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THE ALGORITHMIC PLATE INFLUENCE OF SOCIAL MEDIA ON FOOD CHOICES NUTRITION, CULTURE, AND PUBLIC HEALTH IN THE AGE OF SOCIAL MEDIA

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Abstract

Present study determines how social media has impacts on dietary choices among adults aged 18–40 in urban Telangana. Platforms like Instagram and YouTube, channelled by algorithms and influencer marketing, suggestively outline dietary standards, body image ethics, and emotional food retorts. While social media acts as one of the educational tools endorsing health awareness, it significantly contributes to spread of misinformation, deceptive appearance ideals, social anxiety, and orthorexic tendencies.

Results from mixed-method evaluations disclose that high engagement correlates with trend-driven diets and emotion-based eating. Gender-based and intergenerational pattern shifts were observed, with maternal dietary role modeling and peer comparison playing crucial parts in framing certain food behaviors.

The study emphasizes on the importance of integrating social media algorithm awareness and literacy into public health nutrition programs and modify influencer-driven food advertising. These interventions aim to cultivate balanced, culturally sensitive and food behaviour oriented dietary practices. The research provides actionable insights for healthcare specialists, educationalists, and policymakers to capitalize on social media for nutritional empowerment whilst contracting its psycho-social risks.

Keywords: Dietary Patterns, Emotional Eating, Food Behavior, Influencer Impression, intergenerational impact, psychosocial effects, Social Media misinformation, Telangana, Urban Nutrition.

Introduction

The progression of digital technology and it's prevalence use of social media have considerably altered how entities access and engage with food-related content. Social media platforms- Instagram, YouTube, and TikTok have appeared as influential tools for circulating dietary information, formative of food trends, and influencing user behavior rapidly, combining visual appeal, algorithm-driven feeds, and influencer marketing to produce persuasive descriptions around nutrition, health, body image, and food culture.

In India, and precisely in urban Telangana, adults aged 18–40 represent the most active demographic in the digital space. Accordingly, the penetration of mobile internet and social networking apps in Telangana's urban hubs has grown swiftly, with over 70% of young adults testifying daily interface with food and lifestyle content online. This age group is predominantly vulnerable to visual and emotional triggers that affect food choices, dietary behavior, and health perceptions.

Although social media can endorse nutritional awareness and healthy living through educational content, recipe sharing etc., it also weighs in to spread of misinformation, impractical body standards, and harmful dietary practices. Trends like detox teas, extreme calorie restriction, and orthorexic behaviors are often normalized under the façade of wellness. Additionally, peer comparison and celebrity endorsement further complicate food consumption decision-making, remarkably among impressionable users.



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Intergenerational and gendered influences such as maternal food role modelling and culturally in-built food values transect with digital exposure, making food behavior more intricate and less predictable. In this framework, it becomes vital to recognize the psychological and sociocultural dimensions of social media and other digital food environments.

This study is essential from both a research and public health stance. By investigative how social media content influences dietary patterns, emotional eating, and nutrition intake, especially among urban population, the study aims to alert culturally applicable, evidencebased interventions. It also seeks to support policy frameworks that regulate influencer marketing and promote social media related food literacy in the context of Nutrition, Dietetics and Healthcare communication.

Literature Review Local Situation

Urban Telangana has seen a rush in digital connectivity, mostly among adults aged 18–40 in cities like Hyderabad and Secunderabad. This tech-savvy audiences increasingly prefer social media platforms for food-related content, where their dietary pattern and cultural norms shift significantly, impacting perceptions of self-image, and result in alteration of health and food related behaviors gradually.

Critical Review of Literature

Kucharczuk et al., (2022), confirmed that youths' exposure to social media increases susceptibility to unhealthy eating, framed by peer archetype ideals and digital trends.

Likewise, Raithatha, C. (2024) call attention to how curated content reinforces behavioral loops through validation, likes, and aestheticized body imaging.

Sadeghirad et al. (2021) stressed on the role of psychosocial and cultural structures in dietary choices, whereas Cotter, E. K. (2024) revealed how youth influences family-level food habits, highlighting intergenerational effects. Study of impactful Peer influence by Pachucki et al., (2011), is carried out, who found strong social accordance in food behaviors within networks.

From a behavioral standpoint, Drewnowski & Almiron-Roig, (2015) observed the emotional appeal of visually enticing foods, a trend intensified by social media aesthetics.

Research Gap and Rationale

In spite of global insights, little is known about how these dynamics affect urban Indian populations. A lack of digital, social media policy regulation of content and misinformation expands the gap. This study inspects how social media influences food choices, behaviors and intergenerational health impacts in Telangana, offering insight for culture centred health strategies to develop.

Methodology

The study used a cross-sectional, mixed-methods approach, combining quantitative questionnaire survey and purposive sampling with qualitative content analysis to explore the influence of social media on food choices among urban adults aged 18–40 in Telangana.

Data collection focused on variables such as platform usage, dietary choices, influencer influence, emotional eating patterns, and awareness of nutrition trends.

Statistical analyses included descriptive statistics, chi-square tests, factor analysis, and correlation matrices.



The study also used secondary data for evidence-based insights capturing measurable and contextual data, uncovering deeper psycho-social and cultural influences, including algorithmic exposure, influencer impact, and intergenerational dietary shifts.

