



Fast Food Consumption and Menstrual Disorders among Adolescent Girls at SMAN 1 Godean, Sleman: A Cross-Sectional Study

Putri Maulidia Tasmara^{1*}, Belian Anugrah Estri¹

Midwifery Study Program, Faculty of Health Sciences, Universitas 'Aisyiyah Yogyakarta, Indonesia

ARTICLE INFO

Article History:

Submitted: 22-05-2026

Revised: 01-07-2025

Accepted: 12-07-2026

Published: 13-08-2026

 doi.org/10.58545/jkmi.v5i2.733

Copyright (c) 2026

This is an open-access article under the CC BY-SA license.



ABSTRACT

Background: Menstrual disorders represent a significant reproductive health issue among female adolescents and can be influenced by various factors, one of which is suspected to be unhealthy dietary habits, such as fast food consumption. **Objective:** This study aims to analyze the correlation between fast food consumption behavior and menstrual disorders among female adolescents at SMAN 1 Godean, Sleman Regency, Yogyakarta. **Methods:** This quantitative study employed an analytical observational design with a cross-sectional approach. The research population comprised 140 eleventh-grade female students, with a sample of 58 respondents ($n = 58$) selected using proportional stratified random sampling. Data were collected via questionnaires and analyzed using the Spearman Rank correlation test. **Results:** The majority of respondents exhibited a moderate level of fast-food consumption (63.8%) and experienced moderate menstrual disorders (65.5%). Statistical test results indicated no significant correlation between fast-food consumption behavior and menstrual disorders ($p=0.539$; $r=-0.082$). **Conclusion:** There is no significant correlation between fast food consumption behavior and menstrual disorders among female adolescents at SMAN 1 Godean. Nevertheless, as a preventive measure for reproductive health, students are advised to transition to a balanced nutritional diet by optimizing the Free Nutritious Meal (MBG) program at school. Implementing an MBG menu rich in iron and fiber could be a practical way to provide healthy food alternatives while also educating students to limit fast-food intake to support long-term health.

Keywords: Fast Food, Menstrual Disorders, Adolescent Girls

Corresponding Author:

Putri Maulidia Tasmara,

Program Studi Sarjana Kebidanan, Fakultas Ilmu Kesehatan, Universitas 'Aisyiyah Yogyakarta,

Kabupaten Sleman, Indonesia 55292.

Email: putritasmara14@gmail.com

How to cite:

Tasmara, P. M., & Estri, B. A. (2026). Fast Food Consumption and Menstrual Disorders among Adolescent Girls at SMAN 1 Godean, Sleman: A Cross-Sectional Study. *Jurnal Kegawatdaruratan Medis Indonesia*, 5(2), 204-217. <https://doi.org/10.58545/jkmi.v5i2.733>

I. INTRODUCTION

Menstrual disorders represent a critical reproductive health issue among female adolescents, directly impacting their quality of life, academic performance,

and escalating long-term risks such as ovarian cysts and infertility. Globally, the prevalence of these disorders is 45%, whereas in Indonesia it is substantially higher, at 54.89%, with a specific regional

estimate from Sleman Regency of 44.3% (Suryatno et al., 2023). This problem manifests through various complaints, including dysmenorrhea, cycle irregularities, and premenstrual syndrome, which serve as early indicators of hormonal imbalances in young females (Habibah et al., 2024). Previous studies have predominantly linked these physiological disruptions to basic dietary deficiencies, yet they often overlook how modern lifestyle shifts alter the baseline of adolescent endocrinology.

However, the availability of these institutional programs does not automatically guarantee a total shift in adolescent consumption behavior. The social phenomenon of 'hanging out' (nongkrong) and the culture of chasing viral food trends driven by the Fear of Missing Out (FOMO) remain powerful magnets for teenagers. This behavior is further exacerbated by the ease of access provided by online food delivery applications, widening the gap between government nutritional targets and the reality of field consumption, which remains dominated by high-fat and high-sugar menus (Abrilla et al., 2024). Consequently, standard state-driven interventions often clash with digital lifestyles that have not been fully accommodated in school health policies.

