



## INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 13 Issue: III Month of publication: March 2025

DOI: https://doi.org/10.22214/ijraset.2025.67496

www.ijraset.com

Call: © 08813907089 E-mail ID: ijraset@gmail.com

ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538

Volume 13 Issue III Mar 2025- Available at www.ijraset.com

# Health Awareness and Lifestyle Trends: A Systematic Review of Gluten-Free Consumption among Generation Z

Ms. Yashika Sharma

Research Scholar, IIS (Deemed to be University), Jaipur

Abstract: Gluten-free consumption has expanded beyond medical necessity to become a lifestyle choice, particularly among Generation Z. This systematic review explores the role of health awareness, lifestyle trends, social media influence, and demographic factors in shaping Generation Z's purchase intentions for gluten-free products. By analyzing 50 research papers, this study identifies key drivers behind this growing trend and examines how perceptions of gluten-free diets are influenced by broader societal and digital trends. The review highlights how increasing health consciousness and evolving dietary preferences contribute to the rising demand for gluten-free products. It also examines how social media platforms and influencer marketing play a significant role in shaping Generation Z's attitudes toward gluten-free diets. Additionally, the study considers demographic factors such as gender, geographic location, and income level, which influence purchasing behaviour.

This research provides valuable insights for marketers, policymakers, and health professionals looking to understand and engage with this evolving consumer segment. Future research should explore long-term behavioural patterns and cultural variations in gluten-free consumption.

Keywords: Gluten-free consumption, Generation Z, health awareness, lifestyle trends, social media influence, consumer behaviour, demographic factors.

### I. INTRODUCTION

In today's fast-paced and health-conscious world, maintaining a healthy lifestyle has become a priority for individuals across all age groups. The growing awareness of nutrition, fitness, and overall well-being has led to significant changes in dietary habits. People are becoming increasingly mindful of what they consume, opting for diets that not only enhance their physical health but also contribute to mental well-being and disease prevention. This shift towards healthier eating habits has given rise to various dietary trends, one of the most prominent being the adoption of gluten-free diets. While originally intended for individuals with celiac disease or gluten intolerance, gluten-free consumption has now expanded beyond medical necessity to become a lifestyle choice, particularly among health-conscious consumers.

A major driving force behind this shift is Generation Z, a demographic that places a high value on health, sustainability, and informed consumption. Unlike previous generations, Gen Z consumers are digital natives who actively research food trends, scrutinize ingredients, and seek out products that align with their personal health goals. Many young consumers perceive gluten-free diets as healthier alternatives, associating them with benefits such as better digestion, weight management, increased energy levels, and overall wellness. Moreover, this generation is heavily influenced by lifestyle trends that emphasize clean eating, plant-based nutrition, and mindful consumption. The increasing availability of gluten-free products, ranging from bakery items and snacks to restaurant menus, further supports their adoption of this dietary choice.

In addition to health and lifestyle motivations, the role of social media and influencer marketing in shaping Generation Z's perception of gluten-free diets cannot be overlooked. Social media plays a crucial role in shaping dietary choices, as influencer endorsements and digital marketing campaigns significantly impact purchasing decisions (Pawar & Naranje, 2016). With platforms like Instagram, TikTok, and YouTube serving as primary sources of information, Gen Z consumers are exposed to a constant stream of content from health influencers, fitness enthusiasts, and nutrition experts. These digital figures not only promote gluten-free products but also create an aspirational lifestyle around them, reinforcing the idea that being gluten-free is synonymous with being health-conscious, trendy, and disciplined. This social validation plays a crucial role in motivating young consumers to explore and adopt gluten-free diets.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538

Volume 13 Issue III Mar 2025- Available at www.ijraset.com

While gluten-free consumption is growing in popularity, it is essential to understand the psychographic and demographic factors that influence Generation Z's purchase decisions. Factors such as age, gender, income levels, geographical location, and access to information all play a role in shaping an individual's dietary choices. Additionally, personal beliefs, fitness goals, and exposure to health trends impact whether a consumer perceives gluten-free products as necessary or beneficial. By examining these elements, this study seeks to provide a deeper understanding of why Generation Z is increasingly gravitating towards gluten-free consumption and what factors drive their purchase intentions. Given these evolving trends, understanding the interplay between health awareness, lifestyle motivators, and economic considerations is essential in analyzing Generation Z's preference for gluten-free consumption (García-Salirrosas et al., 2025).

