

# THE IMPACT OF SOCIAL MEDIA ADVERTISEMENT ON CONSUMER BUYING BEHAVIOR FOR NUTRACEUTICALS IN HYDERABAD

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## ABSTRACT

Social media platforms have become an influential medium for marketing health-related products, particularly nutraceuticals, which are increasingly consumed for preventive healthcare and lifestyle management. This study examines the impact of social media advertising on consumer buying behavior for nutraceutical products in Hyderabad, with a specific focus on the roles of awareness creation, information quality, credibility, trust, and perceived health benefits. While digital advertisements are effective in capturing consumer attention, their ability to convert awareness into actual purchase behavior remains uncertain.

A structured questionnaire was used to collect primary data from 217 respondents in Hyderabad, representing diverse demographic backgrounds. The study employed quantitative research methods, and the collected data were analyzed using IBM SPSS Statistics. Reliability analysis, KMO and Bartlett's test, factor analysis, correlation analysis, and regression analysis were applied to examine the relationships between key variables influencing consumer behavior. The findings reveal that social media advertisements significantly enhance consumer awareness of nutraceutical products; however, awareness alone does not directly translate into purchase decisions. Trust in information and perceived credibility emerged as the strongest predictors of purchase intention, highlighting the importance of reliable and transparent communication in health-related advertising.

The study further indicates that generalized health benefit claims and emotional appeals have a limited impact on influencing consumer purchases unless supported by credible evidence and trustworthy sources. Consumers in Hyderabad demonstrated a rational and value-driven approach toward nutraceutical consumption, prioritizing information accuracy and legitimacy over promotional messaging. These findings provide important managerial insights for nutraceutical marketers, emphasizing the need to design evidence-based social media campaigns that focus on trust-building rather than mere visibility. The study contributes to the growing literature on digital health marketing and offers practical guidance for improving the effectiveness of social media advertising strategies in the nutraceutical sector.

**Keyword:** Social Media Advertising, Nutraceuticals, Consumer Buying Behavior, Information Credibility, Trust, Digital Marketing

## 1. Introduction

Nutraceuticals, which combine the concepts of nutrition and pharmaceuticals, have gained significant importance in recent years due to rising health awareness, increasing prevalence of lifestyle-related disorders, and a growing preference for preventive healthcare. Consumers are increasingly shifting from curative treatments to proactive health management, leading to rapid growth in the nutraceutical sector. In India, this trend is particularly visible

among urban populations, where changes in dietary habits, sedentary lifestyles, and higher disposable incomes have accelerated the demand for nutraceutical products.

Simultaneously, the expansion of digital technologies has transformed the way consumers access health-related information and make purchasing decisions. Social media platforms such as Facebook and Instagram have emerged as powerful marketing channels, enabling nutraceutical companies to directly engage with consumers, disseminate product information, and influence perceptions in real time. Unlike traditional advertising, social media advertising allows interactive communication, peer-to-peer information sharing, and targeted messaging, making it a critical tool in shaping consumer awareness and attitudes.

However, marketing nutraceutical products through social media presents unique challenges. As these products are closely linked to health outcomes, consumers tend to be cautious and evaluate the credibility, accuracy, and trustworthiness of the information presented. While social media advertisements are effective in generating awareness and visibility, there is growing concern regarding whether such awareness translates into actual purchase behavior. Factors such as information quality, credibility of claims, trust in sources, and perceived health benefits play a crucial role in determining consumer responses to digital health advertisements.

Hyderabad, a rapidly developing metropolitan city with a strong technological ecosystem and a health-conscious population, provides a relevant context for examining these dynamics. The city represents a diverse mix of young professionals, students, and working adults who are active users of social media and potential consumers of nutraceutical products. Studying consumer behavior in this setting offers valuable insights into how social media advertising influences health-related purchasing decisions in urban India.

Despite the growing importance of social media in nutraceutical marketing, limited empirical research has examined the gap between awareness created through digital advertisements and actual consumer buying behavior, particularly in the Indian context. This study aims to address this gap by analyzing the impact of social media advertising on consumer buying behavior for nutraceuticals in Hyderabad, with a specific focus on awareness creation, information quality, credibility, trust, and perceived health benefits. The findings of this research are expected to provide practical insights for marketers and contribute to the existing literature on digital health and nutraceutical marketing.