While the correlation between fast food and hormonal health is widely discussed in the literature, a distinct research gap exists in the local context of Sleman regarding the actual efficacy of adolescent dietary habits amid the massive rollout of national nutrition programs. A preliminary study conducted by the researcher at SMAN 1 Godean revealed a striking paradox: despite the active implementation of school health initiatives, 100% of the surveyed respondents still consumed fast food 2–3 times per week. The preliminary findings showed that the menstrual complaints experienced by the respondents were heavily dominated by severe pain (dysmenorrhea) and short menstrual cycles (<21 days), proving an immediate urgency at this location.

Therefore, the scientific merit and novelty of this study lie in its unique approach to examining the intersection of digital-era consumption patterns with the spectrum of menstrual disorders during the critical transition phase of Indonesia's Free Nutritious Meal (MBG) program, a national school-based initiative that provides free nutritious meals to improve students' nutritional status. Based on these underlying conditions, the central problem investigated in this study is the extent to which modern fast-food consumption

habits undermine school-level nutritional interventions and contribute to reproductive health issues. Therefore, this study aimed to analyze the correlation between fast food consumption behavior and menstrual disorders among female adolescents at SMAN 1 Godean, Sleman Regency, Yogyakarta. The findings are expected to provide not only theoretical contributions to midwifery and reproductive sciences but also practical evaluation metrics for schools to synchronize free nutritious meals with lifestyle education, ensuring that unhealthy external dietary patterns do not distort public health interventions.

2. METHODS

This quantitative research employed an analytical observational design using a cross-sectional approach to examine the correlation between fast-food consumption behavior (independent variable) and menstrual disorders (dependent variable). The study was officially declared ethically cleared through the ethical approval certificate number 5259/KEP-UNISA/II/2026. The research population comprised 140 eleventh-grade female students at SMAN 1 Godean, with a total sample size of 58 respondents selected using proportional stratified random sampling. The study population

was stratified according to six Grade XI classes (XI A–XI F). Participants were selected from each class in proportion to the number of eligible female students in each class relative to the total population, after which respondents were randomly selected within each stratum. Respondents were recruited based on specific eligibility criteria. The inclusion criteria involved female adolescents aged 15–18 years who had attained menarche and voluntarily agreed to participate. In contrast, the exclusion criteria ruled out students who were absent during data collection, were severely ill, or were actively taking hormonal medications.

The research instruments consisted of structured questionnaires adapted from Wulandari (2009) to assess fast-food consumption behavior and from Andriani (2025) to assess menstrual disorders. The questionnaire, adapted from Wulandari (2009), had previously been tested for validity and reliability, with all items meeting the validity criterion ($r\text{-count} > r\text{-table}$ at a significance level of 0.05) and a Cronbach's Alpha coefficient of 0.672. The questionnaire, adapted from Andriani (2025), was reported to have good reliability, with a Cronbach's Alpha coefficient of 0.870. Primary data collection was conducted directly at SMAN 1 Godean, with permission and coordination from the

school administration. The gathered data were measured using an ordinal scale. Fast food consumption behavior was categorized as good ($\geq 80\%$), moderate ($60\% - 80\%$), and poor ($< 60\%$). Meanwhile, the severity of menstrual disorders was classified into mild (score 0–2), moderate (score 3–5), and severe (≥ 6). The final stage of data processing was performed using SPSS, encompassing univariate analysis to determine frequency distributions and bivariate analysis using the Spearman Rank correlation test at a significance level of $p < 0.05$ to evaluate the strength and direction of the relationship between the variables.

3. RESULTS

The study was conducted at SMAN 1 Godean, located at Sidokarto Street No. 5, Sidokarto, Godean District, Sleman Regency, Special Region of Yogyakarta 55564. Widely known as "SMAGO," this school holds an "A" accreditation status. As one of the prominent senior high schools in the region, SMAGO had a total student population of 646 in the 2025/2026 academic year, comprising 432 female students and 214 male students (SMAN 1 Godean, 2025). The research data were obtained on February 24, 2026, through the distribution of primary questionnaires to eleventh-grade female students (classes XI-A to XI-F). The school's strategic location and easy access to online food delivery services provide students with convenient access to a variety of fast-food options.

Table 1. Frequency Distribution of Respondent Characteristics (n=58)

Characteristics	Frequency	Percentage (%)
Age		
16 years	20	34.5%
17 years	38	65.5%
Class		
XI-A	7	12.1%
XI-B	11	19.0%
XI-C	10	17.2%
XI-D	13	22.4%
XI-E	8	13.8%
XI-F	9	15.5%

Table 1 shows that the majority of respondents were 17 years old (65.5%), while 34.5% were 16 years old. The respondents were proportionally

distributed across six Grade XI classes, with the largest proportion coming from Class XI-D (22.4%), followed by Class XI-B (19.0%) and Class XI-F (15.5%).

