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Digital marketing approaches and their role in fostering healthy eating behaviors: A systematic literature review

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Abstract: Addressing dietary and nutritional concerns necessitates the promotion of nutritious meals. This article employs the PICOC framework (Population, Intervention, Comparison, Outcome, Context) to formulate research questions that examine the efficacy of various digital marketing strategies in encouraging consumers to choose healthier dietary options. The Scopus database, accessible through a Scopus API key and managed with Publish and Perish software, was utilized for a systematic literature review. A total of 537 records were initially gathered; after screening and applying inclusion criteria, 30 peer-reviewed articles published between 2019 and 2024 were incorporated into the final research. The findings indicate that the most effective strategies include social media marketing, influencer marketing, content marketing, email marketing, targeted advertising, and mobile marketing. Social media platforms such as Instagram, Facebook, and TikTok enhance engagement through visually appealing and dynamic content. Influencer marketing increases purchase intentions by establishing brand reputation and trust. Targeted email campaigns foster customer loyalty and encourage repeat business. Content marketing helps establish authority and generates organic traffic. Focusing on specific health-conscious consumer demographics significantly improves online visibility and sales. Mobile marketing effectively engages younger, technologically adept demographics through app-based campaigns and various educational activities. The study highlights important implications for human well-being: effective digital marketing can reduce the incidence of diet-related diseases, promote healthier eating habits, and enhance overall societal health. From an industry perspective, these strategies offer organizations opportunities to align with consumer health trends, thereby improving brand positioning, increasing market share, and promoting sustainable growth.

Keywords: Digital marketing, Healthy foods, Influencer marketing, Mobile marketing, Social media.

1. Introduction

In today's marketplace, the combination of health consciousness and digital innovation has drastically altered consumer behaviours and marketing techniques in the food business. The global move towards better lifestyles, fuelled by growing knowledge of the negative impacts of bad eating habits, has increased demand for healthy food alternatives [1]. This trend is shown by an increase in health-related disorders such as obesity, diabetes, and cardiovascular disease, which have all heightened the need of encouraging healthful food choices [2]. As a result, both consumers and manufacturers are increasingly prioritising health-conscious goods, altering the landscape of the food sector [3]. Simultaneously, the introduction and development of digital technology has transformed marketing paradigms in a variety of industries, including the food business. Digital marketing, with its varied techniques that include social media campaigns, influencer alliances, content marketing, email marketing, and mobile marketing, provides unprecedented chances for organisations to communicate

with their target consumers [4]. Unlike traditional marketing tactics, digital marketing has the benefits of real-time interaction, personalised communication, and extensive data analytics, allowing marketers to alter their campaigns with accuracy and adaptability [5].

Rising demand for healthy foods and the wide range of options available through digital marketing have come together to make the market a great place for new advertising methods that encourage people to eat better. Because they are engaging and reach a lot of people, digital platforms are important for spreading information, making people loyal to brands, and swaying buying choices [6]. For example, Instagram, Facebook, and TikTok make it easy to make visually appealing and interesting content that can successfully show how healthy food items can help people [7, 8]. Also, influencer marketing uses the authority and reach of well-known people to promote healthy eating habits, which builds trust among consumers and leads to changes in behaviour [9]. In addition, digital marketing lets brands use data-driven information to keep improving their marketing. With analytics tools, marketers can keep an eye on how customers connect with them, keep track of engagement metrics, and see in real time how well different strategies are working [10]. This ability not only makes marketing plans more flexible, but it also lets you make the best use of your resources, making sure that your marketing budget goes to the most effective projects [11]. The engaging nature of digital marketing also creates a way for brands and customers to talk back and forth, which allows for feedback and builds a sense of community around healthy eating [12].

