



The Influence of Social Media on the Eating Patterns of Students at the Faculty of Public Health, Universitas Sumatera Utara in 2023

Namora Lumongga Lubis^{*1}, Estomihi Simanjuntak¹, Melania Stevani¹

¹Faculty of Public Health, Universitas Sumatera Utara, Medan

*Correspondence: namora.lbs@usu.ac.id

<p>Track Record Article</p> <p>Accepted: 30 July 2024 Revised: 30 September 2024 Published: 20 October 2024</p> <p>How to cite : Lubis, N. L., Simanjuntak, E., & Stevani, M. (2024). The Influence of Social Media on the Eating Patterns of Students at the Faculty of Public Health, Universitas Sumatera Utara in 2023. <i>Contagion : Scientific Periodical of Public Health and Coastal Health</i>, 6(2), 1096–1109.</p>	<p style="text-align: center;">Abstract</p> <p><i>Social media refers to platforms and applications that utilize internet-based technology. This type of media promotes and facilitates connections with others. Social media has an important role in the eating patterns of students at the Faculty of Public Health at the Universitas Sumatera Utara. If social media use is wrong, it will impact the quality of students' eating patterns, resulting in a wrong body mass index. This research aims to investigate how social media factors affect eating habits. The study will employ an explanatory survey method with a cross-sectional approach. This research was carried out in September 2023. The population in this research were all students of the Faculty of Public Health at the Universitas Sumatera Utara, with a total of 390 people and a sample of 80 people. The samples taken in this study were students at the Faculty of Public Health, Universitas Sumatera Utara, using the Slovin technique. Slovin's formula is a statistical method used to determine an appropriate sample size when conducting surveys or research. It helps to ensure that the sample accurately represents the population while minimizing the cost and effort involved in data collection. Data was collected using a questionnaire. Based on the research results, it was found that 46 respondents (57.5%) had a poor eating pattern, and 34 respondents (42.5%) had a good eating pattern. Based on the Bivariate test, the variable related to eating patterns is the influence of social media ($p=0.002$). From the data processing results, it is concluded that social media significantly influences eating patterns. Universitas Sumatera Utara. I hope the university and faculty can provide additional education regarding social media and healthy eating patterns to students at the Universitas Sumatera Utara. Universitas Sumatera Utara.</i></p> <p>Keywords: Social Media, Eating Patterns, Student</p>
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INTRODUCTION

With advancements in the internet, social media has become one of Indonesia's most widely used technological innovations. A report from the Indonesian Internet Service Providers Association for the period of 2022-2023 indicates that there are 215.63 million Internet users in the country. This represents a 2.67% increase from the previous period, which had 210.03 million users (Armita et al., 2024).

One consequence of social media usage is an adverse impact on body mass index (BMI). It can influence users' BMI by altering their physical activity and eating habits. This is particularly relevant for adolescents, who are a vulnerable age group at risk for overweight and obesity issues (Limardi et al., 2019).

The social environment, such as peers, can be a factor that can influence the emergence of nutritional problems. Friends also influence eating and snacking habits. This is because

teenagers can catch up and approach what their friends are eating. Peer groups and friends also influence teenagers' habits of consuming junk food and soft drinks. The social environment, such as peers, can be a factor that can influence the emergence of nutritional problems. Friends also influence eating and snacking habits, This is because teenagers can catch up and approach what their friends are eating. Peer groups and friends also influence teenagers' consumption of junk food and soft drinks (Yarah et al., 2021).

The Indonesian Ministry of Health discovered that among the population over 10 years, 40.7% consume fatty foods high in cholesterol and fried items, 26.2% eat salty foods, and 53.1% indulge in sweet foods. Additionally, 93.6% of this population consumes fewer vegetables and fruits (Kemenkes, 2018).

According to the Central Statistics Agency, the proportion of individuals using the Internet in North Sumatra Province in 2019 was 41.38%, this figure increased by 13.75% from 2017, which had a percentage of 27.63%. This significant increase in internet and social media use has significantly influenced users' interaction behaviour and eating patterns.

Research by Sholikhah in 2019 conducted on teenagers, data obtained showed that 68.75% of teenagers had unhealthy eating habits, which were described as frequently buying and consuming snacks such as chips, consuming fast food and soft drinks, and rarely consuming vegetables and fruit (Sholikhah, 2019).

