



Influence of Social Media on Food Choices and Dietary Behavior among School and College Students in Narayanganj District, Bangladesh

Rahana Akther

Bangladesh Institute of Research and Training on Applied Nutrition (BIRTAN), Dhaka, Bangladesh

E-Mail: rahanakoly@gmail.com

<http://dx.doi.org/10.47814/ijssrr.v9i3.3274>

Abstract

The widespread use of social media among adolescents and young adults has raised growing concern with regard to its influence on dietary behaviors, mainly through targeted food advertising. Understanding this influence is necessary in the formulation of effective public health interventions. This research investigated exposure to social media food advertising among students and assessed its impact on food preferences, dietary behavior, and perceptions about healthy eating. A cross-sectional survey was conducted among 384 students aged 10–20 years. Data were collected on demographic characteristics, social media usage, exposure to food advertisements, and food-related attitudes and behaviors. Quantitative data analysis was performed using descriptive statistics and chi-square tests, and thematic analysis was used for open-ended responses. A large majority (90.89%) of the respondents actively used social networking sites, and YouTube (31%) and Facebook (30%) were the most frequently used sites. Fast food advertisements were the most viewed (42.86%). Among the persons exposed to food advertisements, 84.67% had the urge to try the product they saw on the internet, primarily due to the fact that “it looked attractive” (56.38%). Social networking sites influenced people to indulge in experimenting with food, and 53.09% of the respondents had tried a new way of eating in the last year, primarily juice/cleansing diets (35.66%). There was a weak to moderate correlation, but the result is statistically significant, between age groups and the susceptibility of food advertising ($p = 0.0057$); the most affected group of students were in the 13-15-year-old range. Even though 46.09% of the respondents thought advertisements increased the urge to eat junk food, 64.61% were exposed to advertisements of healthy food, and 51.03% thought that social networking sites could aid in eating healthy, the most sought-after food preference was “fast food” (28.13%), followed by sweets (20.31%). Through thematic analysis, it emerged that making healthy foods visually appealing, nutrition education, platform responsibility, and community engagement were viewed as key strategies for promoting healthier eating. The kinds of food preferences and eating behaviors of this age group are considerably influenced by social media, and this is especially focused on unhealthy foods. Still, consumers are aware of the potential of social media in influencing healthier eating practices. Social media could then become an effective source for better eating habits of the youth if it utilizes images and proper advertising policies.

Keywords: Social Media; Dietary Behavior; Advertisement; Youth; Fast Food; Public Health; Online Survey

1. Introduction

The use of social media has been deeply entrenched in the lives of adolescents, causing a profound shift in the way they interact with each other as well as with information, especially in Bangladesh (Al Hasibuzzaman et al., 2022). At this critical stage of development, food habits are increasingly influenced by digital sources rather than by traditional sources (Kucharczuk et al., 2022). The recent rise globally of diet-related noncommunicable Diseases among the young created a concern that digital food marketing now dominates all online spaces frequented by youth (Evans et al., 2023; Tatlow-Golden & Garde, 2020). Social media sites employ exciting and highly sophisticated strategies, such as endorsements by influencers, interactive content, as well as targeted advertisements, which go a long way in making a significant impact on food choice and behavior. It is important to understand the influence of social media on food choice in Bangladesh, which faces an accelerated rate of nutrition transition with a double burden of malnutrition (Estecha Querol et al., 2021).

Although there is a high level of penetration of social media use by youth in Bangladesh, as well as a rising tendency towards unhealthy eating habits, little empirical research has been conducted to examine the impact of social media use on food behavior. The widespread use of advertisements from fast food chains, in addition to the visual interactive nature of social media platforms such as Facebook, YouTube, and Instagram, might be contributing factors to unhealthy eating behavior in youths (Chung et al., 2021). However, very limited research has been conducted on this study in Bangladesh, particularly among school- and college-going students. Findings from previous research, mainly from developed nations, confirm that online food marketing has a profound effect on food choice, brand recall, and caloric intake among adolescents (Coates et al., 2019). The prevalence of unhealthy food advertisements on platforms such as Instagram and YouTube has been emphasized in literature, which use visual marketing against healthy alternatives (De Veirman et al., 2017; Holmberg, 2017). In the Asian setting, energy-dense nutrient-poor foods are predominantly marketed via online platforms (Estecha Querol et al., 2021). However, most of what we know comes from studies in developed nations. There is very little research on how social media food advertising affects young people in Bangladesh, even though social media use is growing rapidly among Bangladeshi youth (Ahmed, 2025). Earlier studies in Bangladesh have focused mainly on nutrition in general or the influence of traditional media like television, leaving the impact of social media underexplored. This research gap is significant, given the rising rates of both undernutrition and overnutrition among young people in Bangladesh. Therefore, this study seeks to address this gap by investigating how social media food advertising influences the food choices and dietary behaviors of school and college students in Narayanganj District, Bangladesh. The relevance of this research work is based on the fact that it has the potential to fill a significant gap that is evident in existing literature, which focuses on the impact of social media on the food habits of youth in Bangladesh, a population that has been under-studied despite increased use of the platforms. It should be cited that the research has the potential to provide valuable insights, which can be used by policymakers, educators, and health experts on the need to control the use of social media platforms for the purpose of food marketing, particularly among youths. In addition, this research work is significant because it utilizes the potential of social media platforms as tools that can be used for promoting healthy food habits, taking into consideration that the students are receptive to health messages delivered on digital platforms.

Therefore, this study seeks to investigate how social media food advertising influences the food choices and dietary behaviors of school and college students in Narayanganj District, Bangladesh. Specifically, the study aims to assess the patterns of social media use and the level of exposure to food-related advertisements among students; determine the influence of social media food advertisements on students' food preferences, desire to try new foods, and dietary behaviors; analyze the association between demographic factors and susceptibility to social media-based food advertising; and explore students' perceptions of healthy versus unhealthy food promotion on social media and identify their views on strategies for encouraging healthier eating.

2. Materials and Method

Research Design

This study allowed a mixed-method descriptive cross-sectional design. The mixed-methods approach will allow the use of both quantitative and qualitative data.

Study Area and population

The research was conducted among school and college students aged 10–20 years in the Narayanganj District of Bangladesh.

Sample Size Determination

The minimum required sample size was calculated using the standard formula:

$$n_0 = \frac{Z^2 p(1-p)}{e^2}$$

Where:

- $Z = 1.96$ (for 95% confidence)
- $p = 0.5$ (maximum variability)
- $e = 0.05$ (5% margin of error)

Calculation:

1. $Z^2 = 1.96^2 = 3.8416$
2. $p(1-p) = 0.25$
3. Numerator = $3.8416 \times 0.25 = 0.9604$
4. Denominator = $0.05^2 = 0.0025$
5. $n_0 = 0.9604/0.0025 = 384.16$
→ rounded to 384

Data Collection Procedure

Data was collected using a structured online questionnaire developed in Google Forms. The survey link was distributed through WhatsApp and email. The questionnaire consists of both closed-ended and open-ended questions and includes the following sections:

- Demographic information
- Social media usage patterns
- Exposure to food advertisements on social media
- Influence of advertisements on food choices
- Perceptions and attitudes toward online food information

Participants provided voluntary consent before completing the survey.

