

UNIVERSITI TEKNOLOGI MARA

**EXPLORING THE AWARENESS AND CONSUMPTION OF OMEGA-3
AMONG UNIVERSITY STUDENTS IN MALAYSIA**

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ABSTRACT

Background: Omega-3 functional foods are known for their health benefits, particularly in supporting cardiovascular and cognitive functions. However, awareness and consumption of such foods among university students in Malaysia remain unclear. **Aim:** This study aimed to assess the level of knowledge, attitude, and practice (KAP) towards omega-3 functional foods among Malaysian university students and explore the association between sociodemographic factors and KAP levels. **Methods:** A cross-sectional online survey was conducted among 423 Malaysian university students using a validated Knowledge, Attitude, and Practice questionnaire. Data were analysed using descriptive statistics and chi-square tests. **Results:** The majority of students exhibited low knowledge (61.7%) and moderate attitude (69.5%) towards omega-3 functional foods. A significant association was found between gender and knowledge level ($p < 0.005$) and between attitude level and consumption factors ($p < 0.001$). **Conclusion:** Despite moderate attitudes, students' knowledge of omega-3 functional foods remains low, indicating the need for targeted nutrition education programs to promote better dietary practices.

Keywords: Functional Foods, Dietary Behaviours, Knowledge, Attitude

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CHAPTER 1: INTRODUCTION

1.1 Research Background

In contemporary health and nutrition research, there is increasing recognition of the importance of diet not only as a source of nourishment but also as a significant factor in health and disease prevention. The growing incidence of chronic, non-communicable diseases, including cardiovascular conditions, diabetes, and certain types of cancer, has increased interest in foods that offer health benefits beyond essential nutrition. Functional foods, enriched with beneficial elements such as omega-3 fatty acids, probiotics, vitamins, and antioxidants, are increasingly recognised for their potential to prevent disease and promote overall well-being. These foods provide targeted health benefits and align with preventive healthcare strategies that are crucial in addressing lifestyle-related health concerns (Granato et al., 2010).

Functional foods differ from standard foods because they contain bioactive compounds that support various physiological functions, such as boosting the immune response, improving cognitive health, and aiding digestion. This category appeals to consumers who want to quickly and effectively integrate health-focused options into their diets. As more scientific research highlights the benefits of functional foods, consumer demand for products that reflect health-conscious values is on the rise. This shift in public perspective highlights a growing desire for foods that promote wellness and help prevent disease (Pappalardo & Lusk, 2016).

In Malaysia, rapid socioeconomic development and urbanisation have altered lifestyle habits, resulting in higher rates of non-communicable diseases and sparking interest in health-promoting foods. This trend is evident in the expanding organic, nutraceutical, and functional foods market, driven by greater public awareness of health and wellness benefits. Research indicates that Malaysians are increasingly seeking products that support preventive health initiatives as they become more health-conscious