## **2. Review of Literature**

### **2.1 Nutraceuticals and Consumer Health Orientation**

Existing literature highlights that nutraceuticals play an important role in preventive healthcare by supporting immunity, managing lifestyle-related disorders, and improving overall well-being. Increasing health consciousness, rising incidence of chronic diseases, and growing acceptance of self-care practices have significantly influenced consumer interest in nutraceutical products. Studies suggest that consumers are more inclined to purchase nutraceuticals when they perceive clear health benefits and preventive value, although uncertainty regarding efficacy and scientific validation can limit adoption.

### **2.2 Role of Social Media in Consumer Decision-Making**

Social media has transformed traditional consumer decision-making processes by enabling rapid information dissemination, peer interaction, and real-time feedback. Prior research indicates that consumers frequently rely on social media platforms to search for product-related information, compare alternatives, and evaluate user reviews before making purchase decisions. The interactive nature of social media allows consumers to engage with brands directly, thereby influencing awareness, attitudes, and purchase intentions more effectively than conventional advertising channels.

### **2.3 Information Quality, Credibility, and Trust**

Information quality and credibility have been identified as key determinants of consumer responses to social media advertising. High-quality information that is accurate, relevant, and well-structured enhances consumer trust and positively influences attitudes toward advertised products. Several studies report that credibility of information sources plays a crucial role in shaping purchase intentions, particularly for health-related products where perceived risk is high. Trust acts as a mediating factor that converts exposure to social media content into favorable behavioral outcomes.

### **2.4 Influence of Health Benefit Claims and Attitudes**

Health benefit claims are commonly used in nutraceutical advertising to attract consumer attention; however, prior research suggests that exaggerated or unsupported claims may reduce consumer trust. While emotional appeals can increase engagement, consumers tend to adopt a rational evaluation approach when purchasing health-related

products. Attitudes toward social media advertisements are influenced by perceived usefulness and reliability of information rather than promotional intensity alone.

## 2.5 Research Gap

Although previous studies have examined social media marketing, information credibility, and consumer attitudes independently, limited empirical research has explored the combined effect of these factors on nutraceutical purchasing behavior in the Indian urban context. In particular, the gap between awareness generated through social media advertising and actual purchase behavior remains underexplored. This study addresses this gap by integrating awareness, information quality, credibility, trust, and perceived health benefits into a single analytical framework focused on nutraceutical consumers in Hyderabad.

## 3. Research Objectives and Hypothesis

### 3.1 Research Objectives

The primary objective of this study is to examine the impact of social media advertising on consumer buying behavior for nutraceutical products in Hyderabad. The specific objectives of the study are as follows:

- To analyze the role of social media advertising in creating awareness of nutraceutical products among consumers.
- To examine the relationship between information credibility and consumer attitudes toward nutraceutical advertisements on social media.
- To assess the influence of consumer attitudes on purchase decisions for nutraceutical products.
- To evaluate the impact of perceived health benefits communicated through social media advertisements on consumer buying behavior.
- To investigate the influence of information quality on consumer purchase decisions in the nutraceutical market.
- To identify whether awareness generated through social media advertising translates into actual purchase behavior.

### 3.2 Research Hypotheses

Hypothesis	Null Hypothesis (H <sub>0</sub> )	Alternative Hypothesis (H <sub>1</sub> )
H1	Social media ads do not improve consumer awareness of nutraceuticals.	Social media ads significantly improve consumer awareness of nutraceuticals.
H2	Information credibility does not affect consumer attitudes.	Information credibility significantly affects consumer attitudes.
H3	Consumer attitudes toward social media ads do not affect purchase decisions.	Consumer attitudes toward social media ads significantly affect purchase decisions.
H4	Perceived health benefits do not impact buying behavior influenced by social media.	Perceived health benefits significantly impact buying behavior via social media.
H5	Information quality on social media does not influence buying behavior.	Information quality on social media positively influences buying behavior.