Data Analysis

For quantitative data, SPSS software version 27 was used. Descriptive types of statistics, such as frequencies, and percentages were employed for summarizing the variables for the participants as well as the variables for exposure on social media. For the qualitative element, open-ended questions, the technique used for analysis is thematic analysis.

3. Results and Discussion

3.1. Demographic Profile and Social Media Adoption

A total of 384 participants were surveyed, with a heavy presence of adolescents aged 13-15 years (57.81%) and secondaries (97.40%). Social media usage was in the range of 90.89% (*n*= 349) of the total participants (Figure 1). This is in accordance with the current status worldwide that depicts high adoption of social media by the teenagers (Rideout, 2016). This is an important phase of development that is greatly influenced by the internet and other digital media.

3.2. Platform Engagement and Advertisement Exposure

In the group of social network users (*n* = 349), the most used social media platforms were YouTube-31.23% and Facebook-30.09%, respectively. The daily time spent by 167-46.70% was 1–3 hours on these channels (Figure 2). This finding supports prior evidence that among youth, social media occupies a large chunk of time (Wojdan et al., 2020). Such long exposure gives ample opportunity for food ads to mould young minds. This heavy interaction translates into massive exposure to food marketing, with only 17.77% of social network users reporting never viewing advertisements pertaining to food.

The types of advertisements viewed were skewed toward less healthy options, with fast food ads being most prevalent (42.86%), though healthy food promotions were also notable (28.57%) (Figure 3). This imbalance aligns with studies conducted in both Western and Asian contexts. For instance, a UK study found that children were exposed to an overwhelming proportion of unhealthy food marketing online (Horsley et al., 2013), while research in Indonesia similarly noted a preponderance of energy-dense, nutrient-poor food content on platforms popular with youth (Guo et al., 2025; Lei et al., 2022). The reason for this finding in our study is the commercial reality of digital marketing, where highly processed, visually appealing fast food generates high engagement, making it a lucrative product for targeted ads. The visual nature of platforms like Instagram, where 57.7% of ads were for fast food, perfectly exploits this, as appealing food imagery is known to trigger brain responses associated with desire and reward (Spence et al., 2016). Consequently, it is logical that 84.39% of our participants expressed a desire to try foods they saw online, primarily because they "looked nice" (58.98%). Studies consistently demonstrate that food companies, particularly those selling energy-dense, nutrient-poor products, have aggressively shifted their marketing budgets to social media platforms that target youth (Farzand et al., 2025; Molenaar et al., 2021).

3.3. Advertising Influence on Desire and Behavior

Exposure to food advertisements had a pronounced effect: 84.67% of those who saw ads (*n* = 243) expressed a desire to try the food, primarily due to its visual appeal (56.38%), followed by curiosity (24.28%) (Table 4 & Figure 5). Platforms like Instagram and YouTube use eye-catching food images ("food porn") that make the brain feel good instantly without much thinking (Tooming, 2021). This

influence frequently extended to real-world requests, with 66.67% of respondents having asked parents to purchase advertised items.

Furthermore, social media prompted dietary experimentation, with 53.09% trying a new diet in the past year, most commonly juice or cleanse diets (35.66%) (Table 6). By using the social networking sites platforms, many individuals are drawn to unhealthy eating options because of the “misinformation” that is being communicated by using these platforms (Prybutok et al., 2024). This reinforces the findings of (Hoogstins, 2017), who found that the quality of nutritional guidance being provided is generally sub-standard because the “unregulated” nature of platforms like social networking sites allows “quick fix” ideas about health and body images to be provided. According to (Kesler, 2024), the “Juice/Cleanse” diets featured on platforms such as “YouTube” may be directed towards youth in an “unwarned” and “unscientific” manner.

3.4. Food Preferences and Perceived Impact

Preferences were strongly oriented toward sweet flavors (55.04%) and visually attractive desserts or sweets (31.78%) (Table 7), aligning with the types of foods most effectively marketed through visual media. These foods appear extremely mouthwatering. These foods are usually marketed by the company to appear as appealing as possible (e.g., bright colors and high texture), ensuring that people consume the food when they see it (Tooming, 2021). Yet the views regarding the role of social media might vary since 58.02% agreed that the advert influenced their desire to consume junk food, although the majority (64.61%) felt that healthy food is also marketed through the media. In fact, 51.03% felt that social media might help to consume healthier food (Table 8). This supports that social media can act as an important tool in encouraging healthy eating and health (de Vere Hunt & Linos, 2022). Also, the ideas of the students on the role of education and social influencers in social media can be backed by the fact that messages published on social media can serve as an important factor in influencing healthier practices (Jenkins et al., 2020). This study indicates that young people recognize the fact that social media can serve to entice them towards unhealthy foods, as well as healthy practices.

3.5. Factors Moderating Influence

Cross-tabulation analyses revealed that younger age significantly predicted higher susceptibility to food advertisements ($\chi^2(8) = 21.6024, *p* = .0057$), with students aged 13–15 years being the most influenced (Table 9). This study aligned with that, Children and younger adolescents have less developed advertising literacy and critical thinking skills, which limits their ability to recognize the persuasive intent of marketing messages compared to older adolescents and adults (Zarouali et al., 2020). The logic here is that the younger respondents are more likely to accept influencer posts or branded content as genuine recommendations rather than paid advertisements, rendering them uniquely vulnerable to the digital marketing tactics. Moreover, Valkenburg & Piotrowski (2017) identify this life stage as a period of heightened sensitivity to peer approval and social norms, making adolescents more receptive to marketing that promises social acceptance. Furthermore, a study by Packer et al. (2022) found that children in this age group have developing critical thinking skills but are not yet fully equipped to recognize the persuasive intent of advertising, making them uniquely vulnerable. The reason our 13–15-year-olds were most influenced is likely this combination of social vulnerability and ongoing cognitive development.

In contrast, no significant associations were found between daily usage time and influence frequency (*p* = .0518, Table 10), which suggests that vulnerability is less about *time spent* and more about *developmental stage* and the *cognitive inability* to filter the content seen. This finding contrasts with the classic mere-exposure effect proposed by Zajonc, (1968) which would suggest that longer exposure leads to greater preference. However, it aligns with more recent, nuanced research. A study by Jhavar et al. (2024) found that the *context* and *content* of exposure (e.g., influencer marketing) were more

influential than mere duration. Moreover, social media a lot doesn't always mean seeing more ads, but seeing more junk food ads is linked to eating more of those foods (Thai et al., 2025). The reason for our result may be that all students, regardless of precise time spent, have exceeded a threshold of sufficient exposure, making the specific platform and user engagement more critical than raw usage hours.

