

ABSTRAK

Kesya Yolanda Sihombing: Hubungan Asupan Energi Sarapan dan Kualitas Tidur dengan Konsentrasi Belajar Siswa di SMA Negeri 18 Medan, 2026

Asupan energi sarapan berperan dalam memulihkan cadangan energi setelah puasa semalaman, ketersediaan energi yang cukup dapat mempertahankan perhatian selama proses pembelajaran. Kualitas tidur berpengaruh terhadap kondisi fisik, jika tidur tidak berkualitas baik dapat menyebabkan rasa lelah dan kantuk yang berdampak pada menurunnya konsentrasi siswa. Tujuan penelitian ini adalah untuk mengetahui: (1) Karakteristik responden; (2) Asupan energi sarapan responden; (3) Kualitas tidur responden; (4) Konsentrasi belajar responden; (5) Hubungan asupan energi sarapan dengan konsentrasi belajar responden; (6) Hubungan kualitas tidur dengan konsentrasi belajar responden; (7) Hubungan antara asupan energi sarapan dan kualitas tidur dengan konsentrasi belajar responden. Penelitian ini dilakukan di SMA Negeri 18 Medan dan dilaksanakan pada Mei 2026. Populasi penelitian berjumlah 437 orang yang terdiri dari kelas X dan XI. Teknik pengambilan sampel yaitu *cluster sampling* dengan jumlah 72 sampel. Penelitian ini menggunakan desain *cross sectional*. Teknik pengumpulan data menggunakan kuesioner *Pittsburgh Sleep Quality Index* (PSQI), formulir *recall 2x24 jam* dan *Concentration Grid Exercise Questionnaire* (CGEQ). Teknik analisis data dilakukan dengan uji *chi square*, dan uji regresi logistik. Berdasarkan hasil penelitian, usia responden berada pada usia 16 tahun sebanyak 33 orang (45,8%). Jenis kelamin responden didominasi perempuan yaitu sebanyak 44 orang (61,1%) dan tingkatan kelas X dan XI sama banyak yaitu 36 orang (50%). Hasil analisis uji *chi-square* menunjukkan terdapat hubungan yang signifikan antara asupan energi sarapan dengan konsentrasi belajar dengan nilai *p-value* $<0,001$ ($p<0,05$) dan terdapat hubungan yang signifikan antara kualitas tidur dengan konsentrasi belajar dengan nilai *p-value* 0,003 ($p<0,05$) dengan nilai *prevalence ratio* (PR) sebesar 2,04 menunjukkan bahwa responden yang memiliki kualitas tidur buruk berisiko mengalami konsentrasi belajar kurang sebesar 2,04 kali lebih tinggi dibandingkan responden yang memiliki kualitas tidur baik. Berdasarkan hasil analisis regresi logistik asupan energi sarapan memiliki nilai *p-value* $<0,001$ dan kualitas tidur memiliki nilai *p-value* $<0,001$. Kesimpulannya terdapat hubungan yang signifikan antara asupan energi sarapan dan kualitas tidur dengan konsentrasi belajar siswa di SMA Negeri 18 Medan.

Kata kunci : Asupan energi sarapan, kualitas tidur, konsentrasi belajar

ABSTRACT

Kesya Yolanda Sihombing: *The Relationship Between Breakfast Energy Intake and Sleep Quality with Learning Concentration Among Students at SMA Negeri 18 Medan, 2026*

Breakfast energy intake plays a role in restoring energy reserves after an overnight fast. Adequate energy availability can help maintain attention during the learning process. Sleep quality affects physical condition; poor sleep quality can cause fatigue and drowsiness, which may lead to decreased students' concentration. The purpose of this study is to determine: (1) the characteristics of respondents; (2) respondents' breakfast energy intake; (3) respondents' sleep quality; (4) respondents' learning concentration; (5) the relationship between breakfast energy intake and learning concentration; (6) the relationship between sleep quality and learning concentration, and (7) the relationship between breakfast energy intake and sleep quality with learning concentration. The study was conducted at SMA Negeri 18 Medan in May 2026. The study population consisted of 437 students from grades X and XI. The sampling technique used was cluster sampling, resulting in a sample of 72 respondents. This study employed a cross-sectional design. Data were collected using the Pittsburgh Sleep Quality Index (PSQI), two 24-hour dietary recall forms and Concentration Grid Exercise Questionnaire (CGEQ). Data analysis was conducted using the Chi-square test and logistic regression analysis. Based on the study results, the majority of respondents were 16 years old, accounting for 33 students (45.8%). Female students predominated, with 44 respondents (61.1%), while Grade X and Grade XI students were equally represented, with 36 students (50%) in each grade. The Chi-square test analysis indicated a significant relationship between breakfast energy intake and learning concentration ($p\text{-value} < 0.001$; $p < 0.05$). There was also a significant relationship between sleep quality and learning concentration ($p\text{-value} = 0.003$; $p < 0.05$), with a prevalence ratio (PR) of 2.04, indicating that respondents with poor sleep quality had a 2.04 times higher risk of experiencing poor learning concentration compared to those with good sleep quality. Logistic regression analysis showed that breakfast energy intake had a $p\text{-value} < 0.001$ and sleep quality had a $p\text{-value} < 0.001$. In conclusion, there was a significant relationship between breakfast energy intake and sleep quality with students' learning concentration at SMA Negeri 18 Medan.

Keywords: Breakfast energy intake, sleep quality, learning concentration