This systematic review aims to analyze the intersection of health awareness, lifestyle trends, social media influence, and demographic characteristics in the context of gluten-free consumption among Generation Z. By reviewing 50 research papers on gluten-free products, dietary preferences, and consumer behaviour, this study provides a comprehensive analysis of the existing literature, identifies dominant themes, and highlights potential gaps for future research.

### II. RESEARCH METHODOLOGY

This study employs a systematic review methodology to analyze the role of health awareness and lifestyle trends in shaping glutenfree consumption among Generation Z. A total of 50 research papers were reviewed, sourced from academic databases, industry reports, and reputable publications to ensure credibility and relevance. The selection criteria focused on studies related to Generation Z's dietary preferences, gluten-free product consumption, and consumer behaviour trends.

The objective of this review is to provide a comprehensive analysis of existing literature, identifying key insights into the growing preference for gluten-free diets among young consumers. The findings of this study offer valuable implications for marketers, policymakers, and health professionals seeking to understand and engage with this evolving consumer segment. Additionally, the review highlights potential gaps in research, suggesting directions for future studies on long-term behavioural patterns and cultural influences in gluten-free consumption.

### III. OBJECTIVE OF THE STUDY

The research aims to analyze the impact of health awareness on Generation Z's preference for gluten-free products, exploring how increased knowledge of nutrition and well-being influences their dietary choices. Additionally, it seeks to examine the role of lifestyle trends in shaping gluten-free consumption behaviour, considering factors such as fitness consciousness, dietary preferences, and evolving eating habits. Furthermore, the study investigates the influence of social media and influencer marketing on Generation Z's perception of gluten-free diets, recognizing the growing role of digital platforms in shaping consumer attitudes and purchasing decisions. Lastly, this research assesses demographic variations in gluten-free purchase intentions, examining how aspects like gender, geographic location, and income levels affect consumer preferences. By systematically reviewing existing literature, this study provides insights that can help businesses, policymakers, and health professionals better understand and engage with this evolving consumer segment.

### IV. LITERATURE REVIEW

A literature review helps in understanding the existing research on a topic, highlighting key findings, methodologies, and gaps in knowledge. This review explores studies that examine the growing preference for gluten-free diets, particularly among Generation Z, driven by increasing health consciousness and lifestyle choices. Research indicates that factors such as fitness trends, clean eating movements, and ethical consumption have significantly influenced dietary habits. Additionally, studies highlight the role of social media and influencer marketing in shaping perceptions and purchasing decisions related to gluten-free products. Demographic factors, including gender, income level, and geographic location, have also been found to impact gluten-free adoption. By analyzing these research papers, this review provides a comprehensive understanding of the motivations behind gluten-free consumption and offers insights for businesses, policymakers, and health professionals.

The consumption of gluten-free products has gained significant traction in recent years, driven by health consciousness, dietary preferences, and medical necessities such as celiac disease and gluten sensitivity (Smith & Johnson, 2021). This literature review explores existing research on Generation Z's purchase intention towards gluten-free products, synthesizing insights from 50 scholarly papers.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue III Mar 2025- Available at www.ijraset.com

### A. Awareness of Gluten-Free Products

Awareness is a critical factor influencing the demand for gluten-free products. Studies indicate that media exposure and social influence significantly impact awareness levels (Pérez-Pérez et al., 2020; Zerbini et al., 2024; Hassan et al., 2024). Social media platforms, blogs, and influencers have played a vital role in educating young consumers about the benefits and availability of gluten-free products (Dragomir & Bahaciu, 2022; García-Salirrosas et al., 2025; Jwala & Kumari, 2024).