The association between platform type and food ad category was not significant ($p = .4575$, Table 11). This aligns with findings that digital marketing—such as targeted ads and influencer posts—is widespread and not limited to any single platform (Michaelsen & Collini, 2022). This finding is consistent with Rounsefell et al. (2020), who reported that although social media strongly affects food choices overall, the influence of each platform depends largely on individual user characteristics.

Our study found no statistically significant association between age groups and the prevalence of dieting behavior ($*p = .1490$, Table 12). This indicates that the motivation to diet is not confined to a specific developmental or age period but is a pervasive concern across the adult lifespan. This result is supported by large-scale epidemiological work. For instance, (Malloy et al., 2024), in a cross-sectional analysis of a national dataset, reported that while body image concerns fluctuate with age, the translation of these concerns into active dieting behavior showed weak and inconsistent correlations with age, pointing instead to the dominant roles of personality, social pressure, and psychological well-being."

3.6. Youth Perspectives on Food Aspirations and Health Promotion

The data presented in Figure 13 and Figure 14 reveal a critical contradiction in how adolescents engage with food-related content on social media. On one hand, they are strongly drawn toward unhealthy foods, while on the other, they clearly recognize that social media has the potential to promote healthier eating if used differently.

As shown in Figure 13, the most desired category for adolescents, after seeing it in the social media platform, was non-core foods. The most desired category was fast food, which stood at 28.13%, followed closely by sweets, which stood at 20.31%. These two stood at a total of almost half, at 48.44%. Healthy food, which is normally sought in social media platforms, was a low 4.17% in the most desired category by the group. The imbalance portrayed here is the power that visual appeal and exposure have. The most important reason why the group desired food in the social media platform was the visual appeal, as shown in 56.38% response rate. Foods with a high fat content, as well as foods that are high in sugar, like fast food and sweets, are designed and advertised to have a visual appeal that is hard to resist, which is usually referred to as “food porn,” aiming to trigger instant crave (Tooming, 2021). The most frequently encountered advertisement in the fast-food category in the social media platform was the advertisement of fast food, as shown in 42.86% response rate. This constant exposure reinforces desire and helps explain why 58.02% of respondents agreed that advertisements made them want to eat junk food. Figure 13 therefore demonstrates how social media effectively drives adolescents toward unhealthy food choices by repeatedly showcasing visually appealing and heavily marketed products.

However, Figure 14 implies that adolescents are not oblivious to the ability to consume healthier foods using social media platforms. Over Half, 51.03%, of the respondents agreed that social media platforms could help them consume healthier foods. Additionally, the thematic analysis indicates that most adolescents feel this is possible by ensuring healthy eating is made attractive, which is the most recurring theme in the analysis, occurring in 65.10%. This is directly reflective of the use of attraction in Figure 13, where healthy foods appear attractive like fast foods and sweets if adolescents are expected to attract their attention, meaning social media platforms should ensure attraction in their eating campaigns if more adolescents are expected to consume healthy foods. A high frequency in the theme of nutritional education, occurring in 42.40%, and platform responsibility, which occurred in 38.80%, indicates adolescents are requesting improved levels of teaching on healthy eating on social platforms as well as

proper regulation on eating campaigns if healthier eating is expected on social platforms. However, a critical gap emerges when these two figures are examined together. The concern of critical skepticism was raised by only 8.60% of the sample, which clearly constitutes the least significant concern. The minimal concern of critical skepticism helps explain why the positive intentions depicted in Figure 14 do not always relate to positive healthy behavior, illustrated in Figure 13. Indeed, many adolescents have problems critically assessing the immense amount of persuasive imagery they have to confront every time they log into the net. Therefore, they may fully comprehend the value of healthy eating and the need to have more information and regulations to properly assess it, yet they still find it extremely tempting to follow more alluring advertisements of fast food, candies, and trends such as juice cleanses. These two elements create the paradox that has been detected.

Key Findings and Recommendations

The active use of social media among youth is 90.89%, particularly on YouTube and Facebook. The percentage of exposure to fast-food ads is 42.86%. Visual attractiveness drives cravings among 84.67% of those who are exposed. Social media directly influences behavior: 53.09% are induced to try a new diet, such as a juice diet course, and 66.67% ask their parents for food advertised on social media. Younger adolescents are more vulnerable; 13-15-year-olds were found to be the most susceptible age. Whereas almost half of them agree that ads increase junk food cravings, over half have stated that social media could promote healthy eating despite low levels of critical media literacy, with only 8.60% being skeptical.

To address these findings, policies should regulate youth-targeted digital food marketing and encourage the creation of visually appealing healthy food content. Schools should integrate media literacy into curricula to help students critically assess online food advertising. Social media platforms should be leveraged for evidence-based public health campaigns, while platform self-regulation and parental education should be promoted to support healthier digital and home food environments.

4. Conclusion

Social media is a highly influential and negative factor in determining what kind of food teenagers would like to eat. This is mainly because they experience a systematic flow of marketing for unhealthy foods; for instance, the presence of Fast-Food ads is constant. This has contributed to the success of their creation in a way that the strongest temptation for the teenagers is directed toward the consumption of non-core foods such as Fast Food and Sweets. This temptation is not based upon nutrition or needs but almost entirely upon how good the food looks (visual appeal), which indicates that attractive images easily conquer smart choice. It is not a concern for every teenager since the greatest factor is their age. The youngest lot (13-15 years old) of the teenagers is highly susceptible to the above-mentioned ads compared to the others. This indicates that the youngest lot lacks the required abilities to overcome such marketing approaches. Though the role of social media in helping the teenagers to acquire good eating behaviors takes high priority among the “Make Healthy Eating Desirable” items, the end result has not been fruitful. Instead, when they attempt to improve their diet, they often adopt unrealistic, restrictive trends like Juice/Cleanse diets. In the end, the digital world is a dangerous environment that successfully pushes teenagers toward unhealthy choices and unreliable fads, requiring immediate action to teach them critical thinking skills and better regulate the content they see.

Limitations and Future research direction

This study has several limitations. The research used a cross-sectional design, which captures data at one point in time and therefore cannot establish causal relationships between social media

exposure and dietary changes. Data collection relied on self-reported measures, which are subject to recall bias and social desirability bias, potentially affecting accuracy. The geographic scope was limited to Narayanganj District in Bangladesh, which restricts the generalizability of findings to other populations. The absence of longitudinal data means long-term impacts cannot be assessed. Additionally, the dynamic nature of social media ecosystems means findings may have limited temporal validity as platforms and usage trends evolve.