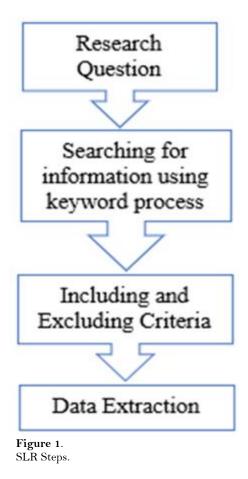
The changing digital terrain, marked by the development of new technologies, changing consumer tastes, and altering regulatory regimes, influences the dynamic interaction between digital marketing and the promotion of healthy foods even more. Artificial intelligence (AI), machine learning, and augmented reality (AR) are just a few of the innovations constantly broadening the toolbox accessible to marketers and allowing more complex and immersive marketing experiences [13]. Simultaneously, the growing focus on data protection and ethical marketing techniques calls for a careful approach to digital marketing so that promotional efforts are both responsible and successful [14]. Given the special difficulties with marketing nutritious meals, this study is very relevant. Unlike traditional food items, healthy foods may need the conveyance of complicated nutritional information, the dispelling of consumer misunderstandings, and the overcoming of ingrained dietary biases [15]. Furthermore, the competitive scene is full of a lot of less nutritious options that could be more strongly promoted or more engrained in consumer behaviour. Therefore, firms trying to build out a position in the healthy food area must first know which digital marketing methods are most efficient in negotiating these hurdles [16].

1.1. Research Gap

Even if digital marketing and the advocacy of healthy food are merging more and more, many significant gaps in a body of present knowledge still exist. These constraints prevent a complete understanding of how best to apply digital marketing strategies to alter consumer behavior towards healthier dietary selections. While several studies have examined various digital marketing tactics, there is a lack of specialized study determining which ones best inspire better eating. Many current studies generalize digital marketing as a monolithic entity, without differentiating the key aspects and their various effects on client behavior [3, 17]. There have been few research that compare how digital marketing influences purchasing behavior among health-conscious customers to traditional marketing tactics. To effectively manage resources and maximize advertising approaches, marketers must first evaluate the relative usefulness of various methods [5, 18]. Emerging Digital Marketing Trends: In the ever-changing world of digital marketing, new trends emerge all the time. These emerging trends, such as influencer marketing, artificial intelligence-driven tailoring, and augmented reality experiences are impacting the promotion of healthy foods, particularly in metropolitan areas where internet use is often greater [19]. Implementing digital marketing strategies for healthy foods has unique challenges such as presenting complex nutritional information, overcoming client distrust, and navigating the competitive online domain. Many times, existing research ignores these implementation challenges or fails to study how they evolve across different digital platforms, limiting the usefulness of their findings to actual marketing contexts. Contextual Variations Across Digital Platforms: Because of differences in user demographics, content formats, and interaction systems, digital marketing tactics may perform differently on different platforms (e.g., Facebook, Instagram, Tiktok, YouTube). However, existing research seldom differentiate the success of marketing strategies by platform, resulting in a lack of nuanced understanding of best practices specific to each platform [7, 20].

2. Methodology and Research Design

This paper presents the review process as shown in figure 1 using a systematic literature review (SLR) approach, thereby fully investigating digital marketing techniques applied to support healthy foods. The SLR method was chosen because of its established success in synthesizing existent research, distinguishing patterns, and spotting research gaps inside a specified collection of material [21-23]. Following a methodical and particular set of protocols helps the SLR improve the validity and dependability of the results, therefore supporting academic research on digital marketing in the healthy food industry [24]. Thus, the acceptance of an SLR offers a strong basis for a thorough knowledge of the phenomena under study as well as for the development of evidence-based recommendations that may direct practitioners and lead academic studies.



The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow chart guides the reporting of this study by offering a well-founded structure for improving the rigor and

clarity of systematic literature reviews [25]. PRISMA is a complete tool that helps arrange and display results from many types of published research in an organized manner.

2.1. Formulation of research Questions

The PICOC framework, which stands for Population, Intervention, Comparison, Outcome, and Context, is closely adhered to in this research. This framework provides a fundamental framework for developing research questions and directing the process of conducting a systematic review [25]:

- Population (P): The target population consists of persons who are keen in or frequently buying healthy foods and range in age from 18 to 65.
- Intervention (I): The study examines a range of digital marketing to promote healthy food and Emerging digital marketing trends on consumer behavior.
- Comparison (C): Digital marketing strategies and traditional marketing methods.
- Outcome (O): Promoting healthy food consumption, this includes measuring consumer awareness, attitudes towards healthy foods, purchasing behavior and behavioral changes.
- Context (C): Different digital platforms.

The below mentioned are the study's research questions, each of which is in line with the appropriate PICOC elements.

