
“SCROLLING AND SNACKING: A STUDY ON THE INFLUENCE OF SOCIAL MEDIA, NUTRITION KNOWLEDGE, BODY IMAGE PERCEPTION, AND EATING BEHAVIOUR ON NUTRITIONAL AWARENESS AMONG ADULTS”

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ABSTRACT

In the current digital era, social media plays a significant role in shaping lifestyle behaviours, including dietary habits and body image perception among adults. A cross-sectional descriptive study was conducted among 200 male and female adults aged 20–30 years. Data were collected using a structured self-administered questionnaire distributed through Google Forms. The questionnaire included sections on demographic details, social media usage, eating behaviour, nutrition knowledge, and body image perception. Selected item adapted from the Eating Attitudes Test (EAT-26) were used to assess eating behaviour patterns. The Chi-square test showed significant associations between social media influencer impact and food purchasing behaviour, following food-related content and buying behaviour, and daily social media usage with overeating behaviour ($\chi^2=11.239, df=4, p=0.0240$). The correlation analysis revealed a significant positive relationship between nutritional knowledge and confidence in making healthy dietary choices ($r=0.451, p<0.001$). Independent sample t-test findings indicated significant differences in nutritional awareness ($t = 4.18, p < 0.001$), snacking behaviour, and body image concern based on social media exposure and dieting

practices. One-way ANOVA demonstrated significant variation in confidence toward healthy dietary choices among respondent groups ($F=8.316, p<0.001$). Social media exposure, nutrition knowledge, and body image perceptions significantly influenced adults' nutritional awareness and eating behaviour. A strong positive correlation was observed between nutrition knowledge and confidence in healthy dietary choices ($r = 0.451, p < 0.001$), indicating that higher nutrition knowledge improves healthy decision-making.

KEYWORDS: Social media, Nutritional awareness, Eating behaviour, Body image perception, Nutrition knowledge.

INTRODUCTION

The increasing use of social media has transformed the way adults access, share, and engage with health, nutrition, and lifestyle information. With widespread global usage, platforms such as Facebook, Instagram, and Twitter provide opportunities to reach large through interactive and accessible interventions.⁶ As digital technologies continue to shape health communication, understanding how individuals seek and engage with health-related information online has become increasingly important for the development of effective public health strategies.⁴ Social media serves as a major source of health information and awareness worldwide, offering opportunities for education and disease prevention while also presenting risks associated with misinformation and unhealthy behavioural influences.¹¹

Social media has also become an important source of nutrition-related information, food trends, and dietary advice, significantly influencing individuals' food choices and eating behaviours. Increased exposure to online nutrition content can improve dietary awareness and encourage healthier eating practices; however, it may also contribute to poor dietary decisions when information lacks scientific credibility.¹⁶ Similarly, previous studies have noted that social media can have both positive and negative effects on dietary behaviour by promoting nutritional knowledge while simultaneously encouraging unhealthy food choices through persuasive marketing strategies.¹² It further emphasized that social media influences dietary behaviours both directly and indirectly through peer pressure, social comparison, body image ideals, and exposure to nutrition-related content. Prolonged digital engagement may contribute to unhealthy dietary patterns, including increased consumption of fast foods, sugary beverages, and snack foods, particularly among individuals who frequently interact with food-related content online. In addition to providing nutrition information, social media platforms create environments where social norms and food-related cues influence eating

behaviours.³ Social norms play a significant role in shaping food consumption patterns and that individuals often misperceive the dietary behaviour of their peers. Such misperceptions may be reinforced through exposure to online food content, advertisements, and social interactions.¹⁵ Socially endorsed food images on social media may directly affect food intake and eating decisions, highlighting the powerful influence of digital environments on dietary behaviour.⁸ Beyond nutrition, social media significantly influences body image perceptions and psychological well-being. Social networking platforms frequently expose users to idealized images portraying thin, attractive, and fit bodies, which can shape perceptions of physical appearance and self-worth.⁵ Continuous exposure to such content encourages individuals to compare themselves with others online, contributing to body dissatisfaction and a strong desire for thinness.¹⁰ Similarly, previous studies have found that unrealistic appearance standards promoted on social media may lead to negative psychological outcomes, including body dissatisfaction and disordered eating behaviours.¹ However, social media can also provide opportunities for self-expression, inclusivity, and body positivity, demonstrating both beneficial and harmful effects on users.² Furthermore, body image perceptions are influenced by multiple factors, including physical characteristics, physical activity, social expectations, and media exposure.⁷ Given the widespread use of social media and its growing influence on dietary habits, body image perceptions, and health-related behaviours, examining its impact on adults has become an important public health priority.⁹ Furthermore, previous studies have highlighted that social media can shape dietary behaviours through peer influence, social comparison, and exposure to nutrition-related content.³ While emphasizing the need to balance the benefits of health promotion with the risks of misinformation. Therefore, understanding how social media influences dietary choices, body image, and overall well-being among adults is essential for developing evidence-based interventions and effective public health strategies.¹¹