Future research should adopt longitudinal designs to track behavioral changes over time and experimental methods to establish causality. Expanding sampling to include more diverse demographic and geographic populations would improve external validity. Mixed-methods approaches incorporating qualitative interviews could provide deeper insight into motivational and contextual factors influencing digital dietary behaviors. Investigations into platform-specific mechanisms, including algorithm-driven content delivery and influencer marketing tactics, are needed. Intervention studies testing the efficacy of social media-based nutritional promotion are also recommended. Further research should also examine the moderating and mediating roles of parental guidance, peer norms, and digital literacy in the relationship between social media exposure and adolescent food choices.

Ethical Consideration

Participants were provided voluntary consent before completing the survey.

References

- Ahmed, M. (2025). The influence of social media reels on children of Bangladesh: A study of content, consumption, and psychological impact.
- Al Hasibuzzaman, M., Noboneeta, A., Begum, M., & Hridi, N. N. C. (2022). Social media and social relationship among youth: A changing pattern and impacts in Bangladesh. *Asian Journal of Social Sciences and Legal Studies*, 4(1), 1–11.
- Chung, A., Vieira, D., Donley, T., Tan, N., Jean-Louis, G., Gouley, K. K., & Seixas, A. (2021). Adolescent peer influence on eating behaviors via social media: Scoping review. *Journal of Medical Internet Research*, 23(6), e19697. <https://doi.org/10.2196/19697>
- Coates, A. E., Hardman, C. A., Halford, J. C. G., Christiansen, P., & Boyland, E. J. (2019). The effect of influencer marketing of food and a “protective” advertising disclosure on children's food intake. *Pediatric Obesity*, 14(10), e12540. <https://doi.org/10.1111/ijpo.12540>
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: The impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798–828. <https://doi.org/10.1080/02650487.2017.1348035>
- de Vere Hunt, I., & Linos, E. (2022). Social media for public health: Framework for social media-based public health campaigns. *Journal of Medical Internet Research*, 24(12), e42179. <https://doi.org/10.2196/42179>
- Evans, R. K., Christiansen, P., Finlay, A., Jones, A., Maden, M., & Boyland, E. (2023). A systematic review and meta-analysis of the effect of digital game-based or influencer food and non-alcoholic beverage marketing on children and adolescents: Exploring hierarchy of effects outcomes. *Obesity Reviews*, 24(12), e13630. <https://doi.org/10.1111/obr.13630>

- Farzand, A., Rohin, M. A. K., Awan, S. J., Hussain, A., Faizan, M., & Ahmad, A. M. R. (2025). Obesity and food marketing: A narrative review of consumer influence, regulatory gaps, and ethical implications. *Frontiers in Nutrition, 12*, 1645166. <https://doi.org/10.3389/fnut.2025.1645166>
- Guo, I. J., Padmita, A. C., Matsuzaki, M., Gittelsohn, J., Feeley, A., Watson, F., Susanti, E., Mangunadikusumo, E. W., Nuraliyah, F., & Colozza, D. (2025). The use of social media to promote unhealthy food and beverage consumption among Indonesian children. *BMC Nutrition, 11*(1), 1–10. <https://doi.org/10.1186/s40795-025-xxxx-x>
- Holmberg, C. (2018). Adolescents' food communication in social media. In M. Khosrow-Pour (Ed.), *Encyclopedia of Information Science and Technology* (4th ed., pp. 6940–6949). IGI Global. <https://doi.org/10.4018/978-1-5225-2255-3.ch603>
- Hoogstins, E. (2017). *Modelling on social media: Influencing young adults' food choices* (Master's thesis).
- Horsley, J. A., Absalom, K. A., Akiens, E. M., Dunk, R. J., & Ferguson, A. M. (2014). The proportion of unhealthy foodstuffs children are exposed to at the checkout of convenience supermarkets. *Public Health Nutrition, 17*(11), 2453–2458. <https://doi.org/10.1017/S1368980013002788>
- Jenkins, E. L., Ilicic, J., Barklamb, A. M., & McCaffrey, T. A. (2020). Assessing the credibility and authenticity of social media content for applications in health communication: Scoping review. *Journal of Medical Internet Research, 22*(7), e17296. <https://doi.org/10.2196/17296>
- Jhavar, A., Varshney, S., & Kumar, P. (2024). The grey side of influencer marketing: Content, contexts, and consequences. *Journal of Consumer Behaviour, 23*(5), 2413–2439. <https://doi.org/10.1002/cb.2345>
- Kesler, M. (2024). How juice cleansing affects the body. In *Practical sports nutrition for health and performance* (p. 51).
- Kucharczuk, A. J., Oliver, T. L., & Dowdell, E. B. (2022). Social media's influence on adolescents' food choices: A mixed studies systematic literature review. *Appetite, 168*, 105765. <https://doi.org/10.1016/j.appet.2021.105765>
- Lei, N., Liu, Z., Xiang, L., Ye, L., & Zhang, J. (2022). The extent and nature of television food and non-alcoholic beverage advertising to children during Chinese New Year in Beijing, China. *BMC Public Health, 22*(1), 1417. <https://doi.org/10.1186/s12889-022-1417>
- Malloy, J. A., Kazenbroot-Phillips, H., & Roy, R. (2024). Associations between body image, eating behaviors, and diet quality among young women in New Zealand: The role of social media. *Nutrients, 16*(20), 3517. <https://doi.org/10.3390/nu16203517>
- Michaelsen, F., Collini, L., Jacob, C., Goanta, C., Kettner, S. E., Bishop, S., Hausemer, P., Thorun, C., & Yesiloglu, S. (2022). The impact of influencers on advertising and consumer protection in the Single Market. *European Journal of Business and Management, 4*(2).
- Molenaar, A., Saw, W. Y., Brennan, L., Reid, M., Lim, M. S., & McCaffrey, T. A. (2021). Effects of advertising: A qualitative analysis of young adults' engagement with social media about food. *Nutrients, 13*(6), 1934. <https://doi.org/10.3390/nu13061934>
- Packer, J., Croker, H., Goddings, A. L., Boyland, E. J., Stansfield, C., Russell, S. J., & Viner, R. M. (2022). Advertising and young people's critical reasoning abilities: Systematic review and meta-analysis. *Pediatrics, 150*(6), e2022057780. <https://doi.org/10.1542/peds.2022-057780>
- Prybutok, V., Prybutok, G., & Yogarajah, J. (2024). Negative influence of social media on children's diets: A systematic review. *Encyclopedia, 4*(4), 1700–1710. <https://doi.org/10.3390/encyclopedia4040103>

