

## ABSTRAK

### **Hubungan Tingkat Stres, Kualitas Tidur, Perilaku Makan, Asupan Zat Gizi Makro Dan Aktivitas Fisik Terhadap Indeks Massa Tubuh Pada Mahasiswa/i Prodi Gizi Di Universitas Esa Unggul Harapan Indah Bekasi**

Yolanda Krisna Dewi <sup>(1)</sup>, Idrus Ju'sat, M.Sc., Ph.D <sup>(2)</sup>, Yulia Wahyuni, S.Kep, M.Gizi <sup>(3)</sup>, Rachmanida Nuzrina, S.Gz, M.Gizi, RD <sup>(4)</sup>

**Latar Belakang :** Indeks massa tubuh (IMT) merupakan salah satu indikator status gizi dengan pengukuran antropometri khususnya untuk kelompok usia remaja berumur 10-18 tahun atau dewasa berumur >18 tahun. Alat ukur yang digunakan ialah timbangan dan microtoise. Pengukuran dilakukan dengan cara membagi berat badan dalam kilogram (kg) dengan tinggi badan dalam meter kuadrat (m<sup>2</sup>). Hasil pengukuran IMT dengan kategori status gizi normal untuk orang Indonesia berada dalam rentang 18,5-25,0 Kg/m<sup>2</sup>. Apabila IMT <17,0 maka kategori status gizi kurang/kurus (underweight), IMT 25,0 – 27,0 maka kategori status gizi gemuk (overweight), sedangkan IMT >27,0 berarti kategori status gizi sangat gemuk (overweight).

**Tujuan :** Mengetahui Hubungan Tingkat stres, Kualitas tidur, Perilaku makan, Asupan zat gizi makro dan Aktivitas fisik Terhadap Indeks Massa Tubuh Pada Mahasiswa/i prodi gizi Di Universitas Esa Unggul Harapan Indah Bekasi

**Metode Penelitian :** Desain penelitian ini adalah *cross sectional* dengan sampel sebanyak 45 responden. Data status gizi menggunakan Indeks Massa Tubuh, tingkat stres menggunakan kuesioner KPDS (kessler psychological distress scale 10 K), data kualitas tidur menggunakan kuesioner PSQI (pittsburgh sleep quality index), data perilaku makan (emotional eating, restraint eating, eksternal eating) menggunakan kuesioner DEBQ (*Dutch Eating Behaviour Questionnaire*), data asupan zat gizi makro menggunakan form *food recall* 2x24jam, data aktivitas fisik menggunakan PAL. Analisa data menggunakan uji Korelasi Pearson.

**Hasil Penelitian :** Ada hubungan antara tingkat stres ( $p=0.780$ ,  $r= -0,043$ ), kualitas tidur ( $p=0.281$ ,  $r=0.164$ ), perilaku makan emotional eating ( $p=0,250$ ,  $r= -0.175$ ), perilaku makan restraint eating ( $p=0,180$ ,  $r=0.204$ ), perilaku makan eksternal eating ( $p=0,013$ ,  $r= -0.369$ ) dan indeks massa tubuh. Pada variabel asupan, ada hubungan antara asupan energi ( $p=0.0001$ ,  $r=0.616$ ), asupan protein ( $p=0.263$ ,  $r= -0.170$ ), asupan lemak ( $p=0.035$ ,  $r= -0,0314$ ), asupan karbohidrat ( $p=0.050$ ,  $r= -0,294$ ), serta aktivitas fisik ( $p=0.187$ ,  $r=0.200$ ) dan indeks massa tubuh.

**Kesimpulan :** Ada hubungan antara perilaku makan eksternal eating, asupan zat gizi makro (energi, lemak dan Karbohidrat) dengan indeks massa tubuh. Tidak ada hubungan antara tingkat stres, kualitas tidur, perilaku makan (emotional dan restraint eating), asupan zat gizi makro (protein), dan aktivitas fisik terhadap indeks massa tubuh.

**Kata kunci :** tingkat stres, kualitas tidur, perilaku makan, asupan zat gizi makro, indeks massa tubuh, aktivitas fisik

## ABSTRACT

***Relationship Between Stress Levels, Sleep Quality, Eating Behavior, Macronutrient Intake and Physical Activity on Body Mass Index In Nutrition Study Students at Esa Unggul***

***Harapan Indah University, Bekasi***

Yolanda Krisna Dewi <sup>(1)</sup>, Idrus Ju'sat, M.Sc., Ph.D <sup>(2)</sup>, Yulia Wahyuni, S.Kep, M.Gizi <sup>(3)</sup>,  
Rachmanida Nuzrina, S.Gz, M.Gizi, RD <sup>(4)</sup>

**Background :** Body mass index (BMI) is an indicator of nutritional status with anthropometric measurements, especially for the adolescent age group aged 10-18 years or adults aged >18 years. The measuring tools used are scales and microtoise. Measurements were made by dividing weight in kilograms (kg) by height in meters squared (m<sup>2</sup>). The results of BMI measurements in the category of normal nutritional status for Indonesians are in the range of 18.5-25.0 Kg/m<sup>2</sup>. If BMI <17.0 then the category of nutritional status is underweight, BMI 25.0 – 27.0 is the category of overweight nutritional status, while BMI > 27.0 means the category of nutritional status is very fat (overweight).

**Objective:** To determine the relationship between stress levels, sleep quality, eating behavior, macronutrient intake and physical activity on body mass index in nutrition study students at Esa Unggul Harapan Indah University, Bekasi.

**Research Methods:** The design of this study was cross sectional with a sample of 45 respondents. Nutritional status data using Body Mass Index, stress level using the KPDS questionnaire (Kessler psychological distress scale 10 K), sleep quality data using the PSQI (Pittsburgh sleep quality index) questionnaire, eating behavior data (emotional eating, restraint eating, external eating) using a questionnaire. DEBQ (Dutch Eating Behavior Questionnaire), macronutrient intake data using a 2x24 hour food recall form, physical activity data using PAL. Data analysis using Pearson Correlation test.

**Result:** There is a relationship between stress level ( $p=0.780$ ,  $r= -0.043$ ), sleep quality ( $p=0.281$ ,  $r=0.164$ ), emotional eating behavior ( $p=0.250$ ,  $r= -0.175$ ), restraint eating behavior ( $p=0.180$ ,  $r=0.204$ ), external eating behavior ( $p=0.013$ ,  $r= -0.369$ ) and body mass index. In the intake variable, there was a relationship between energy intake ( $p = 0.0001$ ,  $r = 0.616$ ), protein intake ( $p = 0.263$ ,  $r = -0.170$ ), fat intake ( $p = 0.035$ ,  $r = -0.0314$ ), carbohydrate intake (  $p=0.050$ ,  $r= -0.294$ ), as well as physical activity ( $p=0.187$ ,  $r=0.200$ ) and body mass index.

**Conclusion :** There is a relationship between external eating behavior, intake of macronutrients (energy, fat and carbohydrates) with body mass index. There is no relationship between stress levels, sleep quality, eating behavior (emotional and restraint eating), macronutrient intake (protein), and physical activity on body mass index.

**Keywords:** stress level, sleep quality, eating behavior, macronutrient intake, body mass index, physical activity