## 4. Research Methodology

### 4.1 Research Design

The present study adopted a quantitative research design to examine the impact of social media advertising on consumer buying behavior for nutraceutical products. A descriptive and analytical approach was used to understand relationships between awareness, information quality, credibility, trust, perceived health benefits, and purchase behavior. Primary data were collected using a structured questionnaire.

### 4.2 Data Collection and Sample Size

Primary data were collected from consumers residing in Hyderabad, Telangana. A total of 217 valid responses were obtained using a structured questionnaire administered through online and offline modes. Convenience sampling was adopted due to accessibility and time constraints. The sample included respondents from diverse demographic backgrounds, ensuring adequate representation of age, gender, education, and occupation.

### 4.3 Research Instrument

The questionnaire consisted of two sections. The first section captured demographic information such as gender, age, education level, and occupation. The second section measured key study variables including awareness, information quality, credibility, trust, perceived health benefits, consumer attitude, and purchase intention. A five-point Likert scale was used, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

### 4.4 Data Analysis Tools

The collected data were coded and analyzed using IBM SPSS Statistics and Microsoft Excel. Statistical techniques such as reliability analysis (Cronbach's Alpha), Kaiser-Meyer-Olkin (KMO) measure, Bartlett's Test of Sphericity, factor analysis, correlation analysis, and regression analysis were employed to examine relationships among variables and test the proposed hypotheses.

### 4.5 Ethical Considerations

Participation in the study was voluntary, and respondents were informed about the purpose of the research. Anonymity and confidentiality of responses were maintained, and the data collected were used solely for academic research purposes.

**Table-1:** Demographic Profile of Respondents (n = 217)

Demographic Variable	Category	Frequency
Gender	Male	119
	Female	98
Age (Years)	18–24	141
	25–34	58
	35–44	12
	45–54	6
	55 and above	0
Education	High School	29
	Undergraduate	49
	Postgraduate	137
	PhD	2
Occupation	Student	114
	Employed	64
	Self-employed	14
	Unemployed	4
	Housewife	21

## 5. Data Analysis and Result

This section presents the statistical analysis and interpretation of data collected to examine the impact of social media advertising on consumer buying behavior for nutraceutical products in Hyderabad. The analysis was carried out using IBM SPSS Statistics and Microsoft Excel. Various statistical tools were employed to ensure reliability, validity, and robustness of the results.

### 5.1 Reliability Analysis

Reliability analysis was conducted to assess the internal consistency of the measurement scales used in the study. Cronbach's Alpha was used as the reliability coefficient, where a value greater than 0.7 indicates acceptable reliability.

**Table-2:** Reliability Analysis (Cronbach's Alpha)

Construct	Number of Items	Cronbach's Alpha	Interpretation
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Information Quality & Credibility	3	0.889	Excellent reliability
Awareness	3	0.850	Good reliability
Perceived Health Benefit	1	Not applicable	Single-item measure
Customer Attitude	1	Not applicable	Single-item measure

The results indicate that the constructs of Information Quality & Credibility and Awareness exhibit strong internal consistency, confirming that the measurement scales used in the study are reliable and suitable for further statistical analysis.

### 5.2 KMO and Bartlett's Test of Sphericity

Kaiser–Meyer–Olkin (KMO) measure and Bartlett's Test of Sphericity were conducted to examine the suitability of the data for factor analysis. The KMO value indicates sampling adequacy, while Bartlett's Test checks whether the correlation matrix is significantly different from an identity matrix.

**Table-3: KMO and Bartlett's Test of Sphericity**

Measure	Value
Kaiser–Meyer–Olkin (KMO)	0.882
Bartlett's Test – Chi-Square	1015.005
Degrees of Freedom	28
Significance (p-value)	< 0.001

The KMO value of 0.882 indicates excellent sampling adequacy, and the significant Bartlett's Test ( $p < 0.001$ ) confirms that the data are suitable for factor analysis.

### 5.3 Factor Analysis

Factor analysis was performed to identify underlying factors influencing consumer buying behavior toward nutraceutical products. Principal component analysis was applied to extract factors based on eigenvalues greater than one.