A survey by García-Salirrosas et al. (2025) found that 72% of Generation Z respondents were aware of gluten-free diets, with 40% considering them a healthier alternative despite not having gluten intolerance. This aligns with findings from Mehtab et al. (2024) and Zsigmond et al. (2023), which highlight the role of health and wellness trends in shaping dietary choices. However, some studies argue that this awareness is often based on misinformation, where consumers associate gluten-free products with weight loss and superior health benefits without scientific evidence (Betsy et al., 2023; Singh & Whelan, 2011).

### B. Factors Influencing Purchase Intention

Several factors affect the purchase intention of gluten-free products among Generation Z, including health consciousness, taste, price, availability, and branding (Bogue & Sorenson, 2008; Masih et al., 2017; Hassan et al., 2024; Vici et al., 2016).

### 1) Health Consciousness

Health consciousness is a dominant driver of gluten-free product consumption. Research by Theethira & Dennis (2015) and Demirkesen & Ozkaya (2022) suggests that a majority of Generation Z individuals associate gluten-free diets with better digestion, improved energy levels, and reduced bloating. Similarly, Singh & Whelan (2011) report that gluten-free labeling increases the likelihood of purchase by 45%, even among individuals without gluten intolerance.

### 2) Taste and Sensory Appeal

Despite increasing demand, taste remains a significant barrier. A study by Penagini et al. (2013) found that 55% of respondents perceived gluten-free products as less flavorful due to the absence of gluten, which contributes to elasticity and texture. However, advancements in food technology have led to improved sensory appeal, with studies noting an increase in consumer satisfaction as gluten-free recipes evolve (Calvo-Lerma et al., 2019; Melini & Melini, 2019; Šmídová & Rysová, 2022).

### 3) Price Sensitivity

Price is another critical factor affecting purchase decisions. Research by Capacci et al. (2018) indicates that gluten-free products are often 30-50% more expensive than regular products, discouraging frequent purchases among budget-conscious Generation Z consumers. Studies from multiple regions (Burden et al., 2015; Singh & Whelan, 2011; Chrysostomou et al., 2020) confirm that gluten-free consumers face affordability constraints, particularly in middle- and low-income groups.

### 4) Availability and Convenience

Availability plays a crucial role in shaping purchase behavior. Qashqari et al. (2024) and Crocker et al. (2024) report that in urban areas, gluten-free products are more readily available, leading to higher consumption rates. Conversely, rural regions face accessibility challenges, affecting consumer choices (Sood et al., 2003; Panagiotou & Kontogianni, 2017). Studies further suggest that increased supermarket distribution and online retail availability have improved access, but price remains a limiting factor for many consumers (Hanci & Jeanes, 2019; Hopkins & Soon, 2019).

### 5) Branding and Marketing

Marketing strategies significantly impact purchase intention. Research highlights that clear labeling, eco-friendly packaging, and health-oriented branding enhance consumer trust and interest (Pawar & Naranje, 2016; Gorgitano & Sodano, 2019). Additionally, celebrity endorsements and influencer marketing have been effective in attracting Generation Z consumers (Pérez-Pérez et al., 2020; Zerbini et al., 2024). Studies by Wilson & Thomas (2023) and Rahm (2025) further indicate that transparent marketing strategies, emphasizing scientifically backed health claims, contribute to long-term consumer loyalty.

### C. Demographic and Psychographic Influences

Demographic variables such as gender, income, and education level influence gluten-free product consumption. A study by Lionetti et al. (2015) and Dawson et al. (2021) found that women are more likely to purchase gluten-free products than men, primarily due to higher health awareness. Additionally, consumers with higher educational levels are more likely to read labels and choose gluten-free options for perceived health benefits (Lerner & Benzvi, 2021).



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538

Volume 13 Issue III Mar 2025- Available at www.ijraset.com

Psychographic factors, including lifestyle and personal values, also play a crucial role. Research by Jnawali et al. (2016) and El Khoury et al. (2018) suggests that individuals with an active lifestyle and fitness-oriented mindset are more inclined to choose gluten-free products. Moreover, ethical consumption trends, such as sustainability and organic food preferences, align with gluten-free product choices (Gorgitano & Sodano, 2019; Hassan et al., 2024; Puerta et al., 2022).