- 1. Which digital marketing techniques best encourage among consumers healthier foods?
- 2. In what ways does social media marketing affect the buying behavior of people who are health-conscious than more conventional marketing techniques?
- 3. Which new developments in digital marketing are influencing metropolitan area healthy food promotion?
- 4. How various digital platforms affect the difficulties marketers have when applying digital marketing techniques for healthy foods?

These research questions are designed to guide the systematic literature evaluation, therefore maintaining that the study stays oriented on important aspects of digital marketing in the framework of healthy eating promotion. This research aims to provide a thorough overview of effective digital marketing strategies, encompassing their benefits, current trends, and the obstacles marketers face in their daily professional activities. To attain this objective, it is essential to address the previously highlighted problems. This comprehensive research not only advances academic knowledge of the topic but also offers actionable tips for professionals seeking to improve digital marketing tactics that promote healthy eating habits

2.2. Database selection and Search Strategy

The Scopus database was the sole resource that the authors relied on in order to locate pertinent works for this systematic review. This is due to the fact that the Scopus database has a comprehensive coverage of peer-reviewed publications that are held to strict academic standards [26, 27]. Despite the fact that every database has its own set of advantages and disadvantages, Scopus was chosen as the major source because of the extensive and high-quality academic information that it has. This content is regularly used in literature reviews. In addition, Scopus is widely acknowledged as an essential resource for study in the domains of business, management, and health, and it has been utilized extensively in systematic literature reviews within these different fields [28, 29]. To facilitate the extraction of literature, the Publish/Perish software was employed, utilizing an API key to interface directly with the Scopus database by employing strategically formulated keywords ("digital marketing" OR "online marketing" OR "internet marketing" OR "social media marketing" OR "digital advertising" OR "email marketing" OR "online advertising" OR "web marketing" OR "digital campaigns" OR "social media campaigns" OR "influencer marketing" OR "content marketing" OR "mobile marketing" OR "email marketing") AND ("food" OR "healthy" OR "consumer*" OR "consumption") to maximize the relevance of retrieved studies [30]. In order to capture the full width and depth of the current research

while keeping the search focused on the specific aims of the study, it is essential to pick keywords in a systematic literature review with great care. Researchers are able to traverse the diverse vocabulary and terminology that is present in academic writing by selecting the appropriate combination of related concepts and synonyms, as well as narrow and wide phrases. The review is built on a solid foundation of comprehensiveness, which helps to ensure that no important research are overlooked [31]. In addition, the prospect of including publications from supranational organizations like the Food and Agriculture Organization of the United Nations (FAO) as well as sources come from the private sector was taken into consideration, in general, they do not go through an independent peer-review process. As a result, they do not satisfy the stringent scientific standards that were established for this study.

2.3. Inclusion and Exclusion Criteria

For the objective of this study on digital marketing approaches for encouraging healthy food choices, a rigorous and thorough screening process was used. The authors started by examining the titles and abstracts of the publications to assess their alignment with the research problem. Studies required to be published within the previous five years, specifically investigating digital marketing methods in the overall context of encouraging healthy eating, follows basic methodological requirements for empirical research, and be met the criteria. Articles published outside the assigned period, had not been written in English, or did not properly relate digital marketing to healthier food promotion were omitted. Furthermore, omitted were simply technical studies, conference papers, editorials, and other non-empirical publications unless they provided significant qualitative or quantitative insights pertinent to the study issues. Combining clearly specified inclusion and exclusion criteria with targeted research topics guarantees a methodologically strong synthesis of the body of current literature in this fast-developing subject [32, 33].

2.4. Data Extraction

The process of screening scientific literature in the current study was adopted using the PRISMA statement, a widely regarded and comprehensive framework for performing meta-analyses and directed inclusion and exclusion process in systemic reviews [34, 35]. The data extraction and analysis procedure will be guided by the core research questions established for this review.

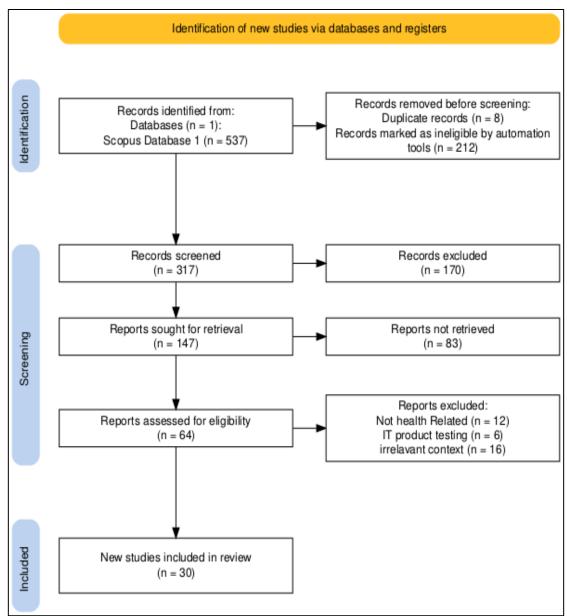


Figure 2.
Prisma flow diagram of study selection [35].

