



# “ANALYSING THE IMPACT OF SOCIAL MEDIA ON THE DIETARY CHOICES OF NUTRITION STUDENTS”

AMENA MEHNAZ. D,  
PG SCHOLAR

MS. PRITHIKA. M,  
ASSISTANT PROFESSOR

DR.P.S.PRATHIBA  
PROGRAM HEAD

DEPARTMENT OF FOOD SCIENCE, NUTRITION AND DIETETICS  
DR. M.G.R. EDUCATIONAL AND RESEARCH INSTITUTE, CHENNAI, INDIA

## Abstract

This study investigated the influence of social media on the dietary choices of nutrition students through a quantitative approach. In the contemporary digital age, social media platforms play a pivotal role in shaping individuals' behaviours and lifestyle choices, including their dietary habits. The research aimed to elucidate the multifaceted impact of social media on the dietary behaviours of nutrition students, taking into account both the positive and negative impacts. The study employed quantitative surveys to assess the frequency and patterns of social media usage among nutrition students, as well as their exposure to food-related content and influencers on various social media platforms. Preliminary findings revealed that social media platforms served as significant sources of dietary information and inspiration for nutrition students, influencing their food preferences, cooking habits, and meal planning behaviours. However, concerns were raised regarding the potential negative impact of social media, such as the promotion of unrealistic body ideals, unhealthy eating trends, and misinformation about nutrition and dieting. In this research, a questionnaire was designed and distributed to participants to assess the impact of social media on the dietary choices of nutrition students. Analysis of the questionnaire responses revealed that social media does indeed play a negative role in shaping the dietary habits of nutrition students. These findings contribute to a deeper understanding of the influence of social media on the dietary behaviours and highlight the importance of promoting accurate and reliable nutritional information on social media platforms.

**Keywords:** Nutrition, Social Media, Eating habits, Online platforms, Influencers, Food trends.

## 1. Introduction

Social media platforms are interactive mobile spaces where communities and individuals engage in creating, co-creating, discussing, and sharing user-generated content. (Megan Kreft et al., 2023) Social media platforms offered a space for discussions on balanced diets, meal planning, and the latest research in the field of nutrition. However, it was crucial to acknowledge the challenges within this space, as social media can also exposed individuals to misinformation, unrealistic body standards, and trends that may not align with evidence-based nutrition principles. The interactive nature of these platforms could have influenced dietary decisions negatively, depending on the quality of the information shared and the receptiveness of the audience.

The rising influence of social media has contributed to disrupted eating patterns among young adults, resulting in unhealthy dietary choices, despite the growing awareness of health-conscious behaviours among this demographic. (Ishita Mehta et al., 2023)

Food choices are influenced by a multitude of factors, including taste preferences, nutritional knowledge, cultural background, social and environmental influences, economic considerations, psychological factors, health restrictions, advertising, personal habits, convenience, media, biological factors, education, personal values, peer and family influence, government policies, food additives, social media trends, food security, culinary diversity, time constraints, social acceptance, retail availability, educational background, religious beliefs, culinary skills, food waste concerns, and the availability of healthy options. The complexity of these factors underscores the diverse and interconnected nature of the decision-making process regarding food selection.

Food plays a fundamental role in human existence, providing essential nutrients crucial for bodily functions, tissue maintenance, and overall health regulation. (National geographic society, 2024) According to Shepherd (1999), food selection is shaped by various interrelated factors, including social and cultural influences. Cultural backgrounds strongly influence individuals' food choices, while social interactions play a significant role in shaping attitudes and behaviours towards eating. (The importance of food selection, 2023)

Food plays a crucial role in our lives; it was not merely about satisfying hunger but also about nourishing our bodies and supporting overall well-being. The choices we made regarding food could significantly impact our health. It was essential to prioritise nutrient-rich options when selecting foods. These included foods that offered a good balance of vitamins, minerals, and other essential nutrients. Colourful fruits and vegetables, lean proteins such as chicken or fish, whole grains, and healthy fats like avocado provided our bodies with the fuel they need to function optimally and helped us feel our best.

