ABSTRACT

Ultra-Processed Food Consumption and Its Relationship with Adolescent Nutritional Status: A Cross-Sectional Study

Nurul Afiah, Salwa Astrid Aprilia, Ika Wirya Wirawanti

Correspondence E-mail : nurulafiah@fkm.unmul.ac.id

Background : Ultra-processed food (UPF) consumption among adolescents is increasing along with fast-paced, convenience-oriented lifestyles. UPFs are industrially formulated products containing additives such as preservatives, artificial sweeteners, colorings, and flavor enhancers, and are generally high in energy but low in micronutrients. This consumption pattern may contribute to both overnutrition and undernutrition, which is a concern because adolescence is a critical growth period that requires balanced nutrition.

Objective : This study aimed to analyze the relationship between UPF consumption and the nutritional status of students at SMK Negeri 2 Balikpapan.

Research Methods/ Implementation Methods : This observational study used a cross-sectional design. The population was students aged 15–18 years, and 93 respondents were selected using stratified random sampling and purposive sampling. UPF consumption was assessed using the Semi-Quantitative Food Frequency Questionnaire (SQ-FFQ) and interviews, while nutritional status was determined by anthropometric measurement using BMI-for-age (BMI/A). Data were analyzed using Fisher's exact test.

Results : Most students (69.9%) had a high level of UPF consumption. Nutritional status was normal in 44.1% of respondents, overnutrition in 32.3%, and undernutrition in 23.7%. There was a significant relationship between UPF consumption and nutritional status ($p = 0.027$), indicating that higher UPF consumption was associated with a greater likelihood of nutritional imbalance, particularly overnutrition.

Conclusion/Lesson Learned : UPF consumption is significantly associated with adolescent nutritional status. Students should be more selective in their food choices and limit UPF intake. Continuous nutrition education involving students, parents, and schools is needed to promote healthy, balanced eating habits and support optimal adolescent growth and health.

Keyword : Ultra-processed Food; Nutritional Status; Adolescents; BMI-for-Age