Figure 2 presents the PRISMA flow diagram, which delineates the process of identifying, screening, and including papers in a systematic review. Initially, 537 entries were obtained from the Scopus database during the identification phase, of which 220 records were eliminated prior to screening, including 8 due to duplication and 212 classified as ineligible by automated methods. Subsequently, 317 entries required manual screening, of which 170 were excluded because their titles and abstracts failed to meet the acceptance criteria. Following that, in the screening phase, 147 reports were sought; however, 83 could not be retrieved due to inaccessible data. Of the remaining 64 reports, a comprehensive full-text eligibility assessment was conducted, resulting in the exclusion of 34 reports due to reasons including insufficient focus on the health-related food environment, relevance to IT product testing or development, and provision of extraneous contextual information. These exclusions

were primarily based on their failure to meet the inclusion criteria pertaining to digital marketing strategies aimed at promoting healthy foods or empirical rigor. Studies deemed irrelevant, published in languages other than English, or without enough methodological transparency were excluded. In all, 30 publications satisfied the criteria for inclusion, offering the most relevant, methodologically rigorous, and current insights into digital marketing tactics aimed at promoting healthy foods and influencing the purchasing behavior of health-conscious consumers. Thus, it was concluded that this final compilation of documents warranted a thorough examination. The review followed recognized methodological best practices by rigorously monitoring the selection process throughout each level of identification, screening, and eligibility. The clear use of inclusion and exclusion criteria enhances the integrity of the findings and promotes replicability and comparability in future research.

3. Results

The findings of this systematic literature review are organized around the four primary research questions.

3.1. What Digital Marketing Techniques Best Help Consumers to Promote Healthy Foods?

The study identifies numerous digital marketing techniques that show great effectiveness in pushing healthier eating. Among these are social media marketing, influencer marketing, content marketing, email marketing, focused advertising, mobile marketing, and so on.

Social media marketing - makes strategic use of platforms as Instagram, Facebook, Youtube, Twitter and Tiktok because of its interactive qualities and broad reach. Empirical data shows that aesthetically satisfying content, including high-quality images and dynamic video content, very much increases consumer awareness of both healthy and bad food offerings [3]. Furthermore, interactive features like polls, tales, and live streaming events help to develop communities by supporting nearby businesses and therefore sustaining customer interest in zero contact or good eating habits [36].

Influencer marketing - Influencer marketing, often known as engaging with individuals who are members of health-conscious groups, has established itself as a highly successful marketing strategy. The endorsements of healthy food companies are especially fascinating since influencers assist these firms become more reputable and accessible to their target audiences [37]. When compared to more conventional methods of promotion, influencer-driven campaigns are able to enhance the likelihood of followers making a purchase and inspire higher levels of confidence [38]. Furthermore, the genuineness that is displayed in sponsorships by influencers, contributing to an increase in consumer approval [39].

Content marketing - the development of worthwhile and educational materials via blogs, papers, and infographics is crucial in teaching customers about the advantages of better foods by raising understanding of nutrition and improved awareness of the relevance of a better diet [17]. Content marketing creates brand power and generates natural traffic using SEO techniques [40]. Studies show that educational material improves customer impressions and raises the inclination to change to better eating habits. Moreover, effectively written material might raise search engine results, thereby increasing visibility and reach [12, 17].

Email Marketing- targeted email marketing that provide tailored suggestions, promotions, and nutritional information effectively engage subscribers. Direct engagement with customers through email marketing increases brand loyalty and encourages repeat purchases [41]. Compared to generic email strategies, personalized email content greatly improves engagement rates and conversion metrics. Email marketing automation and segmentation both contribute to a more effective campaign overall [42].