Consequently, nutritional needs rise during adolescence, with most nutrient requirements being more significant than those of adults when considering body weight and energy needs. It is vital to optimize nutritional intake during this period to ensure adolescents' health and safeguard future generations' health.

Social factors play a significant role in shaping adolescent nutrition and health. During adolescence, individuals experience increased social interaction with family, peers, colleagues, and the broader community. The 'social brain' maturation during this stage makes adolescents particularly sensitive to the influences of others on their decision-making processes (Panggabean et al., 2024).

During adolescence, peers' social and emotional significance grows as they and social norms strongly impact decision-making and behaviour. This influence extends to dietary habits, with adolescents often consuming healthy foods like whole grains and dairy and less healthy options such as fast food, sugary drinks, and snacks that reflect their peers' choices. This peer influence can be observed both in-person and online, as adolescents' social media accounts often feature food images, most of which are high in calories and low in nutritional value (Moore et al., 2023).

Social media often exposes adolescents to extensive food marketing. These platforms, such as TikTok, Instagram, Facebook, etc, are utilized by brands to promote healthy and unhealthy food products. Studies have shown that non-core food messages (e.g., advertisements for junk food) are positively associated with increased intake of such foods among adolescents. This exposure can also negatively impact food literacy, leading to poorer dietary choices (Qutteina et al., 2022).

Social media platforms emphasize visuals, making food presentation and trendy diets highly appealing. Influencers and food bloggers often set trends quickly gaining traction, encouraging followers to adopt similar eating habits. Social media creates a sense of community. Users often feel pressure to conform to the eating habits showcased by peers or influencers, leading to dietary changes to fit in or seek approval.

Food choices on social media can be a form of self-expression. Users may adopt specific diets or eating patterns to align with the Fear of Missing Out (FOMO) on popular diets or food experiences. This can drive individuals to change their eating habits to participate in what is trending on social media. Their desired identity, which online communities and trends can influence (Putri et al., 2019).

Dietary choices are highly personal and can vary significantly among individuals, regardless of age, gender, or academic background. Factors like personal taste, lifestyle, and health goals often outweigh demographic characteristics. Research studies often show mixed results regarding the influence of age, gender, and study program on diet, suggesting that any observed differences may be coincidental rather than indicative of an accurate correlation (Heidari et al., 2023).

A study involving individuals aged 18-25 revealed that 38.8% of respondents use social media to access culinary content for food references and dining options. Additionally, 63.9% reported being easily influenced by culinary images and videos, while 54.6% indicated they would order food after seeing content on social media. The research also found a significant positive correlation ($r=0.294$, $p=0.002$) between smartphone usage intensity and eating behaviour (Angraini et al., 2023).

Considering the ingrained importance of social media use and the potential impact of excessive use on nutrition status among adolescents and the high prevalence of overweight and obesity among students in the Faculty of Public Health, Universitas Sumatera Utara. Therefore, future research is aimed to analyze the influence of social media on the eating pattern of students at the Faculty of Public Health, Universitas Sumatera Utara.

METHODS

This study employs a quantitative approach using descriptive analysis with a cross-sectional design to investigate social media's impact on students' eating patterns at the Faculty of Public Health, Universitas Sumatera Utara. The research will take place from September 2023 to May 2024.

The population was all the students of class 2021 at the Faculty of Public Health, Universitas Sumatera Utara, totalling 390 respondents. The sampling method uses the Slovin technique, totaling 80 respondents.

Intake was assessed using a Flemish Food Frequency Questionnaire, which asked about the frequency and portion sizes of various food items consumed over the past month, including both core foods (such as water, vegetables, and fruits) and non-core foods (like soft drinks, fried foods, chips, and candy).

The data collection technique used a 17-item Instrument of Social Media Use questionnaire and a 10-item Eating Patterns questionnaire with the instruments used in this study, namely a standardized questionnaire to measure independent variables. Univariate analysis was conducted to see the frequency and distribution of respondent characteristics of each variable, both the influence of social media use and diet. And chi-square analysis to see the relationship between dependent and independent variables.

