

## INTISARI

### HUBUNGAN ASUPAN MAKAN DAN KUALITAS TIDUR DENGAN SIKLUS MENSTRUASI ATLET REMAJA PUTRI DI SMA NEGERI OLAHRAGA (SMANOR) SIDOARJO JAWA TIMUR DAN SMA NEGERI 1 SEWON

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**Latar belakang:** Atlet remaja perempuan merupakan kelompok yang rentan terhadap masalah gizi. Beberapa permasalahan yang sering terjadi pada atlet perempuan yaitu kurangnya asupan makan, kualitas tidur yang buruk dan gangguan siklus menstruasi. Jika hal ini terus berlanjut maka akan berakibat pada kepadatan tulang atlet, risiko cedera yang lebih besar, dan menghalangi atlet mencapai tingkat performa tertinggi.

**Tujuan:** Mengetahui apakah terdapat hubungan asupan makan dan kualitas tidur dengan siklus menstruasi pada atlet remaja perempuan.

**Metode Penelitian:** Penelitian ini merupakan penelitian observasional analitik dengan desain *cross-sectional*. Subjek penelitian ini berjumlah 53 atlet remaja perempuan berusia 15-18 tahun di SMA Negeri Olahraga Sidoarjo dan SMA Negeri 1 Sewon. Pengumpulan data asupan makan menggunakan *Semi Quantitative Food Frequency Questionnaire* (SQ-FFQ), data kualitas tidur menggunakan kuesioner *Pittsburgh Sleep Quality Index* (PSQI) dan siklus menstruasi menggunakan kuesioner menstruasi. Uji statistik dengan menggunakan Chi-Square dengan tingkat kepercayaan 95%.

**Hasil Penelitian:** Subjek memiliki asupan energi kurang (67,9%), asupan protein kurang (69,8%), asupan lemak adekuat (50,9%), asupan karbohidrat adekuat (67,9%), kualitas tidur buruk (69,8%), dan siklus menstruasi normal (62,3%). Tidak terdapat hubungan yang bermakna antara asupan energi ( $p=0,801$ ), asupan protein ( $p=0,522$ ), asupan lemak ( $p=0,646$ ), asupan karbohidrat ( $p=0,723$ ), dan kualitas tidur ( $p=0,061$ ) dengan siklus menstruasi pada atlet remaja perempuan.

**Kesimpulan:** Tidak terdapat hubungan signifikan secara statistik antara asupan energi, protein, lemak, karbohidrat dan kualitas tidur dengan siklus menstruasi atlet remaja putri.

**Kata Kunci:** asupan makan; atlet remaja putri; kualitas tidur; siklus menstruasi

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## ABSTRACT

### **Correlation Between Food Intake and Sleep Quality with Menstrual Cycle in Female Athletes at from Sidoarjo Sports Public High and Sewon 1 Public High School.**

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**Background:** Adolescent female athletes are particularly susceptible to nutritional issues. Among the issues that female athletes frequently face are inadequate food intake, poor sleep quality, and irregular menstrual cycle. These issues may lead to a decrease in athletes' bone density, thereby increasing their risk of injury and compromising their athletic performance.

**Objective:** To ascertain whether food intake and sleep quality are correlated with the menstrual cycle of female adolescent athletes.

**Research Method:** This study is an analytical observational research that implemented a cross-sectional design. The subjects of this study were 53 female adolescent athletes from Sidoarjo Sports Public High School and Sewon 1 Public High School. Data on food intake, sleep quality, and menstrual cycles were gathered using the Semi Quantitative Food Frequency Questionnaire (SQ-FFQ), Pittsburgh Sleep Quality Index (PSQI), and menstruation questionnaire, respectively. For the statistical test, this study implemented Chi-Square test with 95% confidence interval.

**Research Results:** The subjects exhibited inadequate carbohydrate intake (67.9%), insufficient protein intake (69.8%), insufficient energy intake (67.9%), adequate fat intake (50.9%), poor sleep quality (69.8%), and normal menstrual cycles (62.3%). There was no significant correlation found between the menstrual cycle and calorie intake ( $p = 0.801$ ), protein intake ( $p = 0.522$ ), fat intake ( $p = 0.646$ ), carbohydrate intake ( $p = 0.723$ ), or sleep quality ( $p = 0.061$ ) of the female adolescent athletes.

**Conclusion:** There is no statistically significant correlation between the intakes of calories, protein, energy, fat, and carbohydrates and sleep quality with the menstrual cycle of female adolescent athletes.

**Keywords:** food intake, sleep quality, menstrual cycle, female adolescent athletes

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