to implement programs that support healthier eating habits and provide resources for managing and preventing diet-related health problems. Combining educational efforts with policy measures and community support can help reduce the long-term health risks associated with junk food consumption.

Access and affordability

The studies on access and affordability reveal the influence of economic factors on dietary choices. The low cost and high availability of junk food, as observed by Nyangena et al. (2019), make it an attractive option for adolescents, particularly in low-income communities. The disparity between the affordability of junk food and healthier food options highlights the need for policy interventions to address these economic barriers. To tackle the issue, efforts should focus on making nutritious foods more accessible and affordable. Supporting local food markets, providing subsidies for healthy foods, and implementing policies to reduce the availability of unhealthy options can help improve dietary habits in low-income areas. Addressing these economic factors is essential for promoting healthier eating practices and improving public health outcomes.

Educational interventions

The studies on educational interventions highlight the importance of incorporating effective nutrition education into school curriculum. Phougat (2018) and Martin et al. (2021) provide evidence that well-designed educational programs can significantly impact students' dietary choices and promote healthier eating habits. By using interactive and practical approaches, these programs can make nutritional education more engaging and effective.

Schools should prioritize implementing comprehensive nutrition education programs that address the complexities of healthy eating and provide students with the skills and knowledge needed to make informed dietary choices. Collaborating with nutrition experts, involving parents, and integrating practical activities into the curriculum can enhance the effectiveness of these programs and support the development of healthier eating habits among adolescents.

Policy and regulation

The studies on policy and regulation reveal the potential of comprehensive measures to address junk food consumption and improve dietary practices. Kapoor et al. (2020) and Thapa et al. (2021) provide evidence that regulatory policies can significantly impact the availability and marketing of unhealthy foods. Implementing policies that restrict the marketing of junk food to children, regulate its availability in schools, and provide economic incentives for healthier food choices can contribute to improved dietary habits.

Advocating for and implementing these policy measures at local, national, and global levels can help create environments that support healthier eating practices. Collaboration between policymakers, public health organizations, and communities is essential for designing and enforcing effective regulations that address the multifaceted issue of junk food consumption.

Conclusion

In summary, elaborated research into the consumption of junk food by teenagers has brought out very important clues to the complexity of this public health problem. This includes insensitivity among adolescents to the ill effects of junk food, which amounts to only superficial changes in eating behavior. Major motivating forces behind consumption include socio-economic factors, peer pressure, and affordability of the foods in question. This trend toward dietary preferences is further strengthened by increased urbanization and cultural changes toward the consumption of Western diets, which affect individual eating habits and lead to the increased consumption of junk food.

The health effects of junk food intake run deep: physical health and academic performance are affected and chronic conditions of obesity, diabetes, and others result over time. The barriers inculcated to good eating

practice mainly involve access to unhealthy, cheap foods and lack of nutritional education. Therefore, effective interventions should involve comprehensive school-based nutrition education, involving supportive policy measures and community participation in dealing with these issues broadly.

This can thus be addressed by focusing on knowledge gaps, socio-economic determinants, and cultural influence, and by supporting healthier food environments and policies. Early beginnings with proper nourishment have a lot to contribute to promoting healthy dietary behaviors among the young for better health outcomes during adolescence itself.

For Nepal, this finding serves as an appeal to the government for implementing and enforcing policies on the availability and marketing of junk food. Addressing knowledge gaps, socio-economic determinants, and cultural influences and promoting a healthier food environment would allow the government to propagate good dietary practices that improve health outcomes among adolescents.

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Appendix

List of reviewed articles

- “Awareness and Practice of Junk Foods among Adolescents in Secondary Schools” (Subedi et al., 2019)
- “Determinants of Junk Food Consumption Among Adolescents in Pokhara Valley, Nepal” (Thapa et al., 2021)
- “Promoting Healthy Foods among Urban School Children in Bangladesh”
(Khan, et al., 2020)
- “Knowledge and Practice Regarding the Harmful Effects of Junk Foods among School Children in India”
(Phougat, 2018)
- “Nutrition Knowledge, Attitude, and Practices among Urban Primary School Children in Nairobi City.”
(Onyango, et al., 2021)
- “The Impact of Food on Academic Behavior, Attendance, and Performance”
(Martin et al., 2021)
- “A Study to Assess the Knowledge Regarding Health Hazards of Junk Foods among Adolescents in India”
(Kapoor, et al., 2020)
- “Is Fast-Food Consumption a Problem among Adolescents?” (Mohd Nizam, et al., 2019)
- “Perceptions of Dietary Intake Amongst Black, Asian, and Other Minority Ethnic Groups” (Stone, et al., 2020)
- “Street Vended Foods: Potential for Improving Food and Nutrition Security or a Risk?” (Nyangena et al., 2019)