



SUPPLEMENT

Applying precision nutrition to university students: Insights into their diet quality

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Abstract

Background: Previous studies indicated a rising number of university students affected by malnutrition, primarily due to poor diet quality. Considering the growing emphasis on precision nutrition as a strategy to address diverse health needs

Objective: This study was conducted to assess the eating patterns, evaluate the quality of diets, and determine the association between diet quality and socioeconomic characteristics among students at Universiti Kebangsaan Malaysia (UKM).

Methods: This cross-sectional study included 261 UKM students as participants. Eating patterns were assessed using the Meal Pattern Questionnaire (MPQ), while diet quality was evaluated through the Food Frequency Questionnaire (FFQ) and the Malaysian Healthy Eating Index (MHEI). Socioeconomic data and body mass index (BMI) were also recorded.

Results: Results show that students predominantly consumed meals during lunchtime (46.0%), with the lowest intake during morning snack time (1.5%). Alarming, 84.3% of respondents exhibited poor diet quality, and 15.7% required dietary improvements. Poor diet quality was observed in 53.1% of female students and 46.8% of male students. Notably, none of the students achieved a high-quality diet score, highlighting a significant gap in nutritional well-being.

Conclusion: Despite these findings, no significant association was observed between diet quality and the socioeconomic variables studied. These insights highlight the need for tailored, team-based interventions involving educators, and public health professionals to address nutritional disparities at the community level.

Keywords: diet quality, university students, eating patterns

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