**Table-4: Factor Loadings**

Variable	Factor Loading
Quality of Information	0.827
Trust in Information	0.808
Likelihood of Purchase	0.763
Customer Attitude	0.651
Awareness of New Products	0.839
Awareness through Social Media	0.843
Awareness of Nutraceuticals	0.810
Perceived Health Benefits	0.622

**Table 5: Total Variance Explained (Factor Analysis)**

Component	Total	% of Variance	Cumulative %
1	4.801	60.015	60.015

The factor loadings indicate that information quality, trust, and awareness-related variables strongly influence consumer perceptions and purchase intentions.

### 5.4 Correlation Analysis

Correlation analysis was conducted to examine the strength and direction of relationships among key study variables. Pearson's correlation coefficient was used for the analysis.

**Table-6: Correlation Matrix**

Variables	Quality of Info	Trust	Purchase Likelihood	Attitude	Awareness	Health Benefits
Quality of Information	1	0.770	0.573	0.434	0.651	0.424

Trust in Information	0.770	1	0.645	0.498	0.537	0.348
Purchase Likelihood	0.573	0.645	1	0.522	0.542	0.344
Customer Attitude	0.434	0.498	0.522	1	0.437	0.355
Awareness	0.651	0.537	0.542	0.437	1	0.503
Perceived Health Benefits	0.424	0.348	0.344	0.355	0.503	1

The results show strong positive correlations between information quality, trust, awareness, and purchase likelihood, indicating meaningful relationships among these variables.

### 5.5 Regression Analysis

Regression analysis was conducted to identify the key predictors of consumer purchase behavior for nutraceutical products influenced by social media advertising.

**Table-7: Regression Analysis Results**

Predictor Variable	B	Sig.
Quality of Information	0.083	0.778
Trust in Information	-0.188	0.452
Likelihood of Purchase	0.532	0.009
Customer Attitude	-0.244	0.339
Awareness of New Products	0.409	0.102
Perceived Health Benefits	-0.470	0.096

The regression results indicate that trust-related purchase likelihood is the most significant predictor of buying behavior, while awareness and health benefit claims alone do not significantly influence purchase decisions.

## 6. Findings and Discussion

This section presents the key findings of the study and discusses them in the context of the stated research objectives and hypotheses. The findings are derived from statistical analyses including reliability testing, factor analysis, correlation analysis, and regression analysis, and they provide insights into how social media advertising influences consumer buying behavior for nutraceutical products in Hyderabad.

### 6.1 Impact of Social Media Advertising on Consumer Awareness

The results indicate that social media advertising plays a significant role in creating awareness about nutraceutical products among consumers. Strong positive correlations were observed between awareness-related variables and exposure to social media advertisements. Platforms such as Facebook and Instagram were effective in informing consumers about new nutraceutical products and their potential benefits. However, regression results suggest that although awareness is successfully generated, it does not independently translate into actual purchase decisions. Therefore, the null hypothesis (H1) related to awareness is partially rejected, indicating that awareness is necessary but not sufficient to drive buying behavior.

### 6.2 Role of Information Credibility and Trust

Information credibility and trust emerged as the most influential factors affecting consumer purchase intention. The study found strong correlations between information quality, trust in information, and likelihood of purchase. Regression analysis further revealed that trust-related purchase likelihood is a statistically significant predictor of buying behavior. These findings support the rejection of the null hypothesis (H2), confirming that credible and trustworthy information significantly shapes consumer attitudes and purchase decisions. This highlights that consumers in the nutraceutical segment place high importance on reliable, evidence-based information when making health-related purchases.

### 6.3 Influence of Consumer Attitude on Purchase Decisions

The analysis showed a moderate relationship between consumer attitude toward social media advertisements and purchase likelihood. However, regression results indicated that consumer attitude alone did not significantly predict buying behavior. This suggests that positive attitudes toward advertisements may increase engagement or interest,

but they do not necessarily lead to purchases unless supported by credible information and trust. Hence, the null hypothesis (H3) is accepted, implying that attitude without trust has limited impact on actual buying decisions.

