

ABSTRAK

HUBUNGAN INTENSITAS LATIHAN, POLA TIDUR, ASUPAN ENERGI, DAN PERSEN LEMAK TUBUH TERHADAP KADAR HEMOGLOBIN ATLET BASKET WANITA PROFESIONAL

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Latar Belakang: Kadar hemoglobin berperan penting dalam menjaga kesehatan dan kebugaran tubuh, terutama bagi atlet basket. Olahraga intens seperti bola basket membutuhkan kebugaran jasmani yang baik, termasuk daya tahan dan kelincahan. Penurunan kadar hemoglobin dapat menyebabkan gejala, seperti penurunan konsentrasi dan kebugaran, pusing, mudah lelah, dan sesak napas.

Tujuan: Menganalisis hubungan intensitas latihan, pola tidur, asupan energi (protein, lemak, karbohidrat), dan persen lemak tubuh terhadap kadar hemoglobin atlet basket wanita profesional.

Metode: Desain penelitian yang digunakan adalah *cross-sectional* dengan jumlah sampel 20 atlet basket wanita dari Girlsquad Playfield Jakarta. Analisis data menggunakan uji korelasi *Pearson Product Moment* dan *Spearman Rank*. Pengumpulan data dilakukan dengan menggunakan *Easy Touch GCHb*, *Xiaomi Smart Band 5*, *Athletes Sleep Behavior Questionnaire (ASBQ)*, kuesioner *food recall 2x24 jam*, dan *Xiaomi Body Fat Scale 2*.

Hasil: Rata-rata kadar hemoglobin adalah 13,51 g/dL, intensitas latihan 66,45%, skor pola tidur 43,55, asupan energi 1.659 kkal, asupan protein 57,55 gram, asupan lemak 64,56 gram, asupan karbohidrat 212,91 gram, dan persen lemak tubuh 19,95%. Ada hubungan antara pola tidur ($p = 0,020$; $r = -0,517$), asupan karbohidrat ($p = 0,044$; $r = 0,454$), dan asupan protein ($p = 0,030$; $r_s = 0,486$) dengan kadar hemoglobin atlet basket profesional. Akan tetapi, tidak ada hubungan antara intensitas latihan ($p = 0,069$; $r = 0,414$), asupan energi ($p = 0,144$; $r = 0,339$), asupan lemak ($p = 0,888$; $r = 0,034$), dan persen lemak tubuh ($p = 0,502$; $r = 0,159$) dengan kadar hemoglobin atlet basket profesional.

Kesimpulan: Pola tidur, asupan protein, dan asupan karbohidrat merupakan faktor yang berhubungan dengan kadar hemoglobin atlet basket wanita profesional.

Kata Kunci: asupan, bola basket, kadar hemoglobin, persen lemak tubuh, pola tidur

ABSTRACT

THE RELATIONSHIP BETWEEN EXERCISE INTENSITY, SLEEP PATTERN, ENERGY INTAKE, AND PERCENT BODY FAT TO HEMOGLOBIN LEVELS IN PROFESSIONAL WOMEN BASKETBALL ATHLETES

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Background: Hemoglobin levels play an important role in maintaining health and fitness, especially for basketball athletes. Intense sports like basketball require good physical fitness, including endurance and agility. Decreased hemoglobin levels can cause symptoms, such as decreased concentration and fitness, dizziness, fatigue, and shortness of breath.

Objective: To analyze the relationship between exercise intensity, sleep patterns, energy intake (protein, fat, carbohydrate), and percent body fat on hemoglobin levels in professional women's basketball athletes.

Methods: The research design used was cross-sectional with a sample size of 20 female basketball athletes from Girlsquad Playfield Jakarta. Data analysis used the Pearson Product Moment and Spearman Rank correlation tests. Data collection was carried out using Easy Touch GCHb, Xiaomi Smart Band 5, Athletes Sleep Behavior Questionnaire (ASBQ), 2x24-hour food recall questionnaire, and Xiaomi Body Fat Scale 2.

Results: The average hemoglobin level was 13,51 g/dL, exercise intensity was 66,45%, sleep pattern score was 43,55, energy intake was 1.659 kcal, protein intake was 57,55 grams, fat intake was 64,56 grams, carbohydrate intake was 212,91 grams, and percent body fat was 19,95%. There is a relationship between sleep patterns ($p = 0,020$; $r = -0,517$), carbohydrate intake ($p = 0,044$; $r = 0,454$), and protein intake ($p = 0,030$; $r_s = 0,486$) with hemoglobin levels in professional basketball athletes. However, there was no relationship between training intensity ($p = 0,069$; $r = 0,414$), energy intake ($p = 0,144$; $r = 0,339$), fat intake ($p = 0,888$; $r = 0,034$), and percent body fat ($p = 0,502$; $r = 0,159$) with hemoglobin levels in professional basketball athletes.

Conclusion: Sleep patterns, protein intake, and carbohydrate intake are factors related to hemoglobin levels in professional women's basketball athletes.

Keywords: basketball, hemoglobin level, intake, percent body fat, sleep pattern