

UNIVERSITI TEKNOLOGI MARA

**THE ASSOCIATION BETWEEN FAST FOOD CONSUMPTION
AND BODY MASS INDEX AMONG STUDENTS AGED 14 TO 16
YEARS OLD AT SMK SHAH ALAM**

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ABSTRACT

Adolescence is a critical period for developing healthy dietary habits that can significantly impact long-term health. However, the growing consumption of fast food, known for its high calorie content and low nutritional value, has contributed to rising obesity rates among adolescents. The objective of this study was to determine the association between fast-food consumption and Body Mass Index (BMI) among adolescents aged 14 to 16 years old at SMK Shah Alam. The study utilised a quantitative cross-sectional method. Respondents completed a bilingual self-administered questionnaire on sociodemographic background and a fast-food frequency questionnaire. The researcher measured the weight and height of the respondents. The results showed that a total of 300 respondents aged 15.29 ± 0.732 years (45.7% males, 54.3% females) participated in this study. 96.3% of students consumed fast food at least once a month, with 31.7% eating it 2-3 times per week. Their average BMI was 22.64 ± 4.3843 . Furthermore, BMI classifications showed that 43.3% were overweight or obese, 13.0% were underweight, and 43.7% had a normal weight. A Pearson chi-square test revealed a significant positive relationship between fast-food consumption frequency and BMI, $\chi^2 (1, N = 300) = 30.845, p < .001$. These findings underscore the importance of public health interventions, such as school-based nutrition education programs, the provision of healthier food alternatives in school canteens, and increased parental involvement, to promote better eating habits and address the growing obesity issue.

Keywords: Fast food consumption, body mass index, adolescents, Malaysia

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CHAPTER 1

INTRODUCTION

1.1 Research Background

Adolescence is a critical developmental stage that involves not only the teenagers themselves but also their families and the healthcare professionals. The changes that come with this journey can be thrilling, difficult, and even frightening. This phase starts with puberty and continues into the early to mid-twenties. It is marked by notable physical, cognitive, social, and emotional changes (Backes & Bonnie, 2021). During this time, individuals form lifelong habits and beliefs shaped by their families, peers, and society. Even though it is noticed that the concerns about the potential negative consequences are widespread, a good foundation of adult support can aid resilience and foster positive behaviours (Viner et al., 2017).

Furthermore, as adolescents gain more freedom in making decisions and experience psychosocial development, their behaviours begin to influence their long-term health outcomes. These behaviours involve self-management of disease, physical activity, dietary habits, and harmful habits, including cigarettes, alcohol, and using illegal drugs (Arafa et al., 2024). These behaviours are particularly crucial, given that many of them engage in malnutrition in the form of the triple burden, which includes undernutrition, low intakes of micronutrients, as well as over nutrition, as many adolescents receive less than the recommended number of nutrients and an alarmingly growing rate of energy overconsumption and overweight or obesity (Sinai et al., 2021).

After that, childhood obesity has become a global concern and the prevalence of childhood obesity is rising, with rates in the United States rising from 16.9% to 19.7% between 2011 and 2020, Brazil rising from 6.5% in 1990 to 12.0% in the 2010s, Korea rising from 8.7% in 2007 to 15.0% in 2017, China rising from 15.5% in 2010 to 29.4% in 2022, and South Asia showing a notable upward trend (Hu & Staiano, 2022b). Additionally, according to Malaysia's Ministry of Health (2023), the number of overweight and obese children and adolescents has been rising over time. The