MATERIALS AND METHODS

Study Design

This study is a cross-sectional descriptive study conducted among male and female adults aged 20–30 years.

Sample Selection

A convenience sampling method was used to select participants who met the inclusion criteria and were willing to participate in the study.

Inclusion Criteria

- Adults aged 20–30 years
- Both male and female participants
- Individuals who use social media platforms
- Participants willing to provide informed consent

Exclusion Criteria

- Individuals below 20 years and above 30 years
- Individuals who do not use social media platforms
- Participants who are unwilling to provide informed consent
- Incomplete or improperly filled questionnaires

Tools and Techniques

Informed consent was obtained from all participants before data collection. Participants were informed that their responses would be kept confidential and used solely for academic purposes. The questionnaire consisted of both close-ended (multiple-choice) and open-ended questions designed to assess social media usage, nutritional awareness, eating behaviour, and body image perception. A modified version of selected items from the Eating Attitudes Test (EAT-26) was included to assess eating behaviour patterns and attitudes related to food.

Statistical Analysis

The collected data were coded, tabulated, and analyzed using statistical software. Descriptive statistics, including frequencies and percentages, were used to summarize the study variables. Inferential statistical tests such as the Chi-square test were applied to determine associations between categorical variables. Pearson correlation analysis was used to assess relationships between variables, the independent sample t-test was used to compare differences between two groups, and one-way ANOVA was employed to assess differences among multiple groups.

RESULTS AND DISCUSSION

Table 1: Demographic Characteristics.

Variable	Major Category	n (%)
Gender	Male	100 (50.0)
	Female	100 (50.0)
Age	20–23 years	70 (35.0)

	24–26 years	70 (35.0)
	27–30 years	60 (30.0)
Occupational status	Employed	94 (47.0)
Monthly expenditure	<₹5,000	86 (43.0)

An equal proportion of males and females (50.0% each) participated in the study. Most respondents belonged to the age group 20–26 years (70.0%), nearly half were employed (47.0%), and 43.0% reported monthly expenditure below ₹5,000, indicating the predominance of young adults with moderate economic status.

Table 2. Social Media Usage and Perceived Influence.

Variable	Predominant Response	(%)
Daily social media usage	1–3 hours	97 (48.5)
Most used platform	Instagram	138 (69.0)
Follow nutrition-related content	Yes	127 (63.5)
Common food content viewed	Healthy eating tips	133 (66.5)
Exposure to food-related content	2–4 times/week	92 (46.0)
Tried food after viewing online	Occasionally	95 (47.5)

Nearly half of the respondents spent 1–3 hours daily on social media (48.5%), with Instagram (69.0%) and YouTube (66.0%) being the most frequently used platforms. A majority followed nutrition-related content (63.5%) and viewed healthy eating information (66.5%), indicating considerable exposure to food-related social media content. Almost half were neutral regarding the role of social media in improving nutritional awareness (47.5%), while 65.0% experienced confusion due to conflicting nutrition information and 53.0% reported moderate influence of social media influencers on food choices.

Social Media Platforms Used Most Frequently

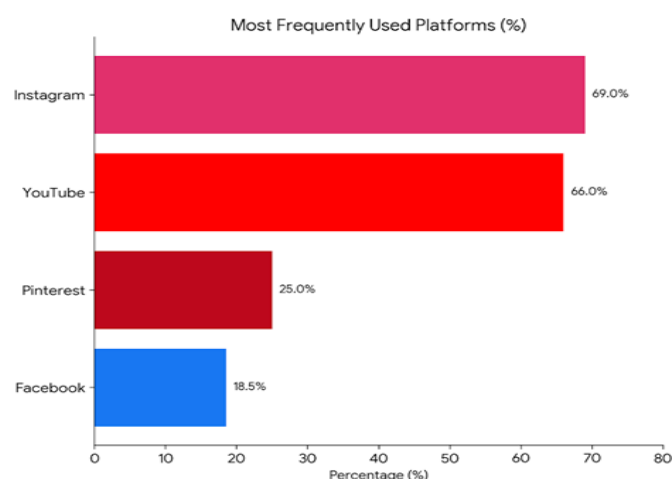


Figure1.Social media plat form usage.

