

INTISARI

PERBANDINGAN ASUPAN ENERGI DAN ZAT GIZI MAKRO, PERSENTASE LEMAK TUBUH, SERTA LINGKAR PINGGANG ATLET WANITA SMANOR SIDOARJO DENGAN GANGGUAN SIKLUS MENSTRUASI DAN TANPA GANGGUAN SIKLUS MENSTRUASI

Larasati Yumna Arni¹, Mirza Hapsari Sakti Titis Penggalih², Rahadyana Muslichah²

Latar belakang: Gangguan siklus menstruasi merupakan salah satu permasalahan kesehatan reproduksi yang sering dijumpai pada atlet wanita. Konsumsi asupan gizi yang tidak sesuai dalam jangka waktu lama akan berdampak pada perubahan kontrol endokrin siklus menstruasi. Jumlah lemak tubuh yang juga dipengaruhi oleh asupan gizi turut mempengaruhi regulasi hormon dalam pengaturan siklus menstruasi.

Tujuan: Mengetahui perbandingan asupan energi, protein, lemak, dan karbohidrat persentase lemak tubuh, dan lingkar pinggang atlet wanita dengan gangguan siklus menstruasi dan tanpa gangguan siklus menstruasi.

Metode: Penelitian observasional analitik dengan desain *case control* dimana atlet wanita dengan gangguan siklus menstruasi sebagai kelompok kasus dan atlet wanita tanpa gangguan siklus menstruasi sebagai kelompok kontrol. Total 48 atlet wanita sebagai subjek penelitian yang diambil dengan teknik *total sampling*. Data siklus menstruasi dan asupan dilaporkan secara mandiri oleh subjek melalui formulir siklus menstruasi dan formulir SQ-FFQ. Data persentase lemak tubuh dan lingkar pinggang diperoleh dari pengukuran oleh peneliti. Analisis *Mann-Whitney U Test* dilakukan untuk membandingkan variabel pada kedua kelompok.

Hasil: Uji Komparasi dua kelompok terhadap asupan energi, protein, lemak, dan karbohidrat, persentase lemak tubuh, serta lingkar pinggang diperoleh *p-value* secara berturut-turut 0,107; 0,950; 0,670; 0,088; 0,647; 0,762. Atlet wanita dengan gangguan siklus menstruasi cenderung memiliki asupan energi, protein, dan karbohidrat lebih rendah, asupan lemak lebih tinggi, persentase lemak tubuh lebih rendah, dan lingkar pinggang lebih tinggi.

Kesimpulan: Tidak ditemukan perbedaan signifikan antara asupan energi, protein, lemak, dan karbohidrat persentase lemak tubuh, dan lingkar pinggang atlet wanita dengan gangguan siklus menstruasi dan tanpa gangguan siklus menstruasi

Kata kunci: Siklus menstruasi, asupan gizi, persentase lemak tubuh, lingkar pinggang, atlet wanita, remaja

¹) Mahasiswa Program Studi S1 Gizi Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada

²) Dosen Departemen Gizi Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan, Universitas Gadjah Mada

ABSTRACT

COMPARISON OF ENERGY AND MACRONUTRIENTS INTAKE, BODY FAT PERCENTAGE, AS WELL AS WAIST CIRCUMFERENCE OF FEMALE ATHLETES IN SMANOR SIDOARJO WITH MENSTRUAL CYCLE DISORDERS AND WITHOUT MENSTRUAL CYCLE DISORDERS

Larasati Yumna Arni¹, Mirza Hapsari Sakti Titis Penggalih², Rahadyana Muslichah²

Background: Menstrual cycle disorders are one of the reproductive health problems that are often found in female athletes. Improper nutrition intake consumption that occurs for a long term will have an impact on changes in the endocrine control of the menstrual cycle. The amount of body fat which is also affected by nutrition intake will also affect hormone regulation that plays a role in regulating the menstrual cycle.

Objective: To determine the comparison of energy, protein, fat, and carbohydrate intake, body fat percentage (%BF), as well as waist circumference (WC) between female athletes with menstrual cycle disorder and without menstrual cycle disorder.

Method: This research is an analytic observational study with a case control design where female athletes with menstrual cycle disorders as the case group and female athletes without menstrual cycle disorders as the control group. A total of 48 female athletes as research subjects were taken using total sampling technique. The menstrual cycle and nutrition intake data were reported independently by the subject through the menstrual cycle form and SQ-FFQ form. The body fat percentage and waist circumference data were obtained from the measurements by researchers. Analysis with the *Mann-Whitney U Test* was carried out to determine the *comparison* of variables in the two groups.

Results: Two-group comparison test results for energy, protein, fat, and carbohydrate intake, %BF, as well as WC respectively was 0.107; 0.950; 0.670; 0.088; 0.647; 0.762. Female athletes with menstrual cycle disorders tend to have lower energy, protein and carbohydrate intakes, higher fat intakes, lower %BF, and higher WC.

Conclusions: No significant differences were found between energy, protein, fat, and carbohydrate intake, %BF, as well as WC of female athletes with menstrual cycle disorders and without menstrual cycle disorders.

Keywords: Menstrual cycle, nutrition intake, body fat percentage, waist circumference, female athletes, adolescents

¹⁾ Undergraduate student of Health and Nutrition Department, Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University

²⁾ Lecturer of Health and Nutrition Department, Faculty of Medicine, Public Health, and Nursing, Gadjah Mada University