Additionally, considering portion sizes and maintaining balance is important. Consuming a variety of foods in moderation is key. Instead of completely eliminating certain food groups, it was better to strive for a balanced approach. This way, we can enjoy our favourite treats while still nourishing our bodies with nutritious foods. Eating mindfully by listening to our hunger cues and stopping when satisfied is a beneficial practice to ensure we provide our bodies with what they need without overeating.

At times, individuals lacked access to reliable nutrition information or did not fully grasp the importance of maintaining a balanced diet. This could result in poor food choices and the development of unhealthy eating habits. Cultural traditions, social gatherings, and peer pressure could all influence our dietary decisions. In some cases, cultural norms or social expectations prioritised indulgent or unhealthy foods, complicating efforts to maintain balance.

In today's fast-paced world, many individuals juggled multiple responsibilities and faced time constraints, making it challenging to prioritise healthy eating. This often led to a reliance on convenient yet less nutritious options such as fast food or processed snacks. The availability of vending machines and fast-food outlets further compounded this challenge, while emotional eating could also contribute to unhealthy dietary choices. Individuals turned to food to cope with their emotions, potentially perpetuating a cycle of unhealthy eating habits.

Regular users of social media platforms often encountered dietary and health advice lacking scientific validation. The pervasive dissemination of food-related content and advertisements on social media influenced changes in eating behaviours, potentially fostering cravings for unhealthy foods. (Mohammad Ali Mohsenpour et al., 2023)

Young individuals frequently relied on social media for inspiration and were influenced by the food trends they encountered on various platforms. Given that social media was a visually-driven and social environment, users were more impressionable and inclined to emulate the food designs they come across online. Being distracted by technology during meal times could result in a reduction in the amount of food consumed by an individual.

Nutrition is vital for sustaining life and promoting health and vitality. A well-balanced diet should provide an adequate supply of nutrients necessary for optimal bodily function. It's essential to incorporate a diverse range of foods into our diet and consume them regularly throughout each day, ensuring enjoyment of the eating experience through the sensory pleasure of taste, smell, and appearance. Adequate nutrition is critical for children and young adults to achieve their full developmental potential, while adults require proper nutrition to perform at their best. (Ministry of higher education, training and employment creation, Namibia and the food and agricultural organisation of the united nations, 2004)

It not only provides nourishment and sustenance but also brings people together, evoking a range of emotions and experiences. One of the remarkable things about food is its ability to transcend cultural boundaries. Every culture has its unique culinary traditions, passed down through generations, reflecting the history, geography, and values of a community. Exploring different cuisines allows us to embark on a journey of cultural discovery, broadening our horizons and fostering a sense of appreciation for diversity.

In today's fast paced world, it could be challenging to make healthy food choices. The rise of convenience foods and the prevalence of processed and sugary snacks have contributed to an increase in diet related health issues.

The internet has transformed numerous aspects of modern life, including our approach to food consumption. From utilising online platforms for food delivery services to engaging with cooking tutorials on social media, today's youth were consistently exposed to a multitude of digital trends shaping their dietary preferences and choices. Online food ordering offered unparalleled convenience, granting consumers seamless access to a diverse range of culinary options and eateries without leaving their homes. Its time-saving benefits, eliminating the need for travel and waiting, further enhance its appeal, making it a cornerstone of modern living. Moreover, social media and influencer culture play a pivotal role in shaping the dietary habits of the younger generation. Platforms like YouTube, Instagram, TikTok, and Snapchat served as vast repositories of food-related content, boasting millions of followers and interactions, influencing food trends and consumption patterns. (HPG Consulting, 2023)

Social media and influencers wielded significant influence over the dietary choices of today's youth, acting as sources of inspiration by sharing innovative recipes, culinary skills, and cultural insights. However, misinformation could rapidly spread, deceiving consumers on topics such

as food safety and nutrition. Sponsored content and undisclosed motivations could manipulate authenticity, posing a threat to genuine information. Additionally, societal pressures to conform to specific dietary norms further complicated matters.

