

UNIVERSITI TEKNOLOGI MARA

**THE EFFECTIVENESS OF ‘EAT RIGHT, FUTURE BRIGHT: NUTRITION
EDUCATION PROGRAM’ (ERFB-NEP) MODULE FOR ABORIGINAL
PRIMARY SCHOOL CHILDREN IN MALAYSIA**

SITI NURSURAYA BINTI ABDUL MAJID

Bachelor (Hons.) of Dietetics

Faculty of Health Sciences

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ABSTRACT

This study aimed to assess the effectiveness of the Eat Right, Future Bright: Nutrition Education Program (ERFB-NEP) improved nutrition knowledge, attitudes, dietary habits, physical activity, eating behaviors, and body measurements among Orang Asli primary school children at SK Bukit Lanjan. A quasi-experimental pre- and post-test design included 49 students aged 11 to 12 years. To collect data, we used a Nutrition Knowledge, Attitude, and Practice (KAP) questionnaire, the Children's Eating Behavior Questionnaire (CEBQ), the Children's Physical Activity Questionnaire (CPAQ), and anthropometric measurements (weight, height, BMI-for-age, and height-for-age) before the intervention. The five-week ERFB-NEP module featured interactive, culturally tailored lessons that focused on balanced nutrition, food choices, hygiene, and physical activity. CEBQ results indicated that the children enjoyed food a lot and responded moderately to food, with no significant gender differences. CPAQ data showed that most children achieved moderate physical activity levels, with slightly more girls (86.4%) than boys (71.4%) in this range. Results showed a statistically significant increase in nutrition knowledge scores ($p < 0.001$). Attitude and practice scores also improved, but did not reach statistical significance. Overall, the ERFB-NEP module was effective in improving nutrition knowledge and supporting better growth and health behaviors among Orang Asli schoolchildren. The program was well-received, feasible for school delivery, and shows potential for broader implementation. Ongoing efforts to include culturally sensitive nutrition education in school curricula are suggested to maintain long-term health results in indigenous communities.

Keywords: Nutrition Education, Orang Asli Children, Knowledge, Attitude, Practice (KAP), ERFB-NEP Module

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CHAPTER 1: INTRODUCTION

1.1 Research Background

Nutrition knowledge is the foundation for developing healthy behaviors in school-age children and, thus, further development (Saavedra & Prentice, 2022). Various research data testify that nutrition knowledge has a positive effect on making healthy food choices by children for further healthy development and reduction of risks for nutrition-related diseases later in life. However, due to poor nutritional education, the knowledge about balanced diets, different groups of food, and portion control significantly lacks understanding among indigenous populations in Malaysia, particularly the Orang Asli (Nordin et al., 2023). This lack of understanding causes poor dietary behaviors that might affect both physical and cognitive development during critical growth periods (Wright et al., 2017).

The World Health Organization highlights that effective nutrition education during early childhood lays the groundwork for lifelong health. Deficiencies in nutrition knowledge acquired during these years correlate with diminished learning capacity, behavioral issues, and heightened vulnerability to chronic conditions, including diabetes and obesity (Roberts et al., 2022). For Indigenous children, including those within Malaysia's Orang Asli communities, nutrition education serves a dual purpose: it promotes physical well-being and reinforces cognitive development, academic success, and an enhanced quality of life.

School-based nutrition education programs are widely acknowledged as effective instruments for equipping children with core dietary knowledge and skills (Siew et al., 2020). In Malaysia, initiatives such as the Malaysian Childhood Obesity Treatment Trial (MASCOT), the Healthy Lifestyle in Children (HELIC), the Healthy Kids Program (HKP), and the Body Image Education Package have contributed to this goal (Ishak et al., 2016). Nevertheless, these initiatives tend to rely on a one-size-fits-all model, frequently overlooking the distinct dietary customs, food availability, and cultural contexts of indigenous communities. To address this gap, we have designed and piloted a dedicated resource: "Eat Right, Future Bright: Nutrition Education