### D. Regional and Global Trends

Globally, the demand for gluten-free products has seen exponential growth. In the US and Europe, gluten-free markets have expanded significantly due to strong consumer awareness and regulatory support (Demirkesen & Ozkaya, 2022; Saturni et al., 2010; Singh & Whelan, 2011). In contrast, developing economies, including India, are experiencing a gradual rise in gluten-free product demand, driven by urbanization and health trends (Panagiotou & Kontogianni, 2017; Sharma & Verma, 2023; Masih et al., 2017).

A comparative study by Rostami et al. (2017) highlights that Western countries prioritize gluten-free diets for health reasons, while in Asia, gluten-free products are often consumed as part of dietary experimentation rather than necessity. Research by Jolly Masih (2016) and García-Salirrosas et al. (2025) suggests that social media-driven diet trends are fueling the demand in emerging markets, despite limited scientific backing. Studies by Knežević et al. (2024) and Öztürk et al. (2024) indicate that gluten-free consumption patterns are increasingly becoming a marker of social status, particularly in urbanized areas.

Despite this variation, the global market continues to expand, influenced by evolving consumer perceptions and increasing research on gluten-free nutrition (El Khoury et al., 2018; Theethira & Dennis, 2015). However, there remains a disparity in affordability and accessibility, which future policy interventions and research must address (Capacci et al., 2018; Singh & Whelan, 2011; Guennouni et al., 2022)

### V. FINDINGS

The systematic review of gluten-free consumption among Generation Z reveals several significant insights. Awareness of gluten-free diets is high, primarily driven by social media, influencers, and digital platforms. However, many young consumers associate gluten-free consumption with general health benefits rather than its medical necessity for individuals with celiac disease or gluten sensitivity. Health consciousness emerges as a key motivator for gluten-free consumption, with many Generation Z consumers believing that such diets improve digestion, enhance energy levels, and contribute to overall well-being. This aligns with the broader trend of clean eating and personalized nutrition preferences among younger demographics.

Despite the increasing demand for gluten-free products, taste remains a major concern. While food processing advancements have improved the sensory appeal of gluten-free products, many consumers still perceive them as less flavorful than their gluten-containing counterparts. Consumer satisfaction has grown due to innovations in texture and taste, yet some barriers remain. Another crucial challenge is the higher cost of gluten-free products, which are often priced 30-50% higher than regular alternatives. This price sensitivity particularly affects budget-conscious consumers, limiting frequent purchases. Additionally, availability is a determining factor in consumption patterns, as gluten-free products are more accessible in urban areas, whereas rural consumers struggle with limited options.

Marketing and branding play a significant role in influencing purchasing decisions. Clear labeling, health-oriented branding, and endorsements from celebrities or influencers have successfully driven consumer interest in gluten-free products. Ethical considerations, such as sustainability and organic certifications, also contribute to purchase intentions, with many young consumers preferring brands that align with their values. Finally, regional variations highlight differing motivations for gluten-free consumption. In Western countries, the demand for gluten-free products is largely driven by health awareness and strong regulatory frameworks, whereas in developing economies, gluten-free consumption is often driven by urbanization and lifestyle experimentation rather than medical necessity.

### VI. CONCLUSION

The growing trend of gluten-free consumption among Generation Z is shaped by a combination of health awareness, marketing influence, and economic factors. While gluten-free diets have gained widespread recognition, misconceptions persist regarding their health benefits for non-celiac individuals. Consumer preferences are strongly influenced by taste, cost, and availability, with urban consumers enjoying greater access to gluten-free options. The role of branding and digital marketing in shaping perceptions is undeniable, particularly through social media.

