

ABSTRACT

RELATIONSHIP BETWEEN NUTRITIONAL STATUS, FREQUENCY OF ULTRA PROCESSED FOOD CONSUMPTION, STRESS LEVELS, AND MENSTRUAL CYCLES IN FEMALE STUDENTS AT SMA FRANSISKUS BANDAR LAMPUNG

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Background: Menstrual cycle disorders are a common reproductive health problem in adolescent girls. These disorders are often associated with various lifestyle factors and psychological conditions, such as nutritional status, dietary patterns including ultra-processed food (UPF) consumption, and stress levels. This study aims to analyze the relationship between nutritional status, UPF consumption frequency, and stress levels with the menstrual cycle in female students at SMA Fransiskus Bandar Lampung.

Methods: This was a quantitative study with an observational analytic design using a cross-sectional approach conducted from September 2025 to January 2026. The sample consisted of 198 female students selected using proportionate stratified random sampling and simple random sampling techniques. Nutritional status was determined via anthropometric measurements, while UPF consumption frequency, stress levels, and menstrual cycle data were collected using the Food Frequency Questionnaire (FFQ), DASS-42 questionnaire, and menstrual cycle questionnaire. Data analysis was performed using the Chi-square test.

Results: The majority of students had normal nutritional status (89.9%), moderate UPF consumption levels (49.5%), and moderate stress levels (35.4%). A total of 52.5% of students had a normal menstrual cycle, while 29,9% experienced menstrual cycle disorders (polymenorrhea or oligomenorrhea). Statistical test results showed no significant relationship ($p > 0,05$) between nutritional status, UPF consumption frequency, or stress levels with the menstrual cycle.

Conclusions: There was no relationship between nutritional status, UPF consumption frequency, and stress levels with the menstrual cycle in female students at SMA Fransiskus Bandar Lampung.

Keywords: Menstrual Cycle, Nutritional Status, Stress Levels, Ultra-processed Food.

ABSTRAK

HUBUNGAN STATUS GIZI, FREKUENSI KONSUMSI *ULTRA PROCESSED FOOD*, DAN TINGKAT STRES DENGAN SIKLUS MENSTRUASI PADA SISWI SMA FRANSISKUS BANDAR LAMPUNG

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Latar Belakang: Gangguan siklus menstruasi merupakan masalah kesehatan reproduksi yang umum terjadi pada remaja perempuan. Gangguan ini sering dikaitkan dengan berbagai faktor gaya hidup dan kondisi psikologis, seperti status gizi, pola makan termasuk konsumsi *ultra processed food* (UPF), serta tingkat stres. Penelitian ini bertujuan untuk menganalisis hubungan antara status gizi, frekuensi konsumsi UPF, dan tingkat stres dengan siklus menstruasi pada siswi SMA Fransiskus Bandar Lampung.

Metode: Penelitian kuantitatif dengan desain observasional analitik dengan pendekatan *cross-sectional* yang dilaksanakan pada bulan September 2025–Januari 2026. Sampel berjumlah 198 siswi yang dipilih menggunakan teknik *proportionate stratified random sampling* dan *simple random sampling*. Data status gizi diperoleh melalui pengukuran antropometri, data frekuensi konsumsi UPF dikumpulkan menggunakan *Food Frequency Questionnaire* (FFQ), data tingkat stres dinilai menggunakan kuesioner DASS-42, dan data siklus menstruasi didapatkan melalui kuesioner siklus menstruasi. Analisis data dilakukan menggunakan uji *Chi-square*.

Hasil: Mayoritas siswi memiliki status gizi normal (89,9%), tingkat konsumsi UPF sedang (49,5%), dan tingkat stres sedang (35,4%). Sebanyak 52,5% siswi memiliki siklus menstruasi normal, sementara 29,3% mengalami gangguan siklus menstruasi (polimenorea atau oligomenorea). Hasil uji statistik menunjukkan tidak terdapat hubungan yang signifikan ($p > 0,05$) antara status gizi, frekuensi konsumsi UPF, maupun tingkat stres dengan siklus menstruasi.

Kesimpulan: Tidak terdapat hubungan antara status gizi, frekuensi konsumsi UPF, dan tingkat stres dengan siklus menstruasi pada siswi SMA Fransiskus Bandar Lampung.

Kata Kunci: Siklus Menstruasi, Status Gizi, Tingkat Stres, *Ultra Processed Food*.