RESULTS

Characteristics and research variables were obtained from a study involving 80 students at the Faculty of Public Health in Universitas Sumatera Utara. The distribution of respondents' characteristics is included gender, age, dan study program. Variable in the study based on the overview of the influence of social media use and eating patterns of students at the Faculty of Public Health in Universitas Sumatera Utara.

Table 1. Characteristics of Respondents (n=80)

Respondent Characteristics	Frequency	%
Age		
< 21 years old	57	71.20
> 21 years old	23	28.80
Gender		
Male	13	16.20
Female	67	83.80
Study Program		
Faculty of Public Health	79	98.80
Faculty of Nutrition	1	1.20

The distribution of respondent characteristics in the table above, the characteristics of respondents based on the most age are age less than 21 years old, as many as 57 respondents

(71,20%), and the minor age more than 21 years old, namely 23 respondents (28,80%). The characteristics of respondents based on the most gender are at the gender of female, as many as 67 respondents (83,80%), and the least gender male, namely 13 respondents (16,20%). The characteristics of respondents based on the most studied program are at the Faculty of Public Health, as many as 79 respondents (98,80), and the least are at the Faculty of Nutrition, namely 1 respondent (1,20%).

Table 2 Characteristics of Social Media Use and Eating Pattern (n=80)

Variable	Frequency	%
Social Media Use		
High	32	40.00
Less	48	60.00
Eating Pattern		
Good	46	57.50
Bad	34	42.50

The table above shows respondents who are highly using social media are 32 respondents (40,00%) and respondents who are rarely using social media are 48 respondents (60,00%). Based on the eating pattern variable, good eating patterns 46 respondents (57,50%) and bad eating patterns 34 respondents (42,50%)

Table 3. The Relationship between Characteristics of Respondents' Age and Eating Patterns of Students at the Faculty of Public Health in Universitas Sumatera Utara

Age	Eating Patterns				Total		P. Value
	Bad		Good		N	%	
	n	%	n	%			
< 21 Years old	33	57,9	24	42,1	57	100	0,910
≥ 21 Years old	13	56,5	10	43,5	23	100	

Characteristics of Respondents are one factor that might influence students' eating patterns. Therefore, a bivariate analysis test was carried out to determine how much influence the Age category has on the eating patterns of public health faculty students at Universitas Sumatera Utara.

Based on the data in Table 3, the results show that of the 57 respondents in the age category < 21 years, 33 respondents (57.9%) had a poor eating pattern, and 24 respondents (42.1%) had a good eating pattern. In the age category ≥ 21 years of 23 respondents, 13 respondents (56.5%) had a poor eating pattern, and 10 respondents (43.5%) had a good eating pattern. Based on the results of data analysis using the chi-square test, the p-value = 0.910 > α = 0.05, meaning that H_a is rejected and H_0 is accepted, it can be concluded that there is no relationship between the age of the respondent and the eating patterns of a student at the Faculty of Public Health Universitas Sumatera Utara in 2023.

Table 4. The Relationship between Characteristics of Respondents' Gender and Eating Patterns of Students at the Faculty of Public Health in Universitas Sumatera Utara

Gender	Eating Patterns				Total		P. Value
	Bad		Good		N	%	
	n	%	n	%			
Male	9	69,2	4	30,8	13	100	0,350
Female	37	55,2	30	44,8	67	100	

Characteristics of Respondents are one factor that might influence students' eating patterns. Therefore, a bivariate analysis test was carried out to determine how much influence the Gender category has on the eating patterns of public health faculty students at Universitas Sumatera Utara.

Based on the data in Table 4, the results show that of respondents in the male gender category, 9 respondents (69.2%) had a poor eating pattern, and 4 respondents (30.8%) had a good eating pattern. In the female gender category, 37 respondents (55.2%) had a poor eating pattern, and 30 (44.8%) had a good one.

Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.350 > \alpha = 0.05$, meaning that H_a is rejected and H_0 is accepted, it can be concluded that there is no relationship between the gender of the respondent and the eating patterns of a student at the Faculty of Public Health Universitas Sumatera Utara in 2023.