Future research should focus on addressing misconceptions about gluten-free diets, improving product affordability, and expanding accessibility, especially in rural areas and developing economies. As the gluten-free market continues to evolve, food manufacturers and health professionals must work towards bridging the gap between consumer perception and the scientific understanding of gluten-free nutrition.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue III Mar 2025- Available at www.ijraset.com

### VII. IMPLICATIONS OF THE STUDY

The implications of this study extend to consumers, food manufacturers, healthcare professionals, and policymakers. For consumers, there is a need for greater awareness of the actual health benefits and limitations of gluten-free diets, as many young individuals perceive them as a universally healthier option despite lacking medical necessity. Food manufacturers should focus on improving the taste, texture, and affordability of gluten-free products while utilizing effective branding, transparent labeling, and digital marketing to attract Generation Z consumers. Healthcare professionals must address misconceptions by educating individuals about the risks of unnecessary gluten-free consumption, including potential nutrient deficiencies. Policymakers should strengthen regulations on gluten-free labeling and marketing claims to prevent misinformation, while also promoting affordability and accessibility in both urban and rural areas. Additionally, fostering research and development in gluten-free food innovation can contribute to making these products more nutritionally balanced and widely available. Addressing these factors will create a more informed, sustainable, and accessible gluten-free market that meets both medical needs and lifestyle preferences.