- Querol, S. E., Iqbal, R., Kudrna, L., Al-Khudairy, L., & Gill, P. (2021). The double burden of malnutrition and associated factors among South Asian adolescents: Findings from the global school-based student health survey. *Nutrients*, *13*(8), 2867. <https://doi.org/10.3390/nu13082867>
- Rideout, V. (2018). Measuring time spent with media: The Common Sense census of media use by US 8- to 18-year-olds. In *Children, adolescents, and media* (pp. 96–102). Routledge.
- Rounsefell, K., Gibson, S., McLean, S., Blair, M., Molenaar, A., Brennan, L., Truby, H., & McCaffrey, T. A. (2020). Social media, body image and food choices in healthy young adults: A mixed methods systematic review. *Nutrition & Dietetics*, *77*(1), 19–40. <https://doi.org/10.1111/1747-0080.12581>
- Spence, C., Okajima, K., Cheok, A. D., Petit, O., & Michel, C. (2016). Eating with our eyes: From visual hunger to digital satiation. *Brain and Cognition*, *110*, 53–63. <https://doi.org/10.1016/j.bandc.2015.08.006>
- Tatlow-Golden, M., & Garde, A. (2020). Digital food marketing to children: Exploitation, surveillance and rights violations. *Global Food Security*, *27*, 100423. <https://doi.org/10.1016/j.gfs.2020.100423>
- Thai, C. L., Villarreal, J., & Thai, J. A. (2025). The relationship between perceptions toward advertising and consumption of energy-dense nutrient-poor foods among adults in the United States: Results from a national survey. *Frontiers in Public Health*, *13*, 1516164. <https://doi.org/10.3389/fpubh.2025.1516164>
- Tooming, U. (2021). Aesthetics of food porn. *Crítica*, *53*(157), 127–150. <https://doi.org/10.22201/IIFS.18704905E.2021.1248>
- Valkenburg, P. M., & Piotrowski, J. T. (2017). *Plugged in: How media attract and affect youth*. Yale University Press.
- Wojdan, W., Wdowiak, K., Witas, A., Drogoń, J., & Brakowiecki, W. (2020). The impact of social media on the lifestyle of young people. *Polish Journal of Public Health*, *130*, 8–13. <https://doi.org/10.2478/pjph-2020-0003>
- Zajonc, R. B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology*, *9*(2, Pt. 2), 1–27. <https://doi.org/10.1037/h0025848>
- Zarouali, B., Verdoodt, V., Walrave, M., Poels, K., Ponnet, K., & Lievens, E. (2020). Adolescents' advertising literacy and privacy protection strategies in the context of targeted advertising on social networking sites: Implications for regulation. *Young Consumers*, *21*(3), 351–367. <https://doi.org/10.1108/YC-03-2020-1090>

APPENDIX--1

Title: Influence of Social Media on Food Choices and Dietary Behavior among School and College Students in Narayanganj District, Bangladesh.

QUESTIONNAIRE

Section A — Student Information

1. Name:

2. School /college Name:

3. Age - A. 10-12, B. 13-15, C. 16-20

4. Class - A. Secondary, B. College/ University

5. Do you use social media? -A. Yes B. No

Section B — Social Media Use

6. Which social media do you use most? (You can tick more than one)

A. Facebook, B. Instagram, C. TikTok, D. YouTube, E. Snapchat, F. WhatsApp, G. Other:

7. How many hours a day do you use social media? - A. Less than 1 hour, B. 1-3 hours, C. 4-6 hours, D. More than 6 hours

8. How often do you see food or drink advertisements on social media? A. Very often, B. Often, C. Sometimes, D. Rarely E. Never

9. What kind of food ads do you see most?

A. Fast food (e.g., burgers, pizza), B. Snacks, C. Soft drinks, D. Healthy food (e.g., fruits, milk)

Section C — Food Choices and Influence

10. Have you ever wanted to eat or buy something after seeing it on social media? A. yes, B. No

11. If yes, how often? A. Often, B. Sometimes C. Rarely

12. Why did you want to try that food? (You can tick more than one) A. It looked nice, B. My favorite You Tuber/ Influencer showed it., C. There was a discount. D. My friend liked it, E. I was curious

13. Have you ever asked your parents to buy food you saw online? A. Yes, many times, B. Sometimes, C. Rarely , D. Never

14. Do social media ads make you want to eat junk food (e.g., chips, burgers, cola)? A. Strongly Agree, B. Agree, C. Not sure D. Disagree, E. Strongly Disagree

15. Have you ever seen healthy food (e.g., fruits, milk, vegetables) being promoted on social media?

A. Yes, B.No, C. Not sure

16. Do you think social media can help students eat healthier? -A. Yes, B. No, C. May be

Section D — Diet Behavior & Reactions

17. In the past 12 months, have you tried a new diet because of something you saw on social media?



A. Yes, B. No

18. If Yes: D1a. Which diet(s)? (tick all that apply)

A. Keto, B. Intermittent fasting, C. Vegan/Plant-based, D. Low-card, E. Juice/Cleanse

19. How many different new diets have you tried in the past 12 months because of social media? ____ (number)

20. Rate your agreement with: "I feel pressured by social media to change my appearance or diet." " A. Strongly Agree, B. Agree, C. Not sure D. Disagree, E. Strongly Disagree

21. Rate your agreement with: "I am confident that the nutrition information I see on social media is accurate."

A. Strongly Agree, B. Agree, C. Not sure D. Disagree, E. Strongly Disagree

22. How often do you feel attracted to food that is colorful or visually appealing on social media? "

A. Never, B. Rarely, C. Sometimes, D. often, E. Very often

23. Do sweet-flavored foods attract you more than sour or savory foods when you see them on social media? "

A. Yes, sweet foods attract me most, B. Yes, sour foods attract me most, C. Yes, savory foods attract me most, D. No, flavor does not affect attraction

24. Which type of food appearance or feature attracts you the most on social media?

A. No, flavor does not affect attraction, B. Desserts / sweet items, C. Traditional dishes / home-cooked meals, D. Exotic or unusual foods, E. Exotic or unusual foods, F. Other

Section E — Awareness and Opinion

25. Do you think social media advertising changes what students eat? A. Yes, B. No, C. Not sure

26. Do you think food ads on social media are made especially for children and teenagers? A. Yes, B. No, C. Not sure

27. Who do you trust most when learning about healthy food? (Choose one) A. Parents, B. Teacher, C. Friends, D. Social media, E. Health experts

28. Would you like to see more advertisements about healthy food online? A. Yes, B. No, C. May be

Section F — Your Thoughts (Short Answers)