Table 5. The Relationship between Characteristics of Respondents' Study Program and Eating Patterns of Students at the Faculty of Public Health in Universitas Sumatera Utara

Study Program	Eating Patterns				Total		P. Value
	Bad		Good		N	%	
	n	%	n	%			
Public Health	46	58,2	33	41,8	79	100	0,242
Nutrition	0	0	1	100%	1	100	

Based on the data in Table 5, the results show that of the 79 respondents in the Bachelor of Public Health study program category, 46 respondents (58.2%) had a poor eating pattern, and 33 respondents (41.8%) had a good eating pattern. Of the 1 respondent in the S1 Nutrition category, 0 respondents (0%) had a poor eating pattern, and 1 respondent (100.0%) had a good eating pattern.

Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.242 > \alpha = 0.05$, meaning that H_a is rejected and H_0 is accepted, it can be concluded that there is no correlation between the respondent's study program and the eating patterns of a student at the Faculty of Public Health Universitas Sumatera Utara in 2023.

Table 6. The Relationship between Social Media Use and Eating Patterns of Students at the Faculty of Public Health in Universitas Sumatera Utara

The Influence of Social Media	Eating Patterns				Total		P. Value
	Bad		Good		N	%	
	n	%	n	%			
High	25	78,1	7	21,9	32	100	0,002
Low	21	43,8	27	56,2	48	100	

Social Media Use (such as TikTok, Instagram, Facebook, etc) is one factor that might influence students' eating patterns. Therefore, a bivariate analysis test was carried out to determine how much influence social media use variables have on the eating patterns of public health faculty students at Universitas Sumatera Utara.

Based on the data in Table 6, the results show that of respondents in the high social media influence category, 25 respondents (78.1%) had poor eating patterns, and 7 respondents (21.9%) had good eating patterns. In the low social media influence category, 21 respondents (43.8%) had a poor eating pattern, and 27 (56.2%) had a good one. Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.002 < \alpha = 0.05$, meaning that H_a is accepted and H_0 is rejected, it can be concluded that there is a correlation between the influence of media and eating patterns among student at the Faculty of Public Health Universitas Sumatera Utara in 2023.

DISCUSSION

The research results in Table 1 show that the most dominant age of respondents is respondents aged < 21 years, namely 57 respondents (71.2%). According to the Indonesian Internet Service Users Association, Internet users in Indonesia come from the young age group, aged 19 – 34 years, with around 49.52% of total users, and students are the largest population in that age range.

Based on the research results in Table 1, it is known that there were 13 male respondents (16.2%) and 67 female respondents (83.8%). There were more women in this study because female students dominated the Faculty of Public Health at Universitas Sumatera Utara. Hence, the opportunity to get a sample of women was greater than that of men. Based on an initial survey conducted by researchers, women are more likely to spend time using social media than men, who prefer to gather with friends outside the home, so there are more female respondents than male respondents.

There are two study programs at the Faculty of Public Health at Universitas Sumatera Utara, namely the Bachelor of Public Health and Bachelor of Nutrition study programs. The research results in Table 3 show that there were 79 respondents with a Bachelor of Public

Health study program (98.8%) and 1 respondent with a Bachelor of Nutrition study program (1.2%). There were fewer respondents in the nutrition study program because the nutrition study program itself is a new study program at the Faculty of Public Health in Universitas Sumatera Utara.

Social media influences various societies in allowing individuals to make their views and lives public) (Rajeev et al., 2015). Social media influence teenagers' social lifestyles, sometimes the impact can be negative (Shabir et al., 2017). Based on the results in Table 2 show that students from the Faculty of Public Health, Universitas Sumatera Utara, were included in the high social media influence category as many as 32 respondents (40%), and those included in the low social media influence category were 48 respondents (60%).

These results show tt respondents are respondents in the low social media influence category, followed by respondents in the high social media influence category. Eating patterns is a method and effort to regulate the type and amount of food consumed to maintain health, ensure adequate nutritional intake, and prevent or accelerate disease onset (Amaliyah et al., 2021).

Healthy eating patterns must contain carbohydrates, proteins, vitamins, fats and oils that suit the body's needs. Apart from that, the recommended eating pattern is three times a day. Snacks are also needed and consumed in the morning and afternoon when leading food is insufficient. Even though they are needed, snacks should not be consumed too much because they can interfere with appetite, which decreases when consuming the main meal.