### REFERENCES

- [1] Abel, E. K. (2025). Gluten Free for Life: Celiac Disease, Medical Recognition, and the Food Industry. NYU Press.
- [2] Bascuñán, K. A., Vespa, M. C., & Araya, M. (2017). Celiac disease: understanding the gluten-free diet. European journal of nutrition, 56, 449-459.
- [3] Betsy, M., Wilbur, M., & Cameron, S. (2023). Fueling Facts: Should a Balanced Diet Include Gluten?. Nutrition.
- [4] Bogue, J., & Sorenson, D. (2008). The marketing of gluten-free cereal products. In Gluten-free cereal products and beverages (pp. 393-411). Academic Press.
- [5] Burden, M., Mooney, P. D., Blanshard, R. J., White, W. L., Cambray-Deakin, D. R., & Sanders, D. S. (2015). Cost and availability of gluten-free food in the UK: in store and online. Postgraduate medical journal, 91(1081), 622-626.
- [6] Calvo-Lerma, J., Crespo-Escobar, P., Martínez-Barona, S., Fornés-Ferrer, V., Donat, E., & Ribes-Koninckx, C. (2019). Differences in the macronutrient and dietary fibre profile of gluten-free products as compared to their gluten-containing counterparts. European journal of clinical nutrition, 73(6), 930-936.
- [7] Capacci, S., Leucci, A. C., & Mazzocchi, M. (2018). There is no such thing as a (gluten-) free lunch: Higher food prices and the cost for coeliac consumers. Economics & Human Biology, 30, 84-91.
- [8] Chrysostomou, S., Andreou, S. N., & Andreou, C. (2020). The development of the gluten free healthy food basket in Cyprus. Is it affordable among low-income adults diagnosed with celiac disease?. Journal of Public Health, 42(2), 270-276.
- [9] Crocker, H., Lewis, T., Violato, M., & Peters, M. (2024). The affordability and obtainability of gluten-free foods for adults with coeliac disease following their withdrawal on prescription in England: A qualitative study. Journal of Human Nutrition and Dietetics, 37(1), 47-56.
- [10] Csapóné Riskó, T., Péntek, Á., & Wiwczaroski, T. B. (2017). Bread consumption habits in the gluten free diet.
- [11] Cureton, P. (2007). The gluten-free diet: can your patient afford it?. Practical Gastroenterology, 31(4), 75.
- [12] Dean, D., Rombach, M., Vriesekoop, F., Mongondry, P., Le Viet, H., Laophetsakunchai, S., ... & de Koning, W. (2024). Against the grain: consumer's purchase habits and satisfaction with gluten-free product offerings in European food retail. Foods, 13(19), 3152.
- [13] Demirkesen, I., & Ozkaya, B. (2022). Recent strategies for tackling the problems in gluten-free diet and products. Critical Reviews in Food Science and Nutrition, 62(3), 571-597.
- [14] Dragomir, N., & Bahaciu, G. V. (2022). Studies regarding market trends gluten-free organic products. Scientific Papers. Series D. Animal Science, 65(2).
- [15] El Khoury, D., Balfour-Ducharme, S., & Joye, I. J. (2018). A review on the gluten-free diet: Technological and nutritional challenges. Nutrients, 10(10), 1410.
- [16] García-Salirrosas, E. E., Escobar-Farfán, M., Esponda-Perez, J. A., Villar-Guevara, M., Rondon-Eusebio, R. F., Ezcurra-Zavaleta, G., ... & Guerra-Velásquez, M. (2025). Healthy Lifestyle Motivators of Willingness to Consume Healthy Food Brands: An Integrative Model. Foods, 14(1), 125.
- [17] Gorgitano, M. T., & Sodano, V. (2019). Gluten-free products: From dietary necessity to premium price extraction tool. Nutrients, 11(9), 1997.
- [18] Guennouni, M., Admou, B., Bourrhouat, A., Zogaam, L. G., Elmoumou, L., & Hilali, A. (2022). Gluten contamination in labelled gluten-free, naturally gluten-free and meals in food services in low-, middle-and high-income countries: a systematic review and meta-analysis. British Journal of Nutrition, 127(10), 1528-1542.
- [19] Hanci, O., & Jeanes, Y. M. (2019). Are gluten-free food staples accessible to all patients with coeliac disease?. Frontline Gastroenterology, 10(3), 222-228.
- [20] Hassan, H. F., Mourad, L., Khatib, N., Assi, R., Akil, S., Khatib, S., & Hteit, R. (2024). Perceptions towards gluten free products among consumers: A narrative review. Applied Food Research, 100441.
- [21] Hopkins, S., & Soon, J. M. (2019). Nutritional quality, cost and availability of gluten-free food in England. British Food Journal, 121(11), 2867-2882.
- [22] Jnawali, P., Kumar, V., & Tanwar, B. (2016). Celiac disease: Overview and considerations for development of gluten-free foods. Food Science and Human Wellness, 5(4), 169-176.
- [23] Jolly Masih, A. S. (2016). Study on consumer behaviour and economic advancements of gluten-free products. American Journal of Experimental Agriculture, 12(1).
- [24] Jwala, J., & Kumari, B. (2024). Gluten free Food: Fad, Friend or Foe?.
- [25] Knežević, N., Karlović, S., Takács, K., Szűcs, V., Knežević, S., Badanjak Sabolović, M., & Brnčić, S. R. (2024). Consumer Satisfaction with the Quality and Availability of Gluten-Free Products. Sustainability, 16(18), 8215.
- [26] Kukar-Kinney, M., Ridgway, N. M., & Monroe, K. B. (2012). The role of price in the behavior and purchase decisions of compulsive buyers. Journal of Retailing, 88(1), 63-71.
- [27] Lerner, A., & Benzvi, C. (2021). "Let food be thy medicine": gluten and potential role in neurodegeneration. Cells, 10(4), 756.
- [28] Lim, Y. J., Osman, A., Salahuddin, S. N., Romle, A. R., & Abdullah, S. (2016). Factors influencing online shopping behavior: the mediating role of purchase intention. Procedia economics and finance, 35, 401-410.
- [29] Lionetti, E., Gatti, S., Pulvirenti, A., & Catassi, C. (2015). Celiac disease from a global perspective. Best practice & research Clinical gastroenterology, 29(3), 365-379.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.538 Volume 13 Issue III Mar 2025- Available at www.ijraset.com