29. Can you name one food or drink you saw on social media that you wanted to try?

30. What can social media do to help students eat healthier?

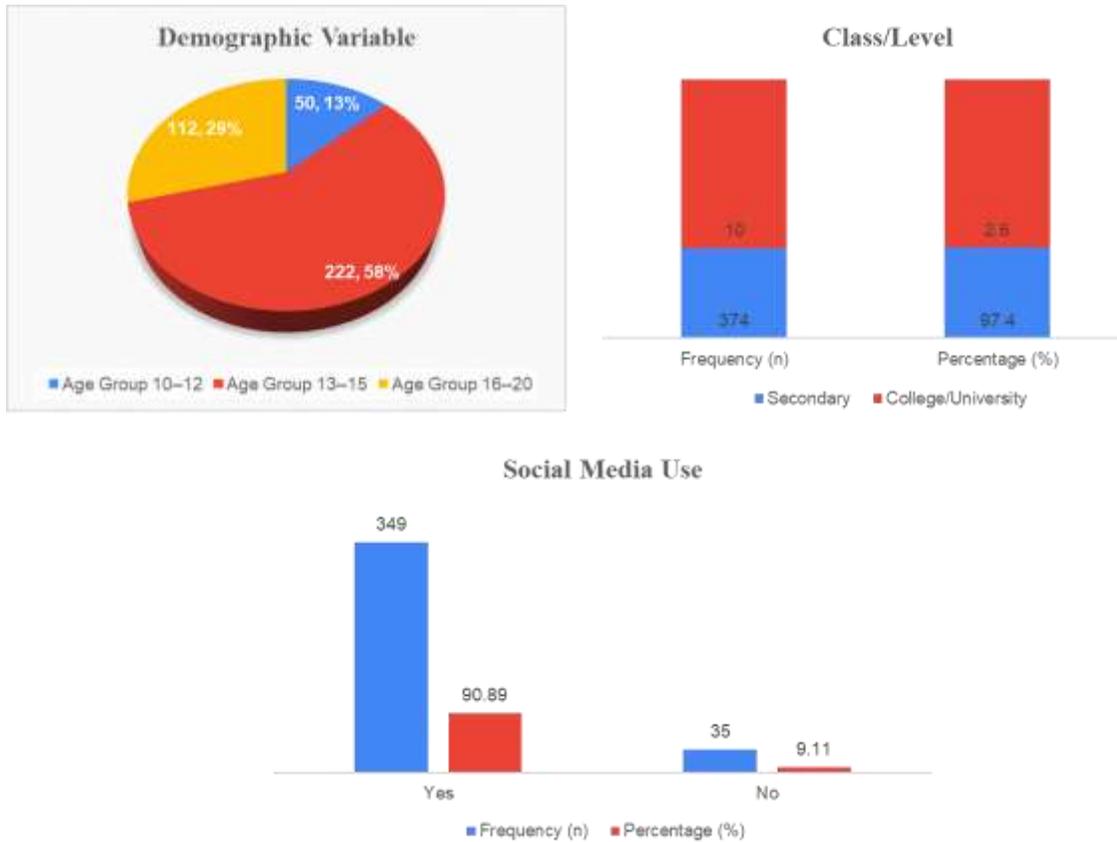


Figure 1: Demographic Profile of Respondents (Scaled to n=384)

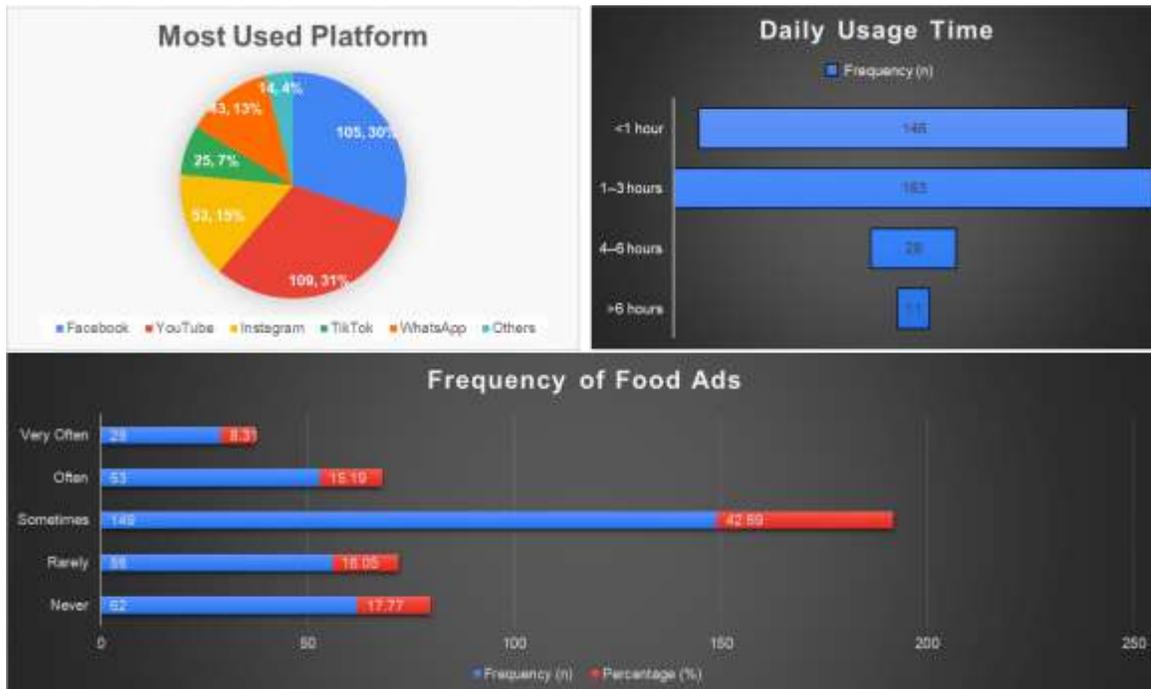


Figure 2: Social Media Usage Patterns (Scaled to n=349 social media users)

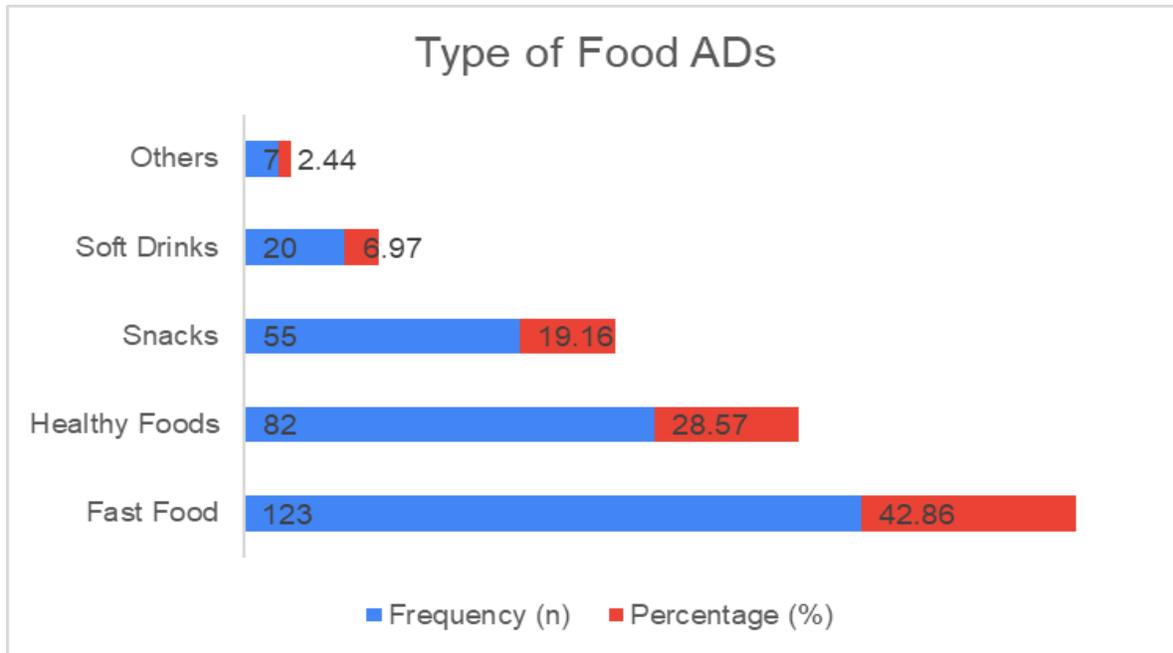


Figure 3: Types of Food Advertisements Most Seen (n=287)