The research results in Table 2 show that the distribution of eating patterns in the wrong category among students at the Faculty of Public Health, Universitas Sumatera Utara, was 46 respondents (57.5%). In contrast, the distribution of eating patterns in the excellent category among students at the Faculty of Public Health, Universitas Sumatera Utara, was 34 respondents (42.5%).

Healthy food has portions that must correspond to the size the body will consume (Leppänen et al., 2022). Individuals with an ideal body weight do not need to reduce or increase their food portions they just consume healthy foods according to their portions (Rodgers et al., 2022). If an individual is overweight, the portion of healthy food consumed must be reduced (Jane et al., 2017).

Research in 2019 conducted on teenagers, obtained data showing that 68.75% of teenagers have unhealthy eating habits, which are described as frequently buying and consuming snacks such as chips, consuming fast food soft drinks and rarely consuming vegetables and fruit (Sholikhah, 2019)

Based on the data in Table 3, the results show that respondents in the age category < 21 years, as many as 33 respondents (57.9%) have a poor eating pattern, and 24 respondents (42.1%) have a good eating pattern. In the age category ≥ 21 years, 13 respondents (56.5%) had a poor eating pattern, and 10 respondents (43.5%) had a good eating pattern.

Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.910 > \alpha = 0.05$, meaning that H_a is rejected and H_0 is accepted, it can be concluded that there is no correlation between the age of the respondent and the eating patterns of students at the Faculty of Public Health in Universitas Sumatera Utara 2023.

There is no correlation between the gender of respondents and the eating patterns of students because dietary choices are primarily influenced by personal preferences, lifestyle, and individual health goals rather than gender alone. While societal norms might suggest different eating habits between genders, many studies indicate that both male and female students can exhibit similar dietary behaviours based on factors such as cultural background, social influences, and access to food. Additionally, personal values and health consciousness often drive dietary decisions more significantly than gender, leading to diverse eating patterns among all students (Trevino et al., 2021).

Based on the data in Table 5, the results show that of respondents in the Bachelor of Public Health study program category, 46 respondents (58.2%) had a poor eating pattern, and 33 respondents (41.8%) had a good eating pattern. In the S1 Nutrition category, 0 respondents (0%) had a poor eating pattern, and 1 respondent (100.0%) had a good one. Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.242 > \alpha = 0.05$, meaning that H_a is rejected and H_0 is accepted, it can be concluded that there is no correlation between the respondent's study program and the eating patterns of students at the Faculty of Public Health in Universitas Sumatera Utara 2023.

There is no correlation between respondents' study programs and the eating patterns of students because dietary choices are primarily shaped by individual preferences, lifestyle, and social influences rather than academic discipline. While some study programs may emphasize nutrition, students often prioritize convenience, peer behaviour, and cultural factors when making food choices. Additionally, social influences and peer behaviours can play a significant role, leading to similar eating patterns across different academic disciplines (Steinsbekk et al., 2021).

Based on the research results in Table 6, it was found that respondents with high social media influence in the lousy eating patterns category were 25 respondents (78.1%). In the excellent eating patterns category, there were 7 respondents (21.9%). Meanwhile, there were

21 respondents with low social media influence in the lousy eating patterns category (43.8%) and 27 in the excellent eating patterns category (56.2%).

Based on the results of data analysis using the chi-square test, the $p\text{-value} = 0.002 < \alpha = 0.05$, meaning that H_a is accepted and H_0 is rejected, it can be concluded that there is a correlation between the influence of media and eating patterns of students at the Faculty of Public Health in Universitas Sumatera Utara 2023.

The study has some limitations, such as the sample diversity limitation. If the sample lacks diversity in demographics such as age, gender, socioeconomic status, or geographic location, the results may not apply to all groups. For example, dietary behaviours and social media use may vary significantly between urban and rural populations or among different cultural groups. There is a significant correlation between adolescents' social media behavior and their eating patterns. Social media platforms play a crucial role in shaping how adolescents perceive food and nutrition, often promoting trends, ideals, and lifestyles that directly influence their dietary choices. The visually driven nature of these platforms, emphasizing aesthetically pleasing food content, encourages adolescents to engage with and replicate popular food trends, such as specific diets, trendy ingredients, or viral recipes.

