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Healthy eating practices for optimal nutrition and well-being: a systematic review

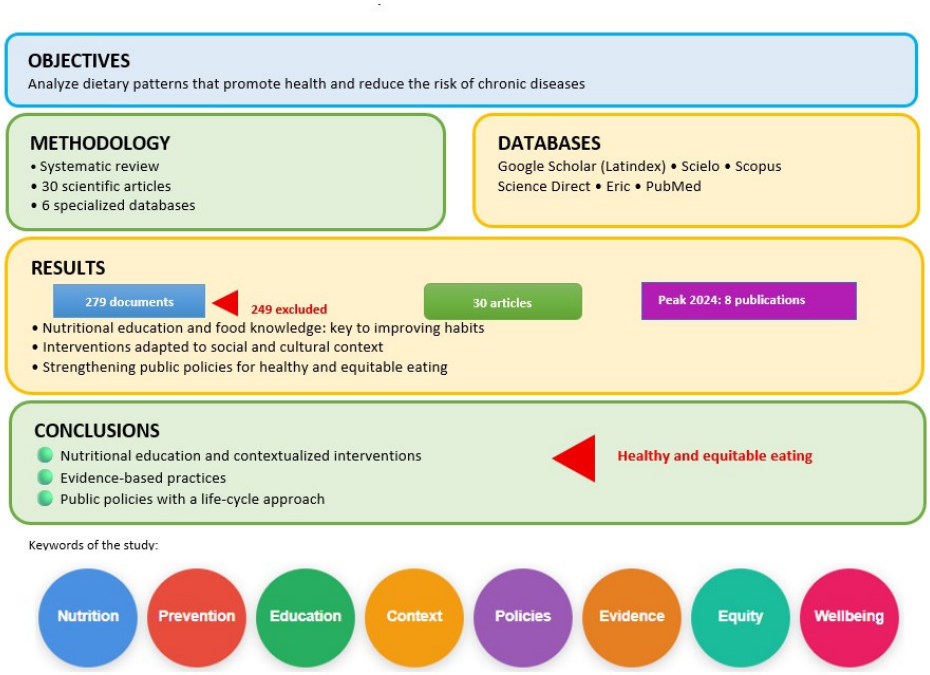
Manuela Daishy Casa-Coila[1] **Henry Mark Vilca-Apaza**[1] **Dometila Mamani-Jilaja**[1] **Katia Perez-Argollo**[1] **Eder Pacori-Zapana**[1] **Diana Agueda Vargas-Velásquez**[1] **Zara Turpo-Puma**[1]

[1]Universidad Nacional del Altiplano – UNAP. Puno, Perú.
E-mail: mcasa@unap.edu.pe

Highlights

- *Nutritional education and food knowledge are essential to improving eating habits.*
- *Higher levels of nutritional knowledge are associated with lower prevalence of malnutrition and overweight.*
- *It is urgent to implement educational programs in nutrition, particularly in vulnerable contexts.*
- *Interventions must be adapted to the social, economic, and cultural context of each population.*
- *Psychosocial factors and the family, school, and university environment directly influence eating practices.*
- *Healthy eating is fundamental for the prevention of chronic diseases and requires the implementation of effective public policies.*

Graphical Abstract



Abstract

The lack of knowledge and application of healthy eating practices negatively impacts human nutrition and well-being. Therefore, it is crucial to implement strategies aimed at improving eating habits. These actions are essential to promote health in vulnerable populations. The objective of this study was to analyze relevant information on dietary patterns that promote health and reduce the risk of chronic diseases, based on high-impact scientific journals. The research methodology was grounded in a systematic review and the selection of scientific articles. The study sample consisted of 30 scientific articles published in the last six years, retrieved from databases such as Google Scholar, SciELO, Scopus, Science Direct, ERIC, and PubMed, considering as variables: healthy eating practices, nutritional quality, consumption frequency, and effects on metabolic health. A total of 279 scientific documents were identified, of which 30 articles were selected for analysis. An increase in scientific production was observed, with a peak in 2024 and continuous progress in 2025. The studies highlight that nutritional education and food knowledge are essential to improve eating behaviors and prevent chronic diseases. They also emphasize the need for context-specific interventions and public policies that promote healthy and equitable nutrition. It is concluded that nutritional education and interventions tailored to the social and health contexts of specific populations are fundamental to improving eating habits and preventing chronic diseases. Promoting evidence-based practices and strengthening public policies with a life-course approach are essential to ensuring healthy and equitable nutrition.