A third online trend that shaped the food habits of the new generation was the growing awareness and concern for the environment and sustainability. The new generation was more conscious of the environmental impact of their food choices than previous generations. According to a 2022 Food and Health survey conducted by the International Food Information Center (IFIC), 73% of Gen Z believes that their generation was more concerned with the environmental impact of their food choices than other generations.

Online food trends, despite their popularity, bring about certain drawbacks. One notable disadvantage involved the encouragement of unhealthy dietary habits. Frequently, social media platforms displayed visually appealing yet nutritionally lacking foods, perpetuating misleading diet trends. Continuous exposure to these trends has the potential to foster unrealistic body standards and unhealthy connections with food, giving rise to problems such as body dissatisfaction and disordered eating. Nutrition is vital for sustaining life and promoting health and vitality. A well-balanced diet should have provided an adequate supply of nutrients necessary for optimal bodily function. It was essential to incorporate a diverse range of foods into our diet and consume them regularly throughout each day, ensuring enjoyment of the eating experience through the sensory pleasure of taste, smell, and appearance. Adequate nutrition was critical for children and young adults to achieve their full developmental potential, while adults required proper nutrition to perform at their best. (Ministry of higher education, training and employment creation, Namibia and the food and agricultural organisation of the united nations, 2004)

It not only provided nourishment and sustenance but also brought people together, evoking a range of emotions and experiences. One of the remarkable things about food is its ability to transcend cultural boundaries. Every culture has its unique culinary traditions, passed down through generations, reflecting the history, geography, and values of a community. Exploring different cuisines allowed us to embark on a journey of cultural discovery, broadening our horizons and fostering a sense of appreciation for diversity.

In today's fast paced world, it could be challenging to make healthy food choices. The rise of convenience foods and the prevalence of processed and sugary snacks have contributed to an increase in diet related health issues.

Food influencers used their social media platforms to share content centred around food, drawing upon their culinary knowledge and online presence to engage with their audience. (Quinn Schwartz, 2023) Combining culinary proficiency with online charisma, food influencers captivated audiences through enticing recipes and personal branding. Skillful in navigating platforms such as YouTube, Instagram, and food blogs, these influencers employed compelling storytelling and irresistible food content, ensuring their audience remained engaged and eager for more.

While many food influencers advocated for a balanced diet and nutritious eating habits, there were instances where individuals with substantial social media followings faced criticism for promoting unhealthy diets. For instance, some influencers endorsed detox teas and weight loss supplements without scientific evidence, often advocating for restrictive and potentially harmful dieting practices. This included the promotion of extreme fad diets like "juice cleanse" or "intermittent fasting" without proper guidance or consideration for individual nutritional needs.

Moreover, the promotion of foods or products with unproven health benefits and the encouragement of overly restrictive eating plans, such as zero-carb or zero-sugar diets, could lead to nutrient deficiencies and contribute to disordered eating patterns. Additionally, hosting weight loss challenges or competitions that advocate for rapid weight loss through extreme calorie restriction or excessive exercise could potentially perpetuate unhealthy body image ideals.

Sharing altered recipes that modified the nutritional profile of a dish, such as replacing whole ingredients with highly processed alternatives or incorporating excessive amounts of unhealthy fats and sugars. Engaging in or endorsing challenges that encouraged the overconsumption of high-calorie, low-nutrient foods for entertainment purposes, potentially glorifying binge eating behaviours.

Showcasing oversized portions or indulgent meals as the standard, without recognizing the significance of portion control and moderation in sustaining a balanced diet. Neglecting to disclose sponsored content or partnerships with brands promoting unhealthy food products or dieting practices, potentially leading followers to misunderstand the motivations behind their recommendations.