Social media also promotes food products to users (Modrzejewska et al., 2022). The advertisements that influencers or YouTubers present on social media show specific food products and recommend their purchase, and they are not always healthy (Packer et al., 2022). These are sponsored advertisements paid for by significant food concerns. Research to date provides sufficient evidence of the effectiveness of influencer marketing on consumption, primarily among adolescents (Lou et al., 2019).

The influence of individuals focused on selling potentially unhealthy products to children and adolescents is often underestimated. Influencers carefully craft their online images, promoting specific products and brands more for self-presentation than genuine use. This can create misleading perceptions about what is desirable or healthy, potentially shaping misguided attitudes toward health among young audiences (Boyd et al., 2007).

Taking these actions is crucial due to phenomena such as the "echo chamber," where online content is personalized to fit individual user profiles, leading to exposure only to information that aligns with existing interests and views. This selective exposure can reinforce pre-existing beliefs and limit the diversity of perspectives, particularly concerning for children and adolescents still developing critical thinking skills. Additionally, the trend of "mukbang," popular on platforms like TikTok and YouTube, involves hosts consuming various foods while engaging with their audience through multimodal communication. While entertaining,

mukbang can glamorize excessive eating and negatively influence body image perceptions. Together, these trends significantly impact young viewers' awareness, body image, and eating habits, underscoring the need for proactive measures to mitigate their effects. (Cinelli et al., 2021).

Moreover, social media fosters a sense of community among users, particularly within age groups that are highly engaged online (de Vries et al., 2019). Adolescents often seek validation and connection through likes, shares, and comments, which can lead to a desire to conform to the eating habits showcased by peers or influencers (Coates et al., 2019). This peer influence can create pressure to adopt specific diets or food choices that may not align with their preferences or nutritional needs, leading to positive and negative dietary behaviors (Scapaticci et al., 2022).

In summary, the interplay between adolescents' social media use and eating patterns is complex and multifaceted. It underscores the need for greater awareness and media literacy regarding food content online. Promoting healthy eating habits and critical engagement with social media can help adolescents make informed dietary choices that support their physical and mental well-being (Merino et al., 2024).

Public health policies and interventions play a crucial role in addressing the unhealthy eating patterns often observed among adolescents. Imagine a school where students learn not just about math and science but also about the importance of nutrition. Through engaging in educational programs, they become empowered to make informed dietary choices and understand the benefits of a balanced diet.

At the same time, the impact of regulations on marketing unhealthy foods should be considered. By limiting advertisements targeting adolescents, public health policies can reduce their exposure to poor dietary options, helping to reshape their perceptions of what constitutes "normal" eating.

Finally, addressing the mental health aspects related to eating behaviours is essential. By providing support and resources to tackle issues like body image and eating disorders, public health initiatives can help adolescents develop a healthier relationship with food. Public health policies can create a nurturing environment that promotes healthier eating among adolescents through education, access, regulation, community involvement, and mental health support. This holistic approach leads to improved dietary habits and paves the way for better public health outcomes in the long run (Hadi et al., 2023).

CONCLUSIONS

Social media influence at the Faculty of Public Health in Universitas Sumatera Utara is dominated by the low category, namely 48 respondents (60%). Furthermore, most students at the Faculty of Public Health in Universitas Sumatera Utara have poor eating patterns, namely 46 respondents (57.5%). There is no correlation between individual characteristics and the eating patterns of students at the Faculty of Public Health, Universitas Sumatera Utara, and there is a correlation between the influence of social media and the eating patterns of students at the Faculty of Public Health, Universitas Sumatera Utara in 2023.

To improve eating habits among students at the Faculty of Public Health at Universitas Sumatera Utara, it is essential to implement workshops on assessing nutritional information from social media, launch interactive healthy eating campaigns, and establish peer support groups for sharing recipes. Additionally, providing nutrition counselling, integrating nutrition education into the curriculum, and collaborating with reputable health influencers can enhance positive dietary choices. A feedback mechanism will refine these initiatives to meet students' needs better.