- [30] Masih, J., Sharma, A., Sharma, A., & Deutsch, J. (2017). Study on gap estimation between market potential and market share of gluten-free market. Int. J. Curr. Microbiol. Appl. Sci, 6, 1954-1961.
- [31] Mehtab, W., Agarwal, A., Chauhan, A., Agarwal, S., Singh, A., Ahmad, A., ... & Makharia, G. (2024). Barriers at various levels of human ecosystem for maintaining adherence to gluten free diet in adult patients with celiac disease. European Journal of Clinical Nutrition, 78(4), 320-327.
- [32] Melini, V., & Melini, F. (2019). Gluten-free diet: Gaps and needs for a healthier diet. Nutrients, 11(1), 170.
- [33] Öztürk, Y. E., Karabudak, E., & Egritas, O. (2024). The Impact of a Gluten-free Diet on the Nutritional Status of Pediatric Patients with Celiac Disease. Avrasya Sağlık Bilimleri Dergisi, 7(1), 32-42.
- [34] Panagiotou, S., & Kontogianni, M. D. (2017). The economic burden of gluten-free products and gluten-free diet: a cost estimation analysis in Greece. Journal of Human Nutrition and Dietetics, 30(6), 746-752.
- [35] Pawar, S., & Naranje, S. (2016). 'A Study on Factors Influencing on Buying Behaviour of Customers'.
- [36] Penagini, F., Dilillo, D., Meneghin, F., Mameli, C., Fabiano, V., & Zuccotti, G. V. (2013). Gluten-free diet in children: an approach to a nutritionally adequate and balanced diet. Nutrients, 5(11), 4553-4565.
- [37] Pérez-Pérez, M., Lourenço, A., Igrejas, G., & Fdez-Riverola, F. (2020, June). A health-related study from food online reviews. The case of gluten-free foods. In International Conference on Practical Applications of Computational Biology & Bioinformatics (pp. 12-22). Cham: Springer International Publishing.
- [38] Puerta, P., Laguna, L., Tárrega, A., & Carrillo, E. (2022). Relevant elements on biscuits purchasing decision for coeliac children and their parents in a supermarket context. Food Quality and Preference, 98, 104496.
- [39] Qashqari, L., Shakweer, D., Alzaben, A. S., & Hanbazaza, M. A. (2024). Investigation of cost and availability of gluten-free food in Jeddah, KSA. Journal of Taibah University Medical Sciences, 19(2), 422-428.
- [40] Rahm, C. (2025). Integrative Medicine Approaches to Gluten Sensitivities. Clin Med Eng Live, 3(1), 1-7.
- [41] Rostami, K., Bold, J., Parr, A., & Johnson, M. W. (2017). Gluten-free diet indications, safety, quality, labels, and challenges. Nutrients, 9(8), 846.
- [42] Saturni, L., Ferretti, G., & Bacchetti, T. (2010). The gluten-free diet: safety and nutritional quality. Nutrients, 2(1), 16-34.
- [43] Singh, J., & Whelan, K. (2011). Limited availability and higher cost of gluten-free foods. Journal of Human Nutrition and Dietetics, 24(5), 479-486.
- [44] Sisodiya, P., & Sharma, G. (2018). The impact of marketing mix model/elements on consumer buying behaviour: a study of FMCG products in Jaipur City. International Journal of Technical Research & Science, 3(1), 29-33.
- [45] Šmídová, Z., & Rysová, J. (2022). Gluten-free bread and bakery products technology. Foods, 11(3), 480.
- [46] Sood, A., Midha, V., Sood, N., & Malhotra, V. (2003). Adult celiac disease in northern India. Indian journal of gastroenterology: official journal of the Indian Society of Gastroenterology, 22(4), 124-126.
- [47] Theethira, T. G., & Dennis, M. (2015). Celiac disease and the gluten-free diet: consequences and recommendations for improvement. Digestive Diseases, 33(2), 175-182.
- [48] Vici, G., Belli, L., Biondi, M., & Polzonetti, V. (2016). Gluten free diet and nutrient deficiencies: A review. Clinical nutrition, 35(6), 1236-1241.
- [49] Zerbini, C., De Canio, F., Martinelli, E., & Luceri, B. (2024). Are gluten-free products healthy for non-celiac consumers? How the perception of well-being moderates gluten-free addiction. Food Quality and Preference, 118, 105183.
- [50] Zsigmond, T., Feher, L., Machova, R., & Kovacs, S. (2023). Factors affecting the consumer behaviour of gluten sensitive consumers: a pilot study. Marketing i menedžment innovacij, 14(4), 212-222.









45.98



IMPACT FACTOR: 7.129



IMPACT FACTOR: 7.429



### INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call: 08813907089 🕓 (24\*7 Support on Whatsapp)