#### **6.4 Effect of Perceived Health Benefits**

Perceived health benefits communicated through social media advertisements showed a positive but statistically insignificant relationship with purchase behavior. While consumers acknowledged health-related claims, they appeared skeptical of generalized or unsupported benefit statements. The findings indicate that perceived health benefits influence consumer awareness but do not strongly motivate purchase decisions unless backed by credible evidence. Therefore, the null hypothesis (H4) is accepted, suggesting that health benefit claims alone are insufficient to drive consumer buying behavior.

#### **6.5 Influence of Information Quality on Buying Behavior**

Information quality demonstrated strong correlations with trust and awareness variables; however, its direct impact on purchase behavior was not statistically significant in the regression analysis. This implies that information quality contributes indirectly by enhancing trust and awareness rather than directly influencing purchase decisions. As a result, the null hypothesis (H5) is accepted. The findings reinforce the idea that information quality is a foundational factor that supports trust-building rather than an immediate trigger for purchases.

#### **6.6 Overall Discussion**

Overall, the findings reveal a clear gap between awareness generation and actual purchase behavior in the context of social media advertising for nutraceuticals. While social media platforms are effective in educating and informing consumers, trust and credibility act as critical mediators in converting awareness into buying decisions. Consumers in Hyderabad exhibit a rational and value-driven approach toward nutraceutical consumption, prioritizing accuracy, transparency, and legitimacy of information over emotional appeal or promotional intensity. These insights underline the need for nutraceutical marketers to shift their focus from visibility-driven campaigns to trust-centric communication strategies that emphasize evidence-based claims and credible information sources.

### **7. Conclusion**

The present study examined the impact of social media advertising on consumer buying behavior for nutraceutical products in Hyderabad, with particular emphasis on awareness, information quality, credibility, trust, perceived health benefits, and consumer attitudes. The findings reveal that social media platforms such as Facebook and Instagram are highly effective in creating awareness and disseminating information about nutraceutical products. However, increased awareness alone does not directly translate into purchase decisions.

The study establishes that trust and credibility of information are the most critical factors influencing consumer purchase behavior in the nutraceutical segment. Consumers tend to adopt a rational and value-driven approach, especially when purchasing health-related products, and they prioritize accuracy, transparency, and reliability of information over emotional appeals or promotional intensity. While information quality and health benefit claims contribute to shaping awareness and perceptions, their direct impact on buying behavior is limited unless supported by credible evidence.

Overall, the research highlights a significant gap between digital visibility and actual consumer conversion. The results suggest that nutraceutical marketers should move beyond awareness-driven campaigns and focus on trust-building strategies that emphasize evidence-based communication, verified claims, and credible information sources. By aligning social media marketing practices with consumer expectations of authenticity and reliability, companies can enhance the effectiveness of their digital marketing efforts and improve consumer engagement and conversion.

### **7. Scope of Future Research**

Although this study provides valuable insights into the role of social media advertising in influencing nutraceutical consumer behavior, it has certain limitations that open avenues for future research. The study was confined to consumers in Hyderabad; therefore, future studies can extend the geographical scope to other cities or regions to enhance the generalizability of findings.

Further research may explore the influence of additional social media platforms such as YouTube, LinkedIn, and emerging short-video platforms on consumer buying behavior for health-related products. Longitudinal studies could also be conducted to examine changes in consumer perceptions and trust over time with repeated exposure to social media advertisements.

Additionally, future studies may incorporate behavioral and psychological variables such as risk perception, brand loyalty, influence of healthcare professionals, and lifestyle segmentation to develop a more comprehensive understanding of nutraceutical consumption in the digital era. Such extensions would contribute to deeper theoretical insights and more refined managerial strategies in digital health and nutraceutical marketing.