Instagram was the most commonly used platform (69.0%), followed by YouTube (66.0%). Pinterest (25.0%) and Facebook (18.5%) were less commonly used. This suggests that visually driven platforms dominate usage among respondents.

Confused Due to Conflicting Nutrition Information Online

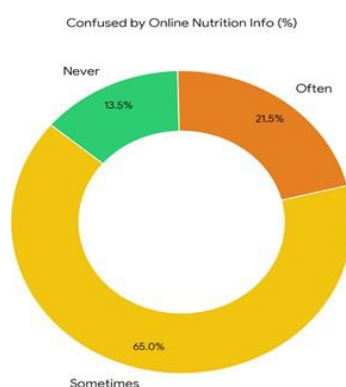


Figure2.Conflictingonline information.

Most respondents reported sometimes experiencing confusion due to conflicting nutrition information online (65.0%), followed by often (21.5%), while only 13.5% reported never experiencing such confusion. These findings indicate that inconsistent nutrition information on social media is a common challenge affecting nutritional understanding among adults.

Table3:Nutritional Awarenessand Knowledge.

Variable	Predominant Response	(%)
Knowledge of balanced diet	Good	97 (48.5)
Reading nutrition labels	Sometimes	112 (56.0)

Awareness of fruit and vegetable intake	Yes	106 (53.0)
Awareness of calorie requirements	Not sure	102 (51.0)
Awareness of hidden sugars and fats	Moderately aware	97 (48.5)
Confidence in healthy choices	Confident	91 (45.5)

Good knowledge regarding a balanced diet was observed among 48.5% of respondents. However, 56.0% read nutrition labels only occasionally, and 51.0% were uncertain about daily calorie requirements, indicating moderate nutritional awareness. Similar findings were reported by previous studies¹⁵, which highlighted the role of nutrition knowledge in promoting healthy eating behaviours.

Confidence in Making Healthy Dietary Choices

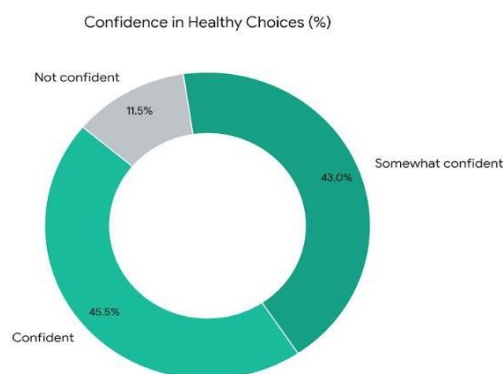


Figure 3. Confidence in making healthy choices.

Almost equal proportions of respondents were confident (45.5%) and somewhat confident (43.0%), while 11.5% were not confident. This suggests that most participants had moderate to high confidence in making healthy dietary choices.

Table 4: Eating Behaviour Patterns and Attitudes.

Variable	Predominant Response	(%)
Snacking during social media use	Sometimes	128 (64.0)
Overeating while using social media	Sometimes	112 (56.0)
Following special diet	No	124 (62.0)
Time pressure affecting food choices	Sometimes	136 (68.0)
Financial influence on food choices	Sometimes	83 (41.5)

Fear of overweight	Sometimes	47 (23.5)
Binge eating	Never	81 (40.5)
Guilt after eating	Never	84 (42.0)

Snacking during social media use (64.0%) and occasional overeating (56.0%) were common among respondents. Time pressure affected food choices in 68.0% of participants, whereas 62.0% did not follow any specific diet, indicating a moderate influence of lifestyle factors on eating behaviour. Most respondents reported never experiencing binge eating (40.5%) or guilt after eating (42.0%), while concerns about overweight were generally occasional (23.5%), suggesting a low prevalence of unhealthy eating attitudes.

STATISTICAL ANALYSIS

1. Chi-square test

Table 5: Chi-Square Association Between Social Media Use, Nutrition Knowledge, Eating Behaviour, and Socio-Economic Factors.