Focused advertising- guarantees that healthy food companies show up prominently in search engine results, therefore drawing more natural visitors [43]. This helps to improve online presence. Targeting certain customer demographics actively seeking healthy food alternatives, Firm Generated Content (FGC) from paid advertising compliments social media advertising [44]. Moreover, constant optimization depending on analytics might improve these techniques for greater results.

With so many people always on the go with their phones, it only makes sense to reach out to them using mobile marketing tactics like app-based promotions and SMS advertising [45]. Especially among younger, more tech-savvy generations, mobile marketing increases reach and interaction. Furthermore, by personalizing the customer experience through location-based marketing and push notifications, the chance of engagement and conversion may be increased [46].

An increase in consumer engagement and sales growth has been achieved within the healthy food industry as a consequence of the utilization of these digital marketing strategies, which, when combined, have a synergistic impact that magnifies the affects of each of the strategies separately. By assisting individuals in making informed decisions regarding their diet, digital marketing plays a significant role in the promotion of health-related goals. The several diverse approaches that digital marketing brings to the table are brought to light by this all-encompassing strategy, which serves to show the significant role that digital marketing also plays. The utilization of a number of different digital marketing methods results in the production of a synergistic impact. This impact magnifies the individual benefits that are associated with each of these strategies, which in turn encourages significant customer engagement and sales growth within the healthy food industry. By highlighting the importance of digital marketing in the promotion of health objectives, this all-encompassing strategy brings to light the function that digital marketing plays in the promotion of dietary choices that are high in nutrients.

3.2. How Does Social Media Marketing Influence the Purchasing Behavior of Health-Conscious Individuals Compared to Traditional Marketing Methods?

The impact of social media marketing on the purchasing behavior of health-conscious individuals significantly differs from that of traditional marketing strategies. Social media marketing surpasses traditional marketing in several significant categories, as indicated by the data:

Social media platforms facilitate two-way communication between organizations and their target consumers, promoting community engagement and simplifying interactions for enterprises [18]. Health-conscious customers interact more actively with their preferred brands through comments, likes, shares, and direct messaging to enhance their emotional connection and loyalty to these companies. Conversely, conventional marketing tactics, such as television advertisements and newspaper publications, offer a restricted degree of participation, often resulting in the passive consumption of marketing content [5].

Facebook, Twitter, and other social media platforms provide users with broad targeting possibilities that are based on their demographics, interests, and actions. These platforms offer a number of features, two of which are personalization and targeting. According to Mo, et al. [47] this makes it possible for advertisers to provide highly customized information that is in line with the tastes, privacy concerns, and health objectives of individual customers. Messages that are geared to the unique dietary requirements and lifestyle choices of customers who are health aware are more likely to generate a positive reaction from those consumers. In traditional marketing strategies, this sort of detail is not there, which usually results in a form of outreach that is more generic and less customized.

The decisions that customers make about their purchases are significantly influenced by the suggestions and assessments that are made by their peers on social media sites. For the purpose of making decisions on the acquisition of healthy food items, individuals who are worried about their health typically rely on the experiences and recommendations of their contemporaries and trusted influencers [48]. When it comes to conventional marketing, where endorsements are frequently provided by celebrities or fictional characters rather than by individuals who are sympathetic to the target population, this peer-driven trust is even less common [49].

Utilizing social media marketing makes it feasible to collect feedback in real time and to fast adjust marketing plans in response to the reactions we receive from customers [50]. The ability to receive feedback in real time is made feasible by social media marketing, which makes this possibility a reality. Brands are able to swiftly adjust their marketing efforts in order to better correspond with the tastes of customers and create trust, which is a crucial component [51]. This pertains to the process of decision-

making that is involved with the act of selecting something to purchase [1, 5]. The agility of this marketing approach makes it feasible to apply a greater degree of flexibility within the marketing plan. When compared to this, conventional marketing tactics are slower and less flexible, and they require longer lead times for campaign revisions. This is in contrast to the nature of modern marketing techniques.

Many studies have shown that marketing using social media is more cost-effective than marketing through traditional methods. Because of this, businesses are able to achieve a greater level of engagement and reach while incurring relatively lower costs. Brands that are worried about their health and may have limited marketing resources may be able to use social media platforms to their advantage because of their scalability and affordability [51].