Keywords: Healthy Eating. Well-being. Quality of Life. Nutrition. Human Health.

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INTRODUCTION

The development of eating habits and the adoption of a healthy lifestyle represent a fundamental and highly significant aspect for human beings[1]. In this context, diet plays an essential role in human health, directly influencing the prevention of chronic diseases such as type 2 diabetes, cardiovascular diseases, and certain types of cancer. The World Health Organization (WHO) highlights that a healthy diet helps protect against malnutrition in all its forms, as well as against non-communicable diseases[2]. Moreover, epidemiological studies have demonstrated a close relationship between diet and the risk of developing such chronic diseases[3]. However, cultural, economic, and technological factors have caused significant changes in eating practices, affecting diet quality and, consequently, population health[4].

An inadequate diet may lead to health problems such as malnutrition, obesity, and metabolic diseases. Obesity, in particular, is associated with a higher risk of coronary heart disease, diabetes, and hypertension[5]. Furthermore, current dietary patterns are neither healthy nor sustainable, which contributes to the prevalence of these conditions[6]. During the COVID-19 pandemic, nutritional deficiencies emerged among students due to limited access to food, lack of nutritional knowledge, and inadequate preparation of healthy meals[7]. On the other hand, Eating Disorders (EDs) affect the health and performance of athletes, with a multifactorial etiology involving genetic, environmental, psychological, and sport-specific factors. These disorders are especially prevalent in endurance sports, weight-class sports, and those in which aesthetics and low body weight confer competitive advantages[8]. Therefore, it is essential to promote healthy eating practices that mitigate these risks and improve people's quality of life.

Optimal nutrition, characterized by a diet rich in fruits, vegetables, and fish, may contribute to good cardiovascular health and reduce the risk of certain diseases[9]. Moreover, nutrients influence emotional states, particularly tryptophan, which is essential for serotonin production, a neurotransmitter that regulates mood, sleep, and appetite. This amino acid is found in foods such as chicken, turkey, dairy products, eggs, soy, spinach, bananas, and nuts[10]. The adequate inclusion of macronutrients and micronutrients is crucial for both physical and mental well-being. Additionally, healthy eating helps maintain good health and prevent non-communicable diseases[11].

Currently, nutritional trends are emerging with the aim of improving health and sustainability. The Mediterranean diet, based on the eating habits of Mediterranean countries, prioritizes plant-based foods over animal-based products[12]. Furthermore, sustainable nutrition and microbiome health are prominent trends, reflecting the growing interest in gut health and its impact on overall well-being[13]. In this context, food security refers to physical and economic access to sufficient, safe, and nutritious food to meet dietary needs[14]. Current nutrition trends emphasize sustainable diets, the reduction of food waste, and the impact of climate change on diet. These trends, supported by recommendations from international organizations, aim to promote dietary patterns that benefit both individuals and the environment.

Conducting a systematic review on healthy eating practices is essential to analyze recent studies and synthesize key information. Considering that current food systems do not provide diets with adequate nutritional quality that are safe, accessible, and sustainable, it is necessary to transform them so that all consumers have access to nutritious diets[15]. This review made it possible to identify effective strategies to improve nutrition and population well-being.

To this end, the following research question was proposed: what dietary patterns promote health and contribute to reducing the risk of chronic diseases? The objective of this investigation was to analyze relevant information on dietary practices aimed at optimal nutrition and overall well-being, drawing on high-impact scientific journals available in the databases Scopus, PubMed, SciELO, and Latindex. By addressing current trends and evidence-based recommendations, this study seeks to provide a comprehensive guide that contributes to the promotion of healthy eating habits and the prevention of chronic diseases.