Distracted Eating Habits: social media scrolling could cause distraction leading to under-eating or over-eating, so just scrolling through social media could harm eating habits rather than the posts posted there. Creating Unrealistic Beliefs and Expectations: Social media is known for setting unrealistic expectations. Shaping Student Perceptions via Targeted Advertising: Today, advertising had become more personalised and tailored to individual preferences. Marketers capitalise on this by promoting unhealthy products, influencing consumers to opt for food items they may not typically choose. This not only impacts purchasing decisions but also shapes self-perceptions and behaviours. (Sophie, 2022)

Misinformation: Social media platforms have the potential to disseminate misinformation through the promotion of fad diets, unsupported health assertions, deceptive before-and-after images, endorsements by celebrities, personal anecdotes, misconceptions about diet, and the promotion of supplements lacking evidence of efficacy. Unrealistic body standards: Viewing idealised body images and beauty standards on social media platforms could lead to dissatisfaction with one's body and the adoption of extreme dieting behaviours. Students might have experienced pressure to adhere to unrealistic ideals, which could have influenced their eating habits.

**Promotion of unhealthy trends:** Social media has the ability to promote unhealthy food trends, like extreme diets or excessive consumption of specific food groups, which can become popularised. Students might have adopted these trends without adequately considering their individual nutritional requirements. **The peer pressure and comparison:** The culture of comparison on social media might compelled individuals to adhere to perceived dietary norms, even if those choices were not conducive to their health. Students might adopt unhealthy eating habits to align with online trends.

**Disordered eating patterns and impact on mental health:** Continuous exposure to images of perfect bodies and various dieting trends could contribute to the development of disordered eating behaviours among students. In pursuit of a certain body ideal, students might adopt extreme diets or restrictive eating habits, which could negatively affect their overall health. Negative discussions or content concerning body image, weight loss, or dietary restrictions could exacerbate mental health issues such as anxiety and low self-esteem. Students might develop unhealthy relationships with food as a result of online influences.

**Reduced attention to nutritional quality:** Students might have prioritised aesthetics over nutritional quality, often opting for visually appealing but nutritionally inadequate foods. This shift might have resulted in imbalanced diets that lack essential nutrients.

## 2. Methods/ Materials

### 2.1 Research design

The research design encompasses the plan, structure, and strategy devised to address the research question and control for variables. (Borwankar, 1995).

The current study employed a survey research design, focusing on participants aged between 18 and 25 years.

### 2.2 Sampling method and sampling size

Sampling refers to the act, process, or technique of selecting a suitable sample—a representative subset of a population—to determine parameters or characteristics of the entire population. (Saumya Verma et al., 2017).

This study utilised a random sampling method to ensure a representative selection of 93 participants for the survey. A random sampling method means that every individual within the defined age range (18 to 25 years) had an equal chance of being selected to participate in the survey. This helped in obtaining a diverse and unbiased representation of the population, enhancing the generalizability of the findings to the broader group of nutrition students within the specified age range.

### 2.3 Period of study

This study had a duration of three months, indicating that data collection, analysis, and any other research activities will take place over this specific timeframe.

### 2.4 Inclusion criteria

Participants meeting the inclusion criteria are individuals aged 18 to 25, currently enrolled in a nutrition program, actively using social media, willing to provide consent, and available for survey completion or other data collection methods. These criteria help ensure that the selected participants possess the necessary characteristics for the study, contributing to the accuracy and relevance of the research outcomes.

### 2.5 Exclusion criteria

The study excluded individuals who fall outside the age range of 18 to 25, are not currently enrolled in a nutrition program, do not actively engage with social media for nutrition-related content, are unwilling to provide consent, or are unavailable to participate in survey completion or other data collection methods.

### 2.6 Tools for data collection

The data collection method involved an offline survey, where participants responded to survey questions using traditional pen-and-paper formats, eliminating the need for an online connection. This approach provided flexibility in engaging participants without relying on internet-based tools.

### 2.7 Method

**Quantitative Method:** Offline surveys were used to design and distribute questionnaires to a large sample of nutrition students. Questions about their social media usage, dietary choices, and the influence of social media on their eating habits were included. Hard copies of questionnaires were used to collect and analyse the data.

