

ABSTRAK

Kristina Nauli Situmorang. Hubungan Asupan Zat Gizi Makro dan Durasi Tidur dengan Status Gizi Remaja di SMAS Methodist Tanjung Morawa. Skripsi. Program Studi Gizi. Fakultas Teknik. Universitas Negeri Medan. 2025.

Status gizi merupakan keadaan yang disebabkan keseimbangan antara asupan zat gizi dengan kebutuhan zat gizi. Tujuan Penelitian ini: 1). Mengetahui karakteristik responden yaitu usia, jenis kelamin, pendidikan ayah dan ibu, pekerjaan ayah dan ibu, pendapatan keluarga, uang saku, dan besar keluarga, 2). Mengetahui asupan zat gizi makro remaja di SMAS Methodist Tanjung Morawa, 3). Mengetahui durasi tidur remaja di SMAS Methodist Tanjung Morawa, 4). Mengetahui status gizi remaja di SMAS Methodist Tanjung Morawa, 5). Mengetahui hubungan antara asupan zat gizi makro dengan status gizi remaja di SMAS Methodist Tanjung Morawa, 6). Mengetahui hubungan antara durasi tidur dengan status gizi remaja di SMAS Methodist Tanjung Morawa, 7). Mengetahui hubungan antara asupan zat gizi makro dan durasi tidur dengan status gizi remaja di SMAS Methodist Tanjung Morawa.

Penelitian ini dilakukan di SMAS Methodist Tanjung Morawa. Metode penelitian ini adalah kuantitatif dengan pendekatan *cross sectional*. Teknik pengambilan sampel dengan menggunakan cluster random sampling, sampel sebanyak 59 orang. Teknik pengumpulan data asupan zat gizi makro dengan menggunakan formulir *food recall* 2 x 24 jam, dan untuk durasi tidur menggunakan kuesioner durasi tidur, sedangkan status gizi dengan melakukan pengukuran berat badan dan tinggi badan. Teknik analisis data menggunakan uji *rank spearman* dan *regresi linear* berganda.

Hasil penelitian menunjukkan asupan protein remaja masuk dalam asupan sesuai atau normal sebesar 45,8%, asupan karbohidrat masuk dalam asupan baik sebesar 47,5%, asupan lemak masuk dalam asupan lebih sebesar 89,8%, durasi tidur remaja masuk dalam durasi tidur cukup sebesar 69,5%. Status gizi remaja masuk dalam status gizi gizi kurang sebanyak 6,8%, gizi baik 62,7%, gizi lebih sebanyak 11,9%, dan obesitas sebanyak 18,6%. Hasil analisis uji *rank spearman* menunjukkan hubungan yang positif dan signifikan antara asupan zat gizi makro dengan status gizi pada remaja dengan $p\text{-value} = 0.000$, dan terdapat hubungan negatif dan signifikan antara durasi tidur dengan status gizi pada remaja dengan $p\text{-value} = 0.000$. Hasil analisis uji regresi linear berganda terdapat hubungan yang negatif dan signifikan antara asupan protein dan durasi tidur dengan status gizi remaja dengan persamaan regresi $Y = -3.868 + 0.025 X_1 + 0.007 X_2 + 0.017 X_3 - 0.269 X_4$. Nilai adjusted R Square sebesar 0.691 menunjukkan asupan zat gizi makro dan durasi tidur mampu menjelaskan status gizi sebesar 69,1%.

Kata kunci: asupan zat gizi makro, durasi tidur, status gizi, remaja

ABSTRACT

Kristina Nauli Situmorang: The Relationship between Macronutrient Intake and Sleep Duration with Nutritional Status of Adolescents at SMAS Methodist Tanjung Morawa. Thesis. Nutrition Study Program. Faculty of Engineering. State University of Medan. 2025.

Nutritional status is a condition caused by a balance between nutrient intake and nutrient needs. The objectives of this study: 1). To determine the characteristics of respondents, namely age, gender, father's and mother's education, father's and mother's occupation, family income, pocket money, and family size, 2). To determine the intake of macronutrients in adolescents at SMAS Methodist Tanjung Morawa, 3). To determine the duration of sleep in adolescents at SMAS Methodist Tanjung Morawa, 4). To determine the nutritional status of adolescents at SMAS Methodist Tanjung Morawa, 5). To determine the relationship between macronutrient intake and nutritional status in adolescents at SMAS Methodist Tanjung Morawa, 6). To determine the relationship between sleep duration and nutritional status in adolescents at SMAS Methodist Tanjung Morawa, 7). To determine the relationship between macronutrient intake and sleep duration with nutritional status in adolescents at SMAS Methodist Tanjung Morawa.

This research was conducted at SMAS Methodist Tanjung Morawa. This research method is quantitative with a cross-sectional approach. The sampling technique used cluster random sampling, a sample of 59 people. The data collection technique for macronutrient intake used the *food recall* 2 x 24 hour questionnaire, and for sleep duration using a sleep duration questionnaire, while nutritional status was measured by measuring body weight and height. The data analysis technique used the Spearman rank test and multiple linear regression.

The results of the study showed that adolescent protein intake was included in the appropriate or normal intake of 45.8%, carbohydrate intake was included in good intake of 47.5%, fat intake was included in excess intake of 89.8%, adolescent sleep duration was included in sufficient sleep duration of 69.5%. The nutritional status of adolescents was included in the nutritional status of malnutrition of 6.8%, good nutrition of 62.7%, overnutrition of 11.9%, and obesity of 18.6%. The results of the Spearman rank test analysis showed a positive and significant relationship between macronutrient intake and nutritional status in adolescents with $p\text{-value} = 0.000$, and there was a negative and significant relationship between sleep duration and nutritional status in adolescents with $p\text{-value} = 0.000$. The results of the multiple linear regression test analysis showed a negative and significant relationship between protein intake and sleep duration with the nutritional status of adolescents with the regression equation $Y = -3.868 + 0.025 X_1 + 0.007 X_2 + 0.017 X_3 - 0.269 X_4$. The adjusted R Square value of 0.691 shows that macronutrient intake and sleep duration can explain nutritional status by 69.1%.

Keywords: *macronutrient intake, sleep duration, nutritional status, adolescents*