REFERENCE

- Amaliyah, M., Rahayu, D. S., Luthfiah, N., & Dwi, K. (2021). Pola Konsumsi Makan Remaja Di Masa Pandemi Covid-19. *Jurnal Tata Boga*, 10(1), 129–137.
- Angraini, D. I., Saftarina, F., & Wijaya, S. M. (2023). The Analysis of Factors to Predict Eating Behavior among Adolescent Girls: A Community-Based Study in Indonesia. *Jurnal Gizi Dan Dietetik Indonesia (Indonesian Journal of Nutrition and Dietetics)*, 11(2), 62. [https://doi.org/10.21927/ijnd.2023.11\(2\).62-76](https://doi.org/10.21927/ijnd.2023.11(2).62-76)
- Armita, D., & Azizah, A. (2024). *Peluang Transformasi Ekonomi Digital Bagi Usaha Kecil dan Menengah*. 1–7.
- Boyd, D. M., & Ellison, N. B. (2007). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230. <https://doi.org/10.1111/j.1083-6101.2007.00393.x>
- Cinelli, M., de Francisci Morales, G., Galeazzi, A., Quattrociochi, W., & Starnini, M. (2021). The echo chamber effect on social media. *Proceedings of the National Academy of Sciences of the United States of America*, 118(9). <https://doi.org/10.1073/pnas.2023301118>
- Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P., & Boyland, E. J. (2019). Food and Beverage Cues Featured in YouTube Videos of Social Media Influencers Popular With Children: An Exploratory Study. *Frontiers in Psychology*, 10(September), 1–14. <https://doi.org/10.3389/fpsyg.2019.02142>
- de Vries, D. A., Vossen, H. G. M., & van der Kolk – van der Boom, P. (2019). Social Media and Body Dissatisfaction: Investigating the Attenuating Role of Positive Parent–Adolescent Relationships. *Journal of Youth and Adolescence*, 48(3), 527–536. <https://doi.org/10.1007/s10964-018-0956-9>
- Hadi, A. J., Cahyono, D., Mahendika, D., & AMAK, K. L. (2023). Membangun Komunitas yang Lebih Sehat: Meningkatkan Akses ke Layanan Kesehatan, Nutrisi, Kebugaran Terhadap Kesehatan Mental. *Jurnal Pengabdian West Science*, 2(05), 345–353. <https://doi.org/10.58812/jpws.v2i5.374>
- Heidari, M., Khodadadi Jokar, Y., Madani, S., Shahi, S., Shahi, M. S., & Goli, M. (2023).