Table 2. Frequency Distribution of Fast Food Consumption Behavior Among Female Adolescents at SMAN 1 Godean (n=58)

Category	Frequency	Percentage (%)
Good	0	0%
Fair	37	63.8%
Poor	21	36.2%

As shown in Table 2, none of the respondents (0%) demonstrated good fast food consumption behavior. The majority of respondents (63.8%) showed fair (moderate) fast food consumption behavior, while 36.2% exhibited poor

consumption behavior. This finding suggests that unhealthy eating habits remain prevalent among female adolescents in the study population, with no students demonstrating optimal fast food consumption patterns.

Table 3. Frequency Distribution of Menstrual Disorders Among Female Adolescents at SMAN 1 Godean (n=58)

Category	Frequency	Percentage (%)
Mild	17	29.3%
Moderate	38	65.5%
Severe	3	5.2%

Table 3 reveals that moderate menstrual disorders were the predominant category among respondents, affecting 65.5% (n=38) of participants. Mild menstrual disorders were reported by 29.3% (n=17) of respondents, while severe menstrual disorders were relatively

uncommon, observed in only 5.2% (n=3) of the sample. This pattern indicates that menstrual health complaints were present in most participants, although severe conditions were observed only in a small proportion.

Table 4. Correlation Between Fast Food Consumption Behavior and Menstrual Disorders Among Female Adolescents at SMAN 1 Godean (n=58)

Fast Food Consumption Behavior	Menstrual Disorders			Total (%)	p-value	r
	Mild (%)	Moderate (%)	Severe (%)			
Good	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0.539	0.082
Fair	9 (24%)	27 (73%)	1 (2.7%)	37 (100%)		
Poor	8 (38%)	11 (52%)	2 (9.5%)	21 (100%)		
Total	17 (29%)	38 (65%)	3 (5.2%)	58 (100%)		

Table 4 indicates that moderate menstrual disorders were the most common outcome regardless of the level of

fast food consumption. Among respondents with fair fast food consumption behavior, 73% experienced

moderate menstrual disorders, while 24% had mild disorders. Among those with poor consumption behavior, 52% reported moderate disorders, 38% had mild disorders, and 9.5% experienced severe disorders.

Although respondents with poor fast food consumption behavior showed a relatively higher proportion of severe menstrual disorders compared to those with fair consumption behavior, the Spearman Rank correlation test revealed no statistically significant correlation between fast food consumption behavior and menstrual disorders ($p = 0.539$, $\alpha > 0.05$). Furthermore, the correlation coefficient ($r = -0.082$) indicated a very weak negative relationship between the two variables, suggesting that fast food consumption behavior has minimal association with the severity of menstrual disorders among female adolescents at SMAN 1 Godean.

4. DISCUSSION

Fast Food Consumption Behavior Among Female Adolescents at SMAN 1 Godean

The results indicate that the majority of respondents exhibit moderate fast-food consumption behavior (63.8%), while the remaining proportion falls into the poor consumption category (36.2%). This

finding is reinforced by questionnaire data showing that 100% of the respondents have consumed fast food, with the most frequent intake being 1–3 times a week (35 respondents). This illustrates that fast-food consumption has become an established part of the daily diet among adolescents at SMAN 1 Godean.

Viewed in light of the characteristics of age (16–17 years old) and grade level (eleventh grade), this behavior is intrinsically linked to students' expanding autonomy. Eleventh-grade students are in late adolescence and typically have greater freedom to manage their pocket money and to determine their food preferences when interacting with peers. The primary reasons respondents chose fast food were its appealing taste (28 respondents) and its practicality (25 respondents). Psychologically, adolescents at this age tend to prioritize palatability over long-term nutritional considerations (Sulfa et al., 2023).

A particularly compelling finding in this study is the presence of a knowledge-behavior gap. Although 49 respondents were fully aware of the poor nutritional content of fast food, they deliberately continued to consume it. This phenomenon is amplified by extensive media exposure, with advertisements in both print and electronic media (44 respondents) serving

as the primary source of information. Digital advertisements, frequently accessed by eleventh-grade students via social media, trigger the desire to consume food products that are currently trending or viral.