Table 4: Influence of social media on Food Behavior (n=287)

Question	Response	Frequency (n)	Percentage (%)
Wanted to try food seen online?	Yes	243	84.67
	No	44	15.33
Total		287	100.00
Frequency of desire	Rarely	33	13.58
	Sometimes	164	67.49
	Often	46	18.93
Total		243	100.00
Asked parents to buy?	Never	43	17.70
	Rarely	38	15.64
	Sometimes	83	34.16
	Yes, many times	79	32.51
Total		243	100.00

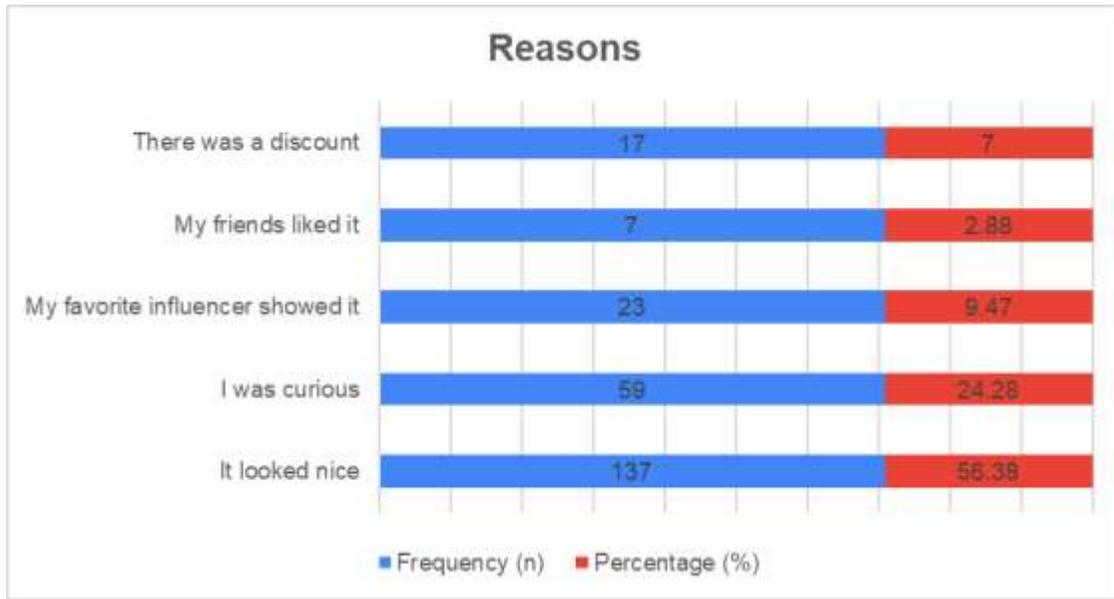


Figure 5: Reasons for Trying Food (Multiple Responses) (n=243)

Table 6: Dietary Behavior Changes (n=243)

Variable	Category	Frequency (n)	Percentage (%)
Tried new diet?	Yes	129	53.09
	No	114	46.91
Total		243	
Type of Diet Tried	Juice/Cleanse	46	35.66
	Intermittent Fasting	23	17.83
	Low-carb	20	15.50
	Keto	20	15.50
	Vegan/Plant-based	10	7.75
	Others	10	7.75
Total		129	

Table 7: Food Attraction Factors (n=129)

Factor	Category	Frequency (n)	Percentage (%)
Most Attractive Food Type	Desserts/Sweets	41	31.78
	Traditional Dishes	35	27.13
	Brightly Colored Foods	21	16.28
	Drinks/Beverages	22	17.05
	Exotic Foods	10	7.75
Total		129	100.00
Flavor Preference	Sweet Foods	71	55.04
	Sour Foods	38	29.46
	No Preference	20	15.50
Total		129	100.00

Table 8: Perceived Impact of Media on Food Choices (n=243)

Statement	Response	n	%
"Ads make me want junk food."	Strongly Agree	29	11.93
	Agree	112	46.09
	Neutral	58	23.87
	Disagree	38	15.64
	Strongly Disagree	6	2.47
"Have you seen healthy food promoted?"	Yes	157	64.61
	No	39	16.05
	Not Sure	47	19.34
"Social media can help me eat healthier."	Yes	124	51.03
	No	24	9.88
	Maybe	95	39.09

Table 9: Age Group vs. Susceptibility to Food Ads (n=349)

Age Group	Never n (%)	Rarely n (%)	Sometimes n (%)	Often n (%)	Very Often n (%)	Total
10–12	4 (8.51%)	5 (10.64%)	18 (38.30%)	12 (25.53%)	8 (17.02%)	47
13–15	35 (17.59%)	31 (15.58%)	96 (48.24%)	28 (14.07%)	9 (4.52%)	199
16–20	23 (22.33%)	20 (19.42%)	35 (33.98%)	13 (12.62%)	12 (11.65%)	103
Total	62 (17.77%)	56 (16.05%)	149 (42.69%)	53 (15.19%)	29 (8.31%)	349

Note: Chi-square, χ^2 (8, N=349) = 21.6024, p = .0057

Table 10: Social Media Usage Time vs. Food Purchase Influence (n=349)

Daily Social Media Use	Never n (%)	Rarely n (%)	Sometimes n (%)	Often n (%)	Very Often n (%)	Total
<1 hour	33(22.60%)	25(17.12%)	62 (42.47%)	15(10.27%)	11(7.53%)	146
1–3 hours	23(14.11%)	26(15.95%)	71 (43.56%)	30(18.40%)	13(7.98%)	163
4–6 hours	1 (3.45%)	4 (13.79%)	15 (51.72%)	6 (20.69%)	3(10.34%)	29
>6 hours	5 (45.45%)	1 (9.09%)	1(9.09%)	2 (18.18%)	2(18.18%)	11
Total	62(17.17%)	56(16.05%)	149(42.69%)	53(15.19%)	29(8.31%)	349