### 3. Results

#### Socio-demographic Data

A questionnaire was administered to 93 nutrition students, resulting in a commendable response rate of 100%. The study comprised 87 (94%) females and 6 (6%) male participants, all falling within the age bracket of 18 to 25 years. Among the respondents, 70 (75%) were pursuing master's degrees in nutrition and dietetics, while 23 (25%) were enrolled in bachelor's programs within the same discipline.

#### Usage of Social Media Platforms

The data analysis revealed that a majority of the respondents, specifically 88 (94.6%) out of 93 nutrition students, affirmed their frequent utilisation of social media platforms.

69.6% of the surveyed nutrition students indicated a frequent usage of Instagram, surpassing the utilisation rates of YouTube (22.8%), Pinterest (2.2%), Facebook (1.1%), and other social media platforms (4.3%). Out of the total 93 surveyed nutrition students, 71(76.3%) reported following nutrition-related accounts or influencers, constituting a notable proportion of the sample.

81 (87.1%) of the surveyed nutrition students reported encountering nutrition-related content on their social media feeds, while the remaining 12 (12.9%) indicated not coming across such content.

Out of the total 93 surveyed nutrition students, 60 (64.5%) acknowledged the influence of social media platforms on shaping their dietary choices. Out of the 93 nutrition students surveyed, 43 (46.2) students reported having tried a dietary trend or changed their eating habits based on social media influence. Conversely, the remaining 50 (53.8%) students indicated that they had never attempted such changes influenced by social media. 55 (59.1%) of the surveyed nutrition students expressed scepticism regarding the accuracy and reliability of nutrition information provided by social media. Conversely, 38 (40.9%) of students held the belief that social media does offer accurate and reliable nutrition information. Out of the 93 surveyed nutrition students, 49 (52.7%) students reported having participated in online seminars or forums related to nutrition.

#### Nutrition Knowledge

33 (35.5%) of the surveyed nutrition students reported feeling pressured to conform to specific dietary trends, while the majority, comprising 60 (64.5%), indicated that they did not experience such pressure. 55 (59.1%) of the total participants don't often seek advice on nutrition from social media, whereas 38 (40.9%) of the participants often seek advice on nutrition from social media.

Among the 93 surveyed nutrition students, 49 (52.7%) reported encountering conflicting nutritional advice on different social media platforms.

Among the surveyed nutrition students, 84 ( 90.3%) indicated that they find dietitians to be the most trustworthy source for nutritional information on social media, as opposed to fitness influencers, social media influencers, and celebrities. Out of the nutrition students surveyed, 47 (50.5%) expressed that social media has positively influenced their overall understanding of nutrition, while 46 (49.5%) held the contrary opinion. Among the nutrition students surveyed, 36 (38.7%) reported that they often share nutrition-related content on their own social media profiles, while 57 (61.3%) stated that they do not share such content on their social media profiles.

Out of 93 nutrition students surveyed, 75 (80.8%) have never participated in challenges or trends related to nutrition on social media, while 18 (19.4%) of the nutrition students have participated in such challenges or trends. Out of the nutrition students surveyed, 48 (51.6%) believe that social media significantly influences the perception of body image, while 45 (48.4%) don't hold this belief. Among the 93 nutrition students surveyed, 49 ( 52.7%) engage in discussions with peers about nutrition topics they discovered on social media platforms. Out of the nutrition students surveyed, 57 ( 61.3% ) believe that social media should play a role in shaping individuals' dietary choices, while 36 (38.7%) hold a contrary opinion.

#### Health and Nutrition

26 (28%) of the surveyed nutrition students reported suffering from health conditions that impact their dietary habits, while 67 (72%) indicated that they do not have any health conditions affecting their dietary habits. 48 (51.6%) of the surveyed nutrition students have sought information on social media platforms regarding managing or preventing obesity, while 45 (48.4%) have never sought such information.

47 (50.5%) of the nutrition students follow social media accounts that share content related to weight loss or obesity management, while 46 (49.5%) of the students do not.

32 (34.4%) of the nutrition students have tried a diet or weight loss plan recommended by someone on social media, while 61 (65.6%) of the students have never tried it. 25 (26.9%) of the nutrition students, either themselves or someone they know, have faced challenges related to underweight or malnutrition due to social media influence, while 68 (73.1%) of the nutrition students have not faced such challenges.