For the purpose of providing a concise review, as compared to marketing strategies that are more conventional, social media marketing has the potential to exert a more significant and subtle impact on the purchasing behavior of those who are worried about their health. Because of its capacity to encourage participation, modify information, rely on the influence of peers, and provide information that is up to current in real time, it is an exceptional instrument for encouraging the intake of foods that are high in nutrients. Also, it is able to provide information that is up to current in real time.

3.3. What Emerging Trends in Digital Marketing Are Shaping the Promotion of Healthy Foods in Urban Areas?

Especially in metropolitan settings, which are usually characterized by increased levels of computer usage and health concern, developing trends in digital marketing are having a substantial effect on the promotion of healthy meals. Some of the more prominent trends that have been emphasized include alliances between powerful personalities, personalization that is driven by artificial intelligence (AI), information that is interactive and immersive, and marketing that is cognizant of the surroundings.

The emergence of micro and nano influencers, who are individuals who have a tiny but highly engaged following, has become a major trend [52]. Collaborations with influencers encompass a wide range of activities. As an illustration of this, consider the utilization of social media on various social media platforms. These influencers have stronger links with their audiences, which leads to increased levels of trust and engagement. There is a correlation between these two factors. Businesses can communicate effectively with certain groups of people in urban areas, which have a lot of different kinds of people and specialized groups by working together with influential people [53].

By analyzing vast volumes of customer data, technologies that utilize artificial intelligence make it feasible to anticipate preferences and actions as they occur in real time. This enables the creation of highly tailored marketing experiences. As a consequence of this, it is feasible to develop marketing experiences that are extremely individualized. When customers connect with a company, it is possible to increase the level of engagement and happiness they feel as a result of such interactions. Customized ideas, tailored content, and dynamic advertising based on artificial intelligence insights can accomplish this. This includes the ability to increase the level of satisfaction that clients experience. Additionally, it is possible for chatbots and virtual assistants that are powered by artificial intelligence to give rapid support and information to clients, which ultimately results in an improvement in the overall quality of the customer experience, clients may benefit from this [19].

In the realm of immersive marketing experiences, technologies such as augmented reality (AR) and virtual reality (VR) are gaining popularity and are becoming increasingly popular [54]. It is becoming increasingly common to find content that is not only interactive but also immersive. Users are able to sense nutrient-dense food items in their immediate surroundings by using augmented reality applications, for instance. This allows customers to make more informed purchasing decisions. Consequently, not only does this increase their comprehension, but it also increases their interest in the items. Additionally, it is possible to get a more complete degree of involvement from customers by utilizing interactive content, which includes polls, quizzes, and gamified experiences, among other

things. This makes the marketing of nutritious meals more captivating and memorable for the specifically targeted population [55].

Sustainability-Focused Marketing- When it comes to making purchasing decisions, consumers in metropolitan areas are increasingly placing a focus on corporate practices that are both ethical and ecologically responsible. This group has a strong affinity for digital marketing campaigns that promote the ethical practices of brand names that provide nutritional meals, as well as sustainable sourcing, environmental benefits, and environmental advantages [14]. Additionally, this helps to attract customers who are concerned about the environment, which adds to the establishment of a positive image for the organization [56]. Using storytelling strategies that highlight a firm's commitment to environmental preservation might also have additional benefits for the organization.

The social commerce movement, which has arisen over the course of the past several years [57] is characterized by the incorporation of e-commerce services into social networking platforms. This new discovery is yet another trend that is having an impact on the marketing of nutritious snacks. The incorporation of a variety of features into social media platforms has been done with the intention of simplifying the process of purchasing and making it simpler for users to purchase healthy food items straight from social media platforms [58]. These features have been built with the intention of making the process of selling more straightforward. There are a number of features that fall under this category, some of which include shoppable posts, in-app purchases, and easier checkout procedures.

Because of these developing trends, which make use of current technology and are in accordance with the changing values of consumers, digital marketing strategies are becoming more successful in promoting healthy meals within urban surroundings. This is because these methods are increasingly aligning with the evolving values of consumers. When it comes to interacting with their target audiences and bringing about significant changes in the behavior of customers, businesses that are able to embrace and innovate within these trends are in a stronger position than those without this ability.

3.4. What Challenges Do Marketers Face When Implementing Digital Marketing Strategies for Healthy Foods, and How Do These Challenges Vary Across Different Digital Platforms?