Specifically, the most preferred food items are fried chicken products from various local and national outlets (47 respondents), with an average portion size of one serving per meal (55 respondents). Theoretically, this type of food contains high levels of saturated fats, sodium, and chemical additives that can disrupt hormonal balance when consumed in excess (Kurniadi & Kumala, 2019). However, in this study, the consumption frequency of the majority of respondents suggests that exposure to these substances might not have reached the clinical threshold required to immediately and significantly alter the respondents' hormonal cycles.

The strategic environmental factors surrounding Sidokarto Street provide eleventh-grade students with convenient access to a variety of food outlets. This ease of access, combined with the typical adolescent culture of "hanging out" (nongkrong), transforms moderate fast-food consumption into a deeply rooted lifestyle habit. However, this behavior did not exhibit a statistically significant

relationship with menstrual disorders in this study; dietary patterns still warrant attention as a lifestyle risk factor that could potentially compromise reproductive health in the long term.

The Incidence of Menstrual Disorders Among Female Adolescents at SMAN 1 Godean

The results show that the majority of respondents experience moderate menstrual disorders (65.5%), followed by the mild category (29.3%), and a small percentage in the severe category (5.2%). This finding is substantiated by questionnaire data indicating that the most dominant complaints are emotional symptoms or Premenstrual Syndrome (PMS) reported by 47 respondents, and menstrual pain or dysmenorrhea reported by 47 respondents. Furthermore, 25 respondents admitted that their menstrual pain forced them to reduce their daily activities, demonstrating that this disorder tangibly impairs student productivity.

Viewed in terms of age characteristics, respondents aged 16–17 (late adolescence) are in a phase of reproductive system maturation. Although the reproductive organs are anatomically mature, the hypothalamic-pituitary-ovarian hormonal axis at this age remains highly sensitive to fluctuations in estrogen

and progesterone levels (Amalia et al., 2023). This accounts for the high prevalence of subjective complaints at SMAN 1 Godean, where cycle irregularities and associated menstrual symptoms often accompany the transitional phase toward adulthood.

As eleventh-grade students, the high rate of moderate menstrual disorders is also closely linked to the density of academic and non-academic activities. The eleventh-grade period represents the peak of student involvement in organizations and extracurricular activities at SMAGO. According to Masthura et al. (2025), a demanding schedule that lacks adequate rest can trigger physical and psychological stress, thereby stimulating the release of cortisol. Cortisol is known to disrupt the regular functioning of reproductive hormones, which is evident from respondents experiencing cycle disruptions such as polymenorrhea (5 respondents) and oligomenorrhea (10 respondents).

Additionally, the findings that 15 respondents experienced bleeding exceeding 8 days (menorrhagia) and 11 respondents experienced exceptionally heavy bleeding leading to staining, indicating clear disruptions in terms of duration and blood volume. This condition has a substantial impact on the students'

quality of life and academic concentration. Decreased focus while attending complex subjects in the eleventh grade becomes a tangible consequence for female adolescents who must cope simultaneously with menstrual pain and PMS symptoms (Simbung et al., 2023).

Theoretically, while the consumption of saturated fats from fast food can stimulate prostaglandin production that worsens pain (Sulfa et al., 2023). The results of this study indicate that such consumption is not an isolated factor. The emergence of moderate menstrual disorders among SMAN 1 Godean students is highly likely multifactorial, where the burden of school activities and adolescent stress factors exerts a more dominant influence compared to the frequency of fast-food consumption among the respondents. Thus, the occurrence of menstrual disorders serves more as a reflection of the complex lifestyle dynamics of high school adolescents rather than merely the direct consequence of a single dietary behavior.