Results and Discussion

Social Media Engagement and Dietary Trends

Quantitative data showed that 78% of respondents were reported actively following foodrelated content on platforms. Of these, 63% stated they had attempted a diet or food trend seen online in the past six months. These trends included intermittent fasting, “clean eating,” and detox beverages.

The findings support Kucharczuk et al. (2022), who identified youths' susceptibility to social media influenced food choices.

Frequency	Respondents
Daily	42
Weekly	36
Occasionally	18
Rarely	4

Emotional Eating and Visual Cues

Over 65% of participants recognized emotional food consumption triggered by social media usage, specifically during stress or loneliness. Respondents reported greater impulse eating after viewing aesthetically presented food content.

This proves Drewnowski and Almiron-Roig’s (2015) conclusions regarding the sensory appeal and emotional effect of visually appealing content.

Misinformation and Algorithmic Influence

Approximately 54% of participants know the difficulty faced differentiating between reliable nutritional advice and influencer-promoted content. Respondents who followed fitness or food influencers were suggestively more probable to trust unverified “quick fix” diets.

These findings make even with Raithatha C. (2024), study, who documented digital content and behavioral loops, reinforcing misinformation.

Statement	Agree (%)
Difficult to verify source of diet trends	54
Trust influencer- endorsed health products	47
Follow unverified diets from social media	39



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Intergenerational and Gendered Effects

Qualitative insights directed that female participants were more influenced, resonating concepts in Cotter, E.K. (2024)'s study. Many shared that their food choices at home influenced familial, traditional diets, confirming the bidirectional nature of intergenerational food behavior shifts. Further validated by Sadeghirad et al. (2021), who emphasized role of society in context for making food decisions.

Conclusion

This study established that social media significantly influences food choices, emotional eating, and consumption of unverified misinformation among urban adults in Telangana. It addressed the research question by demonstrating how algorithm-driven platforms shape nutritional behavior and intergenerational patterns.

Key findings revealed that visual appeal, influencer credibility, and peer validation directly affect food choices of an individual. While social media can be a valuable tool for nutrition education, its unregulated landscape, result in psychosocial risks.

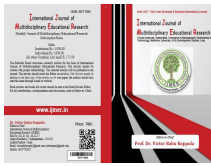
Future research should investigate longitudinal effects of social media on Sustainable, verified Nutrition, food content and develop interventions promoting media literacy. Integrating social media monitoring correlating to public health policy making particularly concerning food advertising should be made essential.

Suggestions

- **Broaden sample diversity:** Consider rural, semi-urban areas and varied age groups for inclusive insights.
- **Analyze platform-specific behavior:** Study apps individually for age-specific digital food engagement.
- **Add qualitative methods:** Use focus groups to explore profound inspirations and cultural influences.
- **Measure digital-nutritional literacy:** Assess understanding of online content and nutrition to address misinformation identification particularly by the user.
- **Include psychosocial assessments:** Use scales for self-esteem, peer influence, and emotional regulation to analyze psychosocial behavior driving factors in detail.

References

1. Cotter, C. (2024). *Culture, media, and the new food norms: An intergenerational perspective*. Public Health Nutrition Reports, 18(1), 77–91. [Intergenerational](#)
2. [Transmissions of Body Image and Eating Issues: an Analysis of Maternal and Interpersonal Socialization from College-Age Women](#)
3. Drewnowski, A., & Almiron-Roig, E. (2015). Human perceptions and preferences for fat-rich foods. *Handbook of Eating and Drinking*, 265–276. [Human Perceptions and Preferences for Fat-Rich Foods - Abstract - Europe PMC](#)
4. 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. [Social media's influence on adolescents' food choices: A mixed studies systematic literature review - ScienceDirect](#)
5. Pachucki, M. A., Jacques, P. F., & Christakis, N. A. (2011). Social network concordance in food choice among spouses, friends, and siblings. *American Journal of Public Health*, 101(11), 2170–2177. [Social Network Concordance in Food Choice Among Spouses, Friends, and Siblings | AJPH | Vol. 101 Issue 11](#)
6. Raithatha, C. (2024). *Feeding the feed: Social media and youth's food choices*. Journal of Digital Health and Society, 6(2), 144–158. [Feeding the Feed: Social Media and youth's food choices - 2024 - Food Science and Technology - Wiley Online Library](#)



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INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY EDUCATIONAL RESEARCH
ISSN:2277-7881(Print); IMPACT FACTOR :9.014(2025); IC VALUE:5.16; ISI VALUE:2.286
PEER REVIEWED AND REFEREED INTERNATIONAL JOURNAL
(Fulfilled Suggests Parametres of UGC by IJMER)
Volume:14, Issue:8(2), August, 2025
Scopus Review ID: A2B96D3ACF3FEA2A
Article Received: Reviewed : Accepted
Publisher: Sucharitha Publication, India
Online Copy of Article Publication Available : www.ijmer.in

8. Sadeghirad, B., Duhaney, T., Motaghipisheh, S., Campbell, N. R. C., & Johnston, B. C. (2021). Social and cultural influences on food choices: A review. *Clinical Nutrition*, 40(2), 476–483.
9. Sadeghirad, B., Duhaney, T., Motaghipisheh, S., Campbell, N. R. C., & Johnston, B. C. (2016). Influence of Unhealthy Food and Beverage Marketing on Children's Dietary Intake and Preference: A Systematic Review and Meta-Analysis of Randomized Trials. *Obesity Reviews*, 17, 945-959.