When it comes to putting digital marketing plans for healthy foods into action, there are a lot of hurdles that come up, and these difficulties are different for each digital platform. Some of the primary hurdles that have been noted include the following: explaining intricate nutritional facts; resolving concern from consumers; keeping involvement; addressing issues surrounding data protection; and conforming to requirements that are special to the platform.

Platform-Specific Challenges- Marketers are required to invest in the development of unique videos and high-quality photographs because both Facebook and Instagram place a significant emphasis on visual content [7, 20]. In addition, because of the quick turnover of material, it is necessary to do regular replacements in order to keep exposure.

TikTok- Because of its diverse user base, businesses need to learn how to properly segment their audience and give a wide range of material in order to appeal to a number of demographics. If they want to be successful, they need to understand how to segment their audience. Additionally, in order to ensure that material gets viewed, TikTok's algorithm upgrades require constant adjustments to the method that is taken [8, 59].

LinkedIn- LinkedIn is essentially a professional network, and as such, it needs more formal and informative content from its community members. It is possible that this will make it more challenging for firms to incorporate their content into the often more casual nature of health food marketing [3].

YouTube- In order to create engaging video content for YouTube, we need to have experience in video editing and narrative editing, in addition to increasing production costs. This is necessary in order to maintain the interest of viewers for longer periods of time [52].

Although digital marketing has great opportunities for the promotion of healthy foods, marketers are required to navigate a complicated ecosystem of difficulties that vary across different platforms. When it comes down to it, this is a truth regardless of whether or not digital marketing offers a great

deal of opportunities. To be successful in overcoming these challenges, it is vital to take part in strategic planning, to assign resources, and to have a comprehensive understanding of the specific dynamics that are associated with each platform. It is feasible for marketers to successfully employ digital marketing methods to stimulate consumer contact, enhance purchasing behavior, and support healthy eating habits; but, they will need to overcome certain challenges in order to achieve this goal.

4. Conclusions

The objective of this comprehensive literature analysis was to provide an investigation into the relevance of the multidimensional role that digital marketing plays in the promotion of healthy meals. It has come to light that the most effective tactics, rising trends, and issues that marketers confront have been focused on. The marketing strategies of social media marketing, influencer partnerships, and content marketing have developed into vital sorts of marketing strategies that have arisen as necessary in order to increase consumer involvement and guide purchase behavior toward better food choices. By utilizing cutting-edge technology and marketing strategies that are oriented on sustainability, it is possible to significantly boost the effect of digital marketing activities in urban settings. The academic community receives major contributions from this study as a result of the fact that it conducts a focused analysis of digital marketing strategies within the healthy foods business and that it also does a comparative evaluation with traditional marketing techniques. Furthermore, these contributions not only establish the framework for future research endeavors, but they also bring about an advance in the theoretical knowledge of marketing effectiveness in the digital era. Industry practitioners who are wanting to better their digital marketing efforts in the healthy foods sector can benefit from the findings of this research through the provision of some significant insights. In the realm of social media marketing, two examples of platforms that are growing increasingly important are Instagram and TikTok. There are many more. Using information that is both visually focused and interactive, these platforms provide high engagement rates to their users. For the purpose of encouraging community engagement, marketers should make an investment in the development of high-quality, visually appealing content that resonates with consumers who are concerned about their health and takes advantage of the interactive capabilities afforded by these platforms. When working with micro and nano influencers that have audiences that are highly engaged and trustworthy persons, it is very important to take into consideration the supplementary approach of influencer marketing. It is crucial for businesses to discover influencers whose thoughts are aligned with their health-centric messages and to strike partnerships with these influencers in order to improve their reputation and encourage consumers to make purchases. Their goal is to increase the number of customers who make purchases. It is also important for content marketing to make an emphasis on the dissemination of information that is not only informative but also beneficial in relation to the benefits of eating nutritious meals.