Variables Associated	χ^2	df	p-value
Nutritional knowledge vs Awareness of hidden sugars and fats	59.981	4	<0.001
Influencer impact vs Food purchasing behaviour	27.132	6	0.0001
Following food content vs Buying behaviour	25.806	2	<0.001
Time pressure vs Snacking frequency	21.686	4	0.0002
Monthly expenditure vs Financial influence on food choices	19.775	4	0.0006
Social media usage vs Overeating behaviour	11.239	4	0.024

Chi-square analysis revealed significant associations between nutritional knowledge, social media-related factors, and eating behaviours. The strongest association was observed between nutritional knowledge and awareness of hidden sugars and fats ($\chi^2 = 59.981$, $p < 0.001$), consistent with the findings of previous studies¹³, highlighting the importance of nutrition education in promoting informed food choices. Social media factors, including influencer impact and following food-related content, were significantly associated with food purchasing behaviour, supporting the findings of previous studies¹⁴ that digital media influences consumer food decisions. Additionally, lifestyle and economic factors such as time pressure, personal expenditure, and daily social media usage showed significant associations with snacking, food choices, and overeating behaviours.

2. Correlation analysis

Table 6: Correlation Analysis of Nutritional Knowledge, Body Image, Social Media Use, and Eating Behaviour

Variable Pair	Correlation Coefficient(r)	p-value
Nutritional Knowledge – Confidence in Healthy Dietary Choices	0.451	<0.001
Body Image Concern – Dieting Behaviour	0.396	0.002
Confusion Due to Online Nutrition Information – Guilt After Eating	0.341	0.006
Time Spent on Social Media – Body Image Dissatisfaction	0.372	0.004
Reading Nutrition Labels – Awareness of Hidden Sugars and Fats	0.488	<0.001

Correlation analysis revealed significant positive relationships among the study variables. Nutritional knowledge was moderately associated with confidence in making healthy dietary choices ($r = 0.451$, $p < 0.001$), consistent with previous studies¹³. Reading nutrition labels was positively associated with awareness of hidden sugars and fats ($r = 0.488$, $p < 0.001$), supporting earlier findings of previous studies¹³. Greater social media use was associated with increased body image dissatisfaction ($r = 0.372$, $p = 0.004$), in agreement with previous studies⁵. Furthermore, confusion arising from online nutrition information was positively associated with feelings of guilt after eating ($r = 0.341$, $p = 0.006$), supporting the findings of previous studies¹¹ on the adverse effects of nutrition misinformation on eating perceptions and psychological well-being.

3. Independent Sample t-test

Independent sample t-test revealed significant differences across study variables. Higher social media usage was associated with lower nutritional awareness ($t = 4.18$, $p < 0.001$), consistent with previous studies¹⁶. Frequent exposure to food-related content was associated with increased snacking behaviour ($t = 2.94$, $p = 0.004$). Participants following special diets exhibited greater body image concerns than non-diet followers ($t = 3.48$, $p < 0.001$), in agreement with previous studies.¹⁰

4. One-way ANOVA

One-way ANOVA showed a significant difference in confidence regarding healthy dietary choices among the groups ($F = 8.316$, $p < 0.001$), indicating that group characteristics influenced

dietary decision-making confidence, consistent with previous studies.⁴

Qualitative Findings from Open-Ended Responses

Content analysis revealed that body image perceptions and eating habits were influenced by social media exposure, social comparison, lifestyle practices, and societal expectations. Participants reported both positive effects, such as improved nutrition awareness and fitness motivation, and negative effects, including body dissatisfaction and pressure to meet unrealistic appearance standards. Similar findings were reported in previous studies⁵, who observed that exposure to idealized social media content increased body dissatisfaction among users. Respondents also highlighted confusion arising from conflicting nutrition information online, which supports the findings of previous studies¹¹ regarding the impact of nutrition misinformation on eating perceptions.

CONCLUSION

The study demonstrated that social media significantly influences nutritional awareness, eating behaviour, and body image perception among adults. Higher nutrition knowledge was positively associated with confidence in making healthy dietary choices, whereas greater social media exposure was linked to body image dissatisfaction, food purchasing decisions, and unhealthy eating patterns. Although social media serves as an important source of nutrition information and awareness, it may also contribute to unhealthy dietary behaviours and negative body image perceptions.

RECOMMENDATIONS

- Promote evidence-based nutrition education through social media to enhance nutritional awareness.
- Encourage critical evaluation of online nutrition information to reduce misinformation and confusion.
- Increase awareness of healthy snacking and mindful eating practices during social media use.

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