Correlation Between Fast Food Consumption Behavior and Menstrual Disorders Among Female Adolescents at SMAN 1 Godean

The statistical results of the Spearman Rank test yielded a p-value of

0.539 ($p>0.05$) and a correlation coefficient (r) of -0.082 , indicating no significant correlation between fast-food consumption behavior and menstrual disorders among female adolescents at SMAN 1 Godean. This finding is supported by several previous studies that also found no meaningful relationship, such as research by Fitri et al., (2024), which stated that no correlation was found between the frequency of fast-food consumption and the menstrual cycle ($p=0.0780$), as well as Husni et al., (2022), which showed no relationship between the consumption of fast food ($p=0.279$) or fast drinks ($p=0.582$) and menstrual disorders. This is further reinforced by Latif et al., (2022), who found no significant differences in groups consuming salty snacks or frozen processed meats ($p\geq 0.05$), and Nugraeni et al., (2023), who stated that a high frequency of fast-food consumption (≥ 3 times/week) was not associated with central obesity as a metabolic disorder risk factor ($p>0.05$). Furthermore, the results of this study are consistent with the findings of Sholikhah et al. (2025) ($p=0.773$) and Fadillah & Puspitasari (2023) ($p=0.722$).

Despite the statistical insignificance observed in this study, a clear gap remains compared with the literature reporting a positive correlation. Research by Nur Aulia et al. (2024) identified a relationship

between fast-food consumption and primary dysmenorrhea pain ($p=0.048$), albeit with a very weak correlation ($r=-0.210$). Sulfa et al. (2023) also reported that adolescents with fast-food addiction faced a 2.19 times higher risk of experiencing menstrual pain compared to those without addiction ($p=0.046$). Other studies by Habibah et al. (2024) demonstrated an even greater risk, up to 11 times higher ($p=0.001$). Ratnawati (2023) stated that there was a relationship between fast-food consumption and the menstrual cycle among female adolescents at SMAN 1 Sewon Bantul, with a result of ($p=0.021$) ($p<0.05$). Simbung et al. (2023) reported a value of ($p=0.000$), wherein 81.0% of adolescents who routinely consumed fast food experienced dysmenorrhea. This inconsistency in outcomes indicates that the impact of fast food is highly individualized and mitigated by other, more dominant variables.

One of these dominant variables is the stress level. Based on research by Fitri et al. (2024) using multivariate analysis, stress emerged as the most dominant factor influencing the menstrual cycle ($p<0.001$; OR=9.411). This aligns with the findings of Fadila et al. (2024) at SMA Negeri 4 Tuban ($p=0.002$), which stated that stress is closely linked to cycle irregularities due to disruptions in the hormonal system.

Among eleventh-grade female students at SMAN 1 Godean, academic pressure and organizational activity burdens are suspected to be triggers for stress that affect menstrual disorders far more substantially than the mere nutritional factors from fast food.

In the context of implementation at SMAN 1 Godean, a unique condition exists: the Free Nutritious Meal (MBG) program operates daily to ensure balanced nutrition. However, the presence of the MBG program does not preclude students from continuing to consume fast food as additional snacks, given its accessibility and palatability. Although the distribution of Iron-Folic Acid (TTD) tablets and PIK-R activities have not run consistently or optimally, the daily nutritional intake provided by MBG is suspected to mitigate the systemic impact of saturated fats. As posited by Putri et al. (2024), consuming healthy, fiber-rich foods can help mitigate exposure to chemical additives in fast food. Consequently, even though fast-food snacking habits persist among the students, the nutritional stability provided by the daily MBG program helps safeguard the respondents' reproductive health, thereby preventing the disorders experienced from progressing to more severe categories.

This research was conducted optimally in accordance with established scientific procedures. However, a minor limitation concerns the depth of data coverage obtained in the field. This study deliberately focused the analysis on the correlation between consumption behavior and menstrual disorders within the scope of SMAN 1 Godean, rendering the results a highly specific and localized overview of the students' reproductive health. Furthermore, while the study successfully identified the most dominant complaints, namely PMS symptoms (47 respondents) and dysmenorrhea (47 respondents), a slight limitation arises from the subjective perceptions of each respondent in describing their pain intensity. Nevertheless, this issue was carefully anticipated by using a standardized questionnaire, ensuring that the collected data remained objective and representative of the actual impact of dietary habits on adolescent menstrual health.

5. CONCLUSION

Based on the research findings on the correlation between fast-food consumption behavior and menstrual disorders among female adolescents at SMAN 1 Godean, it can be concluded that the majority of respondents exhibit moderate fast-food consumption behavior

(63.8%), driven primarily by a preference for fried chicken for its taste and convenience. Concurrently, most respondents experience moderate menstrual disorders (65.5%), with emotional symptoms (PMS) and menstrual pain (dysmenorrhea) being the most dominant complaints. However, statistical analysis using the Spearman Rank test yielded a p-value of 0.539 ($p > 0.05$) and a correlation coefficient (r) of -0.082 , indicating no significant correlation between fast-food consumption behavior and menstrual disorders. This indicates that the frequency of fast-food consumption is not the only factor contributing to these disorders. Instead, the physiological outcomes are multifactorial, heavily influenced by eleventh-grade academic stress and physical fatigue, while being mitigated by the protective effect of the daily school-based Free Nutritious Meal (MBG) program, which serves as a nutritional counterbalance for students.