4.1. Implications for Personal Well-Being

By providing individuals with the information and the motivation to adopt lifestyles that are more health-conscious, the promotion of healthy meals with digital marketing has the potential to have a significant influence on the well-being of individuals. Companies are able to have the opportunity to give customers with rapid access to better food alternatives, which are typically accompanied by nutritional advice that is validated by research. This is made feasible by the strategic utilization of strategies such as targeted advertisements, email marketing campaigns, and social media platforms. People have a greater opportunity to investigate choices that are abundant in nutrients, which contributes to the management of their weight, the enhancement of their energy levels, and a reduction in the likelihood of developing diet-related diseases such as obesity, diabetes, and cardiovascular disease. The fact that correct information is easily accessible and readily available helps to develop this atmosphere. The growth of communities and the empowerment of people are both opportunities that may be made available through digital marketing. It is possible for companies to create encouraging online communities that provide users with assistance in maintaining their motivation, accountability,

and education, so facilitating the implementation of behavior changes that are long-lasting. Using collaborative meal-planning tools, sharing recipes, and giving user reviews are all possible ways to make these places. Honest and open methods, like correct labeling and content that takes cultural norms into account, can help build more customer trust and make positive, long-lasting relationships with healthy products. It is possible to do this by following genuine and equitable steps.

On the other hand, there is the possibility that the impact that digital marketing has on the wellbeing of an individual may have some consequences that are not desirable. To begin, the proliferation of online marketing can result in an oversupply of information, making it difficult for clients to differentiate between genuine guidance and health claims that are either false or overblown. Second, combative or manipulative marketing strategies, such as the use of fear-based tactics or unsubstantiated miracle remedies, may contribute to perplexity and anxiety regarding one's dietary choices. The third issue is that the digital divide remains, which means that individuals who reside in rural areas or have lesser incomes may have limited internet access. Consequently, they are unable to capitalize on the advantages of having health information that is readily accessible online. In regards to the fourth point, targeted marketing strategies that rely on collecting a lot of data may cause privacy worries. If people think that their personal information is being misused or exploited, they may not trust the brand as much. Lastly, a lot of modern digital marketing campaigns connect people's health and the health of the environment by focusing on eco-friendly packaging, sustainable sources, or fair-trade practices. While this holistic view encourages a sense of shared responsibility and ethical consumption, it can also risk "greenwashing," where brands overstate their environmental claims to attract health- and eco-conscious consumers. Consequently, it is critical for stakeholders including marketers, policymakers, health experts, and consumers, to work together to maximize the positive impacts of healthy food promotion while mitigating these potential negatives.

4.2. Implications for Policymakers

Working together with influential individuals and digital platforms might help policymakers build health promotion initiatives that are more likely to be effective. One is able to accomplish this by making use of the insights that are highlighted by this research. Individuals will be motivated to alter their eating habits as a result of this, which will ultimately lead to improvements in their overall health and happiness. By placing a high focus on ethical marketing practices and the security of personal information, one may also contribute to the reduction of any unpleasant circumstances. This not only boosts public confidence and encourages a greater number of people to participate in health-related activities, but it also helps to reduce the potential adverse impacts that may be caused by any undesirable outcomes.

4.3. Future Research Agenda

Nevertheless, despite the fact that this article adds comprehensive knowledge of the digital marketing and communications of healthy foods, there are a number of different areas that require more research in order to expand upon the body of info that is already being employed. Future studies should investigate the effects that digital marketing techniques have on customer behavior over the long term. This will allow for a greater understanding of how their efficacy evolves over time. Research should also be conducted to evaluate the usefulness of digital marketing activities for healthy meals. Additionally, research should be conducted to investigate how newly developing technologies such as artificial intelligence (AI), learning from data, and immersive reality (AR) could boost the success of these efforts through personalization of campaigns and what type of products, customers are most likely to repurchase and health benefits. As a consequence of having a knowledge of how these technologies may be leveraged to develop messages that are more tailored and immersive, it will be feasible to maximize the amount of client involvement and behavior change that occurs. An additional key topic of study that ought to be addressed in the future is the analysis of cultural and contextual elements that impact the efficacy of digital marketing tactics across a variety of geographical regions and demographic

categories. There is a possibility that comparative studies that study how digital marketing techniques function in a range of cultural contexts might lead to the creation of marketing strategies that are more effectively adapted to the specific needs of each individual and more effective overall. In conclusion, doing research on the ethical and moral consequences of digital marketing in the market for healthy meals is of the highest significance. It is essential that study be carried out to explore the ethical conundrums that marketers are confronted with, and that regulations be formulated to guarantee that the privacy of customers is managed in a manner that is responsible, open, and respectful. These rules and regulations are extremely important to the success of digital marketing campaigns.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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