*Note: Chi-square, χ^2 (12, N=349) = 20.90, p = .0518

Table 11: Platform Type vs. Type of Food Ads Seen (n=335)

Platform	Fast Food n (%)	Healthy Food n (%)	Snacks n (%)	Soft Drinks n (%)	Total
Facebook	52 (49.52%)	31 (29.52%)	16 (15.24%)	6 (5.71%)	105
YouTube	50 (45.87%)	26 (23.85%)	21 (19.27%)	12 (11.01%)	109
Instagram	24 (45.28%)	11 (20.75%)	11 (20.75%)	7 (13.21%)	53
TikTok	9 (36.00%)	5 (20.00%)	5 (20.00%)	6 (24.00%)	25
WhatsApp	16 (37.21%)	13 (30.23%)	10 (23.26%)	4 (9.30%)	43
Total	151(45.07%)	86(25.67%)	63(18.81%)	35(10.45%)	335

Note: Chi-square, χ^2 (12, N=335) = 11.85, p = .4575

Table 12: Age Group vs. Dieting Behavior (n=243)

Age Group	No Diet n(%)	1–2 Diets n(%)	3+ Diets n(%)	Total
10–12	10 (40%)	6 (24%)	9 (36%)	25
13–15	64 (44.44%)	50 (34.72%)	30 (20.83%)	144
16–20	40 (54.05%)	24 (32.43%)	10 (13.51%)	74
Total	114(46.91%)	80(32.92%)	49(20.16%)	243

Note: Chi-square, $\chi^2 (4, N=243) = 6.76, p = 0.1490^$

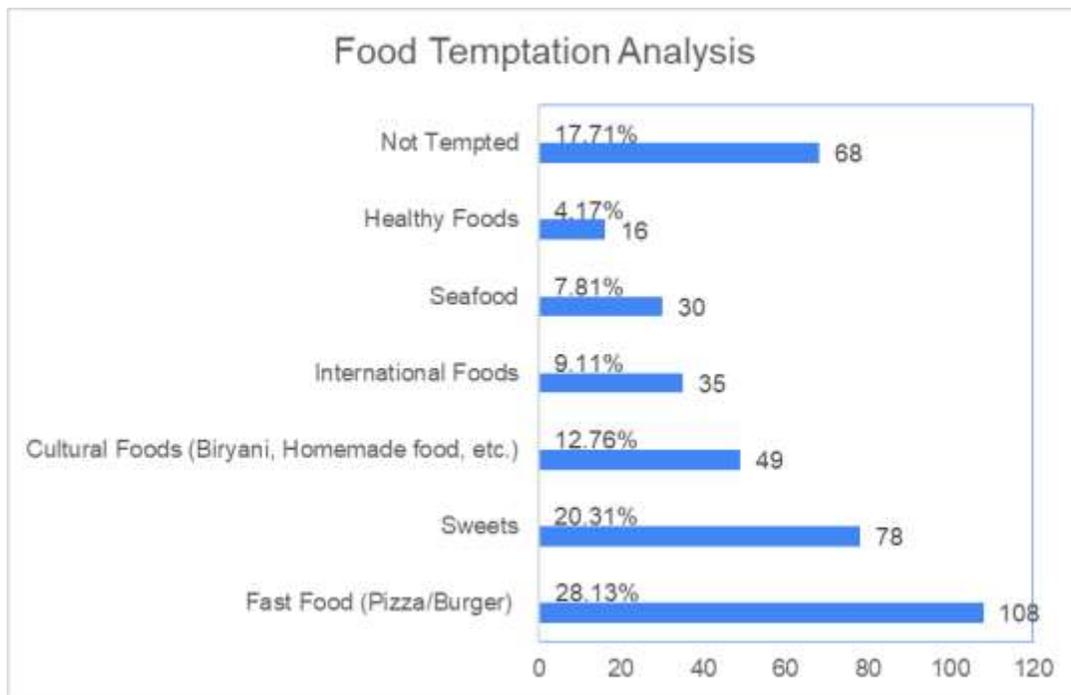


Figure 13: Most Desired Food & Drink Categories from social media (n=384)

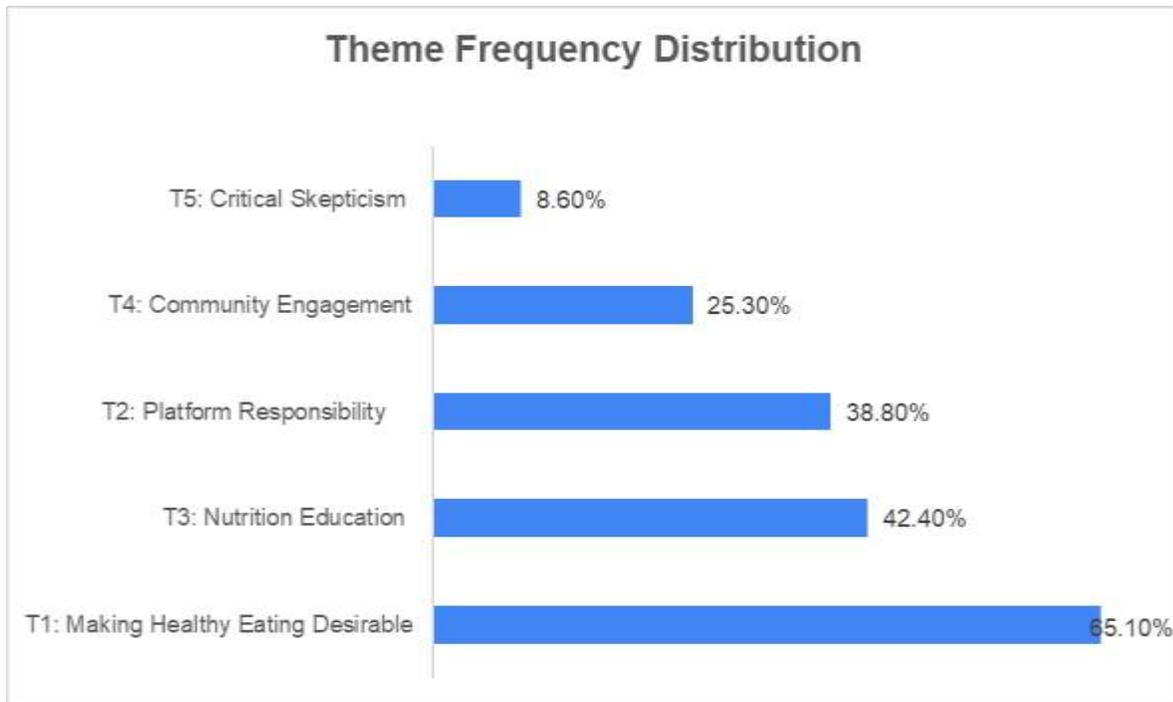


Figure 14: Thematic frequency distribution for Promoting Healthier Eating via social media (n=384)

Copyright Notice

This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.