ACKNOWLEDGEMENT

The authors would like to express their highest gratitude to Universitas Aisyiyah Yogyakarta and the research supervisor for facilitating and guiding this study. Our sincere appreciation is extended to the Headmaster of SMAN 1

Godean for granting permission to conduct this research, as well as to all female students who willingly participated as respondents. We also deeply thank Mrs. Ninda for her valuable contribution and assistance during the data collection and questionnaire administration process at the school.

AUTHOR CONTRIBUTIONS

PMT contributed to the conceptualization of the study, data collection, data analysis, and drafting the initial manuscript. BAE served as the primary supervisor, guiding the research process, refining the methodology, critically revising the manuscript, and providing final approval for submission. All authors have read and agreed to the published version of the manuscript.

CONFLICT OF INTEREST

The authors declare that they have no competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

DATA AVAILABILITY STATEMENT

The data supporting this study's findings are available from the corresponding author upon reasonable request.

REFERENCES

- Abrilla, A., Meliyana, E., & Suriany, R. (2024). The correlation between the habit of consuming fast food and the incidence of obesity in adolescents at SMAN 15 Bekasi city. *Therapy: Journal of Health Science*, 2(2), 133–144. <https://doi.org/10.62354/therapy.V2i2.45>
- Amalia, I. N., Budhiana, J., & Sanjaya, W. (2023). Hubungan stres dengan gangguan siklus menstruasi pada remaja putri. *Jurnal Wacana Kesehatan*, 8(2), 75. <https://doi.org/10.52822/jwk.v8i2.526>
- Andriani, T. (2025). Hubungan tingkat stres dengan siklus menstruasi pada mahasiswi perawat di Asmara Putri Universitas Aufa Royhan Tahun 2024 [Undergraduate thesis, Universitas Aufa Royhan].
- Fadila, R. N., Udi, S., Sumiatin, T., & Ningsih, W. T. (2024). Stres dengan siklus menstruasi pada remaja putri di SMA Negeri 4 Tuban. *Jurnal Ilmu Kesehatan Mandira Cendikia*, 3(8). <https://journal-mandiracendikia.com/jikmc>
- Fadillah, A. N., & Puspitasari, D. I. (2023). Hubungan kebiasaan konsumsi fast food dan tingkat stres dengan siklus menstruasi pada mahasiswi Fakultas Ilmu Kesehatan Universitas Muhammadiyah Surakarta. *Jurnal Diskursus Ilmiah Kesehatan*, 1(1), 25–34. <https://doi.org/10.56303/jdik.v1i1.104>
- Fitri, S., Sofianita, N. I., & Octaria, Y. C. (2024). Faktor yang mempengaruhi siklus menstruasi pada mahasiswi di Depok, Indonesia. *Amerta Nutrition*, 8(3), 94–104. <https://e-journal.unair.ac.id/AMNT/article/view/63113>
- Habibah, I. H., Putriana, D., & Hidayati, R. W. (2024). Hubungan kebiasaan konsumsi fast food dengan gangguan siklus menstruasi pada remaja putri. *Jurnal Riset Gizi*, 12(2).
- Hateriah, S., & Yuandari, E. (2025). Analisis faktor karakteristik orangtua terhadap frekuensi konsumsi fast food pada remaja siswa kelas XI SMAIT Ukhuwah Banjarmasin. *Journal Scientific of Mandalika (JSM)*, 6(3).
- Husni, L., Rufaridah, A., Narti, S., & Dahlan, A. (2022). Hubungan konsumsi fast food dan fast drink terhadap gangguan menstruasi pada remaja putri di Kelurahan Kubu