49 (52.7%) of the nutrition students have encountered misleading information on social media related to weight management or nutritional health, while 44 (47.3%) of the students have not encountered such misinformation

#### 4. Conclusion:

Following the comprehensive research undertaken, the study's conclusion highlights a discernible negative influence of social media on dietary choices of nutrition students. Notably, the investigation underscores the considerable sway that social media platforms wield over the dietary preferences and behaviours of these students. Specifically platforms like Instagram, Pinterest and YouTube emerge as significant conduits through which nutrition students derive inspiration, guidance, and validation pertaining to their food choices. Moreover, the findings shed light on the pervasive exposure of nutrition students to misleading information and unattainable body ideals disseminated through social media channels. Consequently, this exposure exacerbates the challenges faced by students in discerning reliable nutritional guidance amidst the influx of conflicting messages and exaggerated claims prevalent across online platforms. In essence, the study underscores the imperative for heightened awareness and critical engagement with social media platforms among nutrition students, as well as the necessity for strategies aimed at mitigating the adverse impact of misinformation and unrealistic standards perpetuated by these digital mediums.

#### 5. Acknowledgement

We extend our heartfelt gratitude to Mr. A.C. Shanmugam BA. BL, the Founder & Chancellor of Dr. M.G.R. Educational and Research Institute (Deemed to be University), for providing us with the opportunity and resources to pursue our M.Sc. in Food Science, Nutrition, and Dietetics and to successfully complete our project.

We would like to convey our appreciation to Er. A.C.S. Arun Kumar, B.E., President, for his support and encouragement in successfully completing our project work in M.Sc. Food Science, Nutrition, and Dietetics.

We would like to extend our sincere gratitude to Mr. M. Prabu, Joint Registrar, Humanities and Sciences, Phase II, and Dr. P.S. Prathibha, Deputy Dean and Program Head, Department of Food Science, Nutrition, and Dietetics, for their unwavering support and encouragement throughout the completion of our project work.

We wish to convey our heartfelt appreciation to our mentor, Ms. Prithika.M, Assistant Professor in the Department of Food Science, Nutrition, and Dietetics, for her continuous support, guidance, encouragement, and invaluable suggestions that contributed to the successful completion of this study.

We also extend a special note of gratitude to our families and friends for their assistance, support, and unwavering care throughout the duration of this study.

#### 6. References:

1. Megan Kreft, Brittany Smith, Daniella Hopwood and Renee Blaauw (2023) The use of Social media as a source of nutrition information, *South African Journal of Clinical Nutrition*, 36:4, 162-168.
2. Ishita Mehta, Rupali Runwal. Gayatri Parmar.(2023) A comprehensive review on impact of social media on dietary choices of males. *Pharma Innovation* 2023;12(3):2704-2708
3. Sophia. (2022) Impact of Social Media on Dietary Choices. *Wellness by iCliniq*
4. National Geographic Society (2024) Food
5. The importance of food selection. *Internet Public Library*.
6. Mohammad Ali Mohsenpour, Malihe Karamizadeh, Reza Barati-Boldaji, Gordon A. Ferns and Marzieh Akbarzadeh. (2023). Structural equation modeling of direct and indirect associations of social media addiction with eating behaviour in adolescents and young adults. *Sci Rep* 13, 3044.
7. Ministry of higher education, training and employment creation, Namibia and the food and agriculture organisation of the united nation, Windhoek, Namibia. (2004). The function of food. *Food and Nutrition \_ a handbook for namibian volunteer leaders*.
8. HPG Consulting. (2023) How Online Trends are Affecting the Food Habits of the New Generation. *Linkedin*.
9. Borwankar P.V. (1995), Research methodology. *New Delhi: Seth Publisher*.
10. Saumya Verma, Rajneesh Kumar Gautam, Spriha Pandey Aman Mishra, and Shubham Shukla(2017). Sampling Typology and Techniques *International Journal for Scientific Research and Development*.