## 8. REFERENCES

- [1] I. Erkan and C. Evans, "The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption," *Computers in Human Behavior*, vol. 61, pp. 47–55, 2016.
- [2] H. Boateng and A. F. Okoe, "Determinants of consumers' attitude towards social media advertising," *Journal of Creative Communications*, vol. 10, no. 3, pp. 248–258, 2015.
- [3] Y. K. Dwivedi, K. K. Kapoor, and H. Chen, "Social media marketing and advertising," *The Marketing Review*, vol. 15, no. 3, pp. 289–309, 2015.
- [4] A. S. Chopra, R. Lordan, and M. Battino, "The current use and evolving landscape of nutraceuticals," *Pharmacological Research*, vol. 175, 2022.
- [5] H. B. Jadhav et al., "Factors governing consumers' buying behavior concerning nutraceutical products," *Food Science and Nutrition*, vol. 11, no. 9, pp. 4988–5003, 2023.
- [6] C. M. K. Cheung, M. K. O. Lee, and N. Rabjohn, "The impact of electronic word-of-mouth: The adoption of online opinions in online customer communities," *Internet Research*, vol. 18, no. 3, pp. 229–247, 2008.
- [7] S. C. Chen and C. P. Lin, "Understanding the effect of social media marketing activities," *Technological Forecasting and Social Change*, vol. 140, pp. 22–32, 2019.
- [8] Y. I. Ayseli et al., "Food policy, nutrition and nutraceuticals in the prevention and management of COVID-19," *Trends in Food Science & Technology*, vol. 105, pp. 186–199, 2020.
- [9] C. F. Goh et al., "Critical insights of pharmaceutical, cosmeceutical and nutraceutical products," *Journal of Retailing and Consumer Services*, vol. 72, 2023.
- [10] L. Hilken et al., "Social media, body image and resistance training," *Sports Medicine – Open*, vol. 7, no. 1, 2021.
- [11] F. Kujur and S. Singh, "Engaging customers through online participation in social networking sites," *Asia Pacific Management Review*, vol. 22, no. 1, pp. 16–24, 2017.
- [12] J. Kietzmann et al., "Social media? Get serious! Understanding the functional building blocks of social media," *Business Horizons*, vol. 54, no. 3, pp. 241–251, 2011.
- [13] A. Dwivedi et al., "Consumer emotional brand attachment with social media brands," *European Journal of Marketing*, vol. 53, no. 6, pp. 1176–1204, 2019.
- [14] C. Leong, A. M. W. Loi, and S. Woon, "The influence of social media eWOM information on purchase intention," *Journal of Marketing Analytics*, vol. 10, no. 2, pp. 145–157, 2022.
- [15] P. Ares, A. Giménez, and A. Gámbaro, "Influence of nutritional knowledge on perceived healthiness," *Appetite*, vol. 51, no. 3, pp. 663–668, 2008.
- [16] D. Chaffey and F. Ellis-Chadwick, *Digital Marketing*, Pearson Education, 2019.
- [17] S. Gu et al., "Impact of the COVID-19 pandemic on online consumer purchasing behavior," *Journal of Theoretical and Applied Electronic Commerce Research*, vol. 16, no. 6, pp. 2263–2281, 2021.
- [18] K. Koay et al., "Perceived social media marketing activities and consumer-based brand equity," *Asia Pacific Journal of Marketing and Logistics*, vol. 33, no. 1, pp. 53–72, 2021.
- [19] H. Ul Haq, "Perception of social media advertising," *Interdisciplinary Journal of Contemporary Research in Business*, vol. 4, no. 10, pp. 770–778, 2012.
- [20] S. Prendergast, K. Poon, and J. Tsang, "Consumer attitudes toward advertising," *Journal of Consumer Marketing*, vol. 27, no. 3, pp. 223–232, 2010.
- [21] S. Mason et al., "Changes in consumer behavior during COVID-19," *Journal of Retailing and Consumer Services*, vol. 58, 2021.
- [22] P. Pavlou and D. Gefen, "Building effective online marketplaces," *Information Systems Research*, vol. 15, no. 1, pp. 37–59, 2004.
- [23] N. Nawi et al., "Brand engagement on social media," *Journal of Marketing Communications*, vol. 26, no. 5, pp. 495–514, 2020.

- [24] M. Mostafa and A. Kasamani, "Brand experience and consumer response," *Journal of Brand Management*, vol. 28, no. 2, pp. 123–138, 2021.
- [25] M. Erkan, "Information adoption model in social commerce," *Computers in Human Behavior*, vol. 61, pp. 47–55, 2016.