- Dalam Parak Karakah Kecamatan Padang Timur Kota Padang Tahun 2022. *Jurnal Citra Ranah Medika (CRM)*, 2(1), 1–10. <http://ejournal.stikes-ranahminang.ac.id/>
- Kurniadi, B. A., & Kumala, M. (2019). Hubungan massa lemak dengan keteraturan siklus menstruasi pada mahasiswi Fakultas Kedokteran Tarumanagara Angkatan 2013. *Tarumanagara Medical Journal*, 1(2), 265–269. <https://journal.untar.ac.id/index.php/tmj/article/view/3826>
- Latif, S., Naz, S., Ashraf, S., & Jafri, S. A. (2022). Junk food consumption in relation to menstrual abnormalities among adolescent girls: A comparative cross-sectional study. *Pakistan Journal of Medical Sciences*, 38(8), 2307–2312. <https://doi.org/10.12669/pjms.38.8.6177>
- Masthura, S. (2025). Pengaruh stres, pola makan dan aktivitas fisik terhadap perubahan siklus menstruasi pada remaja putri. *Jurnal Keperawatan Cikini*, 6(1), 20–29. <https://jurnal.akperrscikini.ac.id/index.php/jkc>
- Nugraeni, T. A. E., & Maria, R. F. (2023). Hubungan pola konsumsi makanan cepat saji dan frekuensi pemesanan makanan online dengan obesitas sentral pada siswa SMA di Yogyakarta. *Amerta Nutrition*, 7(3), 413–420. <https://e-journal.unair.ac.id/AMNT/article/view/41504>
- Nur Aulia, D., Riyana, S., & Nur Anisa, D. A. (2024). Hubungan mengkonsumsi makanan cepat saji dengan nyeri dismenore primer pada remaja putri di SMPN 2 Sleman. *LPPM Universitas 'Aisyiyah Yogyakarta*.
- Putri, S. M., Yulianti, R., & Suryani, D. (2024). Hubungan pola konsumsi dan status gizi dengan siklus menstruasi remaja. *The Journal of Indonesian Community Nutrition*, 13. <https://journal.unhas.ac.id/index.php/mgmi/article/view/31450>
- Ratnawati, E. A. (2023). Hubungan konsumsi fast food dengan siklus menstruasi pada remaja putri. *Jurnal Ilmu Kesehatan Makia*, 13(1).
- Sholikhah, M. N., Anisa Nur, D., & Riyana, S. (2025). Hubungan konsumsi fast food dengan siklus menstruasi pada mahasiswi Psikologi Universitas 'Aisyiyah Yogyakarta. *Prosiding Seminar Nasional Penelitian dan Pengabdian Kepada Masyarakat*

-
- LPPM Universitas 'Aisyiyah (Fast Food) Tahun 2009
Yogyakarta, 3, 22–2025. [Undergraduate thesis, Universitas
Islam Negeri Syarif Hidayatullah].
- Simbung, R., Ohorella, F., & Metasari, N.
U. (2023). Hubungan mengonsumsi
makanan cepat saji (fast food)
dengan kejadian dysmenorrhea pada
remaja putri. *Madu: Jurnal
Kesehatan*, 12(1), 56. [https://doi
.org/10.31314/mjk.12.1.56-60.2023](https://doi.org/10.31314/mjk.12.1.56-60.2023)
- Sulfa, D., Herdiana, H., & Ernita, P. (2023).
Pengaruh menarche dini, stres dan
perilaku konsumsi fast-food dengan
dismenore primer pada remaja putri
di SMPN 01 Sukalarang. *Sentri:
Jurnal Riset Ilmiah*, 2(4). [https:
//doi.org/10.55681/sentri.v2i4.744](https://doi.org/10.55681/sentri.v2i4.744)
- Suryatno, H., Ayu, G., Adhi, M., Ratu, S. O.,
Astuti, F., Ilmi, N., & Sulistiyani, E.
(2023). Hubungan pola konsumsi
makanan cepat saji dengan
keteraturan siklus menstruasi pada
remaja putri kelas XI di SMAN 7
Mataram. *PRIMA*, 9(2), 160–174.
[https://jurnal.stikes-mataram.ac.id
/index.php/jurnal/article/view/42](https://jurnal.stikes-mataram.ac.id/index.php/jurnal/article/view/42)
- Wulandari, L. (2009). Pengetahuan, sikap
dan perilaku mahasiswa Program
Studi Pendidikan Dokter Universitas
Islam Negeri Syarif Hidayatullah
Jakarta tentang makanan cepat saji
-