- Influence of Food Type on Human Psychological–Behavioral Responses and Crime Reduction. *Nutrients*, 15(17). <https://doi.org/10.3390/nu15173715>
- Jane, M., Hagger, M., Foster, J., Ho, S., Kane, R., & Pal, S. (2017). Effects of a weight management program delivered by social media on weight and metabolic syndrome risk factors in overweight and obese adults: A randomized controlled trial. *PLoS ONE*, 12(6), 1–20. <https://doi.org/10.1371/journal.pone.0178326>
- Kemendes. (2018). Laporan Riskesdas 2018 Nasional.pdf. In *Lembaga Penerbit Balitbangkes* (p. hal 156).
- Leppänen, M. H., Lehtimäki, A. V., Roos, E., & Viljakainen, H. (2022). Body Mass Index, Physical Activity, and Body Image in Adolescents. *Children*, 9(2). <https://doi.org/10.3390/children9020202>
- Limardi, S., Widinugroho, S., & Ribuan, C. (2019). Penggunaan Media Informasi yang Bijak untuk Anak Usia Dini di Era Digital. *Cermin Dunia Kedokteran*, 46(11), 702–706. <http://www.cdkjournal.com/index.php/CDK/article/view/415>
- Lou, C., & Kim, H. K. (2019). Fancying the New Rich and Famous? Explicating the Roles of Influencer Content, Credibility, and Parental Mediation in Adolescents' Parasocial Relationship, Materialism, and Purchase Intentions. *Frontiers in Psychology*, 10(November), 1–17. <https://doi.org/10.3389/fpsyg.2019.02567>
- Merino, M., Tornero-Aguilera, J. F., Rubio-Zarapuz, A., Villanueva-Tobaldo, C. V., Martín-Rodríguez, A., & Clemente-Suárez, V. J. (2024). Body Perceptions and Psychological Well-Being: A Review of the Impact of Social Media and Physical Measurements on Self-Esteem and Mental Health with a Focus on Body Image Satisfaction and Its Relationship with Cultural and Gender Factors. *Healthcare (Switzerland)*, 12(14). <https://doi.org/10.3390/healthcare12141396>
- Modrzejewska, A., Czepczor-Bernat, K., Modrzejewska, J., Roszkowska, A., Zembura, M., & Matusik, P. (2022). #childhoodobesity – A brief literature review of the role of social media in body image shaping and eating patterns among children and adolescents. *Frontiers in Pediatrics*, 10(August). <https://doi.org/10.3389/fped.2022.993460>
- Moore Heslin, A., & McNulty, B. (2023). Adolescent nutrition and health - Characteristics, risk factors, and opportunities of an overlooked life stage. *Proceedings of the Nutrition Society*, 142–156. <https://doi.org/10.1017/S0029665123002689>
- Packer, J., Russell, S. J., Siovolgyi, G., McLaren, K., Stansfield, C., Viner, R. M., & Croker, H. (2022). The Impact on Dietary Outcomes of Celebrities and Influencers in Marketing Unhealthy Foods to Children: A Systematic Review and Meta-Analysis. *Nutrients*, 14(3). <https://doi.org/10.3390/nu14030434>
- Panggabean, Bertha, dkk. (2024). Psikologi Perkembangan Anak Usia Balita – Lansia Pada Studi Kasus Yang Ada Di Masyarakat Sekitaran Parongil Dairi. *Al-Furqan : Jurnal Agama, Sosial, Dan Budaya*, 3(3), 918.
- Putri, L. S., Purnama, D. H., & Idi, A. (2019). Gaya Hidup Mahasiswa Pengidap Fear of Missing Out di Kota Palembang. *Jurnal Masyarakat & Budaya*, 21(2), 129–148.
- Qutteina, Y., Hallez, L., Raedschelders, M., De Backer, C., & Smits, T. (2022). Food for teens: How social media is associated with adolescent eating outcomes. *Public Health Nutrition*, 25(2), 290–302. <https://doi.org/10.1017/S1368980021003116>
- Rajeev MM, & Jobilal. (2015). Effects of Social Media on Social Relationships: A Descriptive Study on the Impact of Mobile Phones among Youth Population. *International Research Journal of Social Sciences*, 4(2), 11–16.
- Rodgers, R. F., Wertheim, E. H., Paxton, S. J., Tylka, T. L., & Jennifer, A. (2022). *Version of Record*: <https://www.sciencedirect.com/science/article/pii/S174014452200064X>. 1–27.
- Scapaticci, S., Neri, C. R., Marseglia, G. L., Staiano, A., Chiarelli, F., & Verduci, E. (2022). The impact of the COVID-19 pandemic on lifestyle behaviors in children and adolescents:

- an international overview. *Italian Journal of Pediatrics*, 48(1), 1–17. <https://doi.org/10.1186/s13052-022-01211-y>
- Shabir, G., Mahmood, Y., Hameed, Y., & Safdar, G. (2017). The impact of social media on changing mind-set of the youth a case study of chennai city. *International Journal of Latest Trends in Engineering and Technology*, 9(2), 132–151. <https://doi.org/10.21172/1.92.01>
- Sholikhah, D. M. (2019). Nutrition Status in Adolescent (Case Study At Yasmu Manyar. *UNES Journal of Scientech Research (UJSR)*, 4(1), 27–34.
- Steinsbekk, S., Wichstrøm, L., Stenseng, F., Nesi, J., Hygen, B. W., & Skalická, V. (2021). The impact of social media use on appearance self-esteem from childhood to adolescence – A 3-wave community study. *Computers in Human Behavior*, 114(7491). <https://doi.org/10.1016/j.chb.2020.106528>
- Trevino, S. D., Kelly, N. R., Budd, E. L., & Giuliani, N. R. (2021). Parent Gender Affects the Influence of Parent Emotional Eating and Feeding Practices on Child Emotional Eating. *Frontiers in Psychology*, 12(September), 1–12. <https://doi.org/10.3389/fpsyg.2021.654237>
- Yarah, S., & Benita, M. (2021). Hubungan Informasi Konsumsi Junk Food dan Peran Teman Sebaya dengan Kejadian Obesitas pada Remaja Putri di SMA Abulyatama Kabupaten Aceh Besar. *Jurnal Aceh Medika*, 5(2), 87–94. <http://jurnal.abulyatama.ac.id/index.php/acehmedika>