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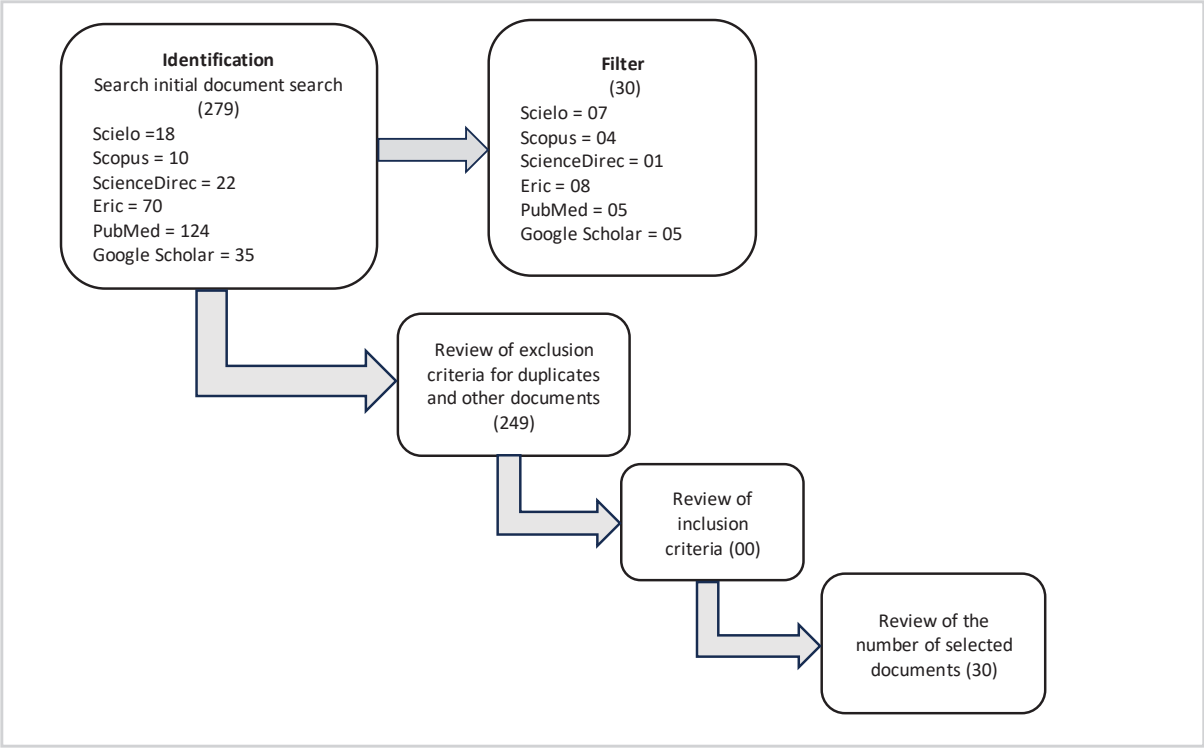
METHODOLOGY

The research methodology consisted of a literature review, with data collection from scientific articles available in databases and academic search engines such as Google Scholar, SciELO, Science Direct, ERIC, Scopus, and PubMed. In the SciELO database, 18 original and review articles were found using the keywords "Práticas alimentares saudáveis" and "nutrição." After applying year filters (2019–2025) and excluding duplicates, 7 articles were selected. In Google Scholar, 35 documents were retrieved; after applying the corresponding filters, 5 articles indexed in the Latindex database were selected. In Science Direct, 22 scientific documents were identified with the keywords "Práticas alimentares saudáveis" and "optimal nutrition and well-being"; following the filtering process, 1 article was selected. In the ERIC database, 70 scientific articles were found, of which 8 were selected. In Scopus, 10 documents were identified and, after the screening process, 4 scientific articles indexed in this database were selected. In PubMed, 124 documents were retrieved using the keywords "Healthy eating practices" and "optimal nutrition and wellness"; after applying the filter for the year 2019 onward and selecting scientific and review articles, 5 were chosen.

The study sample consisted of 30 scientific articles, which were selected and organized in a matrix containing the bibliographic background, classified by country, author, year of publication, methodology, population and sample, and, finally, the results and/or conclusions. Figure 1 presents the method of selection of the scientific documents used for the review and analysis.



Adapted from Parra-Sánchez (2022)[16] and dos Santos *et al.* (2025)[17].

Figure 1 - Methodology for searching, retrieving, and selecting documents for analysis.

RESULTS

The results regarding healthy eating for optimal nutrition and well-being are presented below. Table 1 details the sample of scientific articles selected in the literature review, which provide a solid basis to support the findings of this study.

Table 1 - Results of studies on healthy eating practices for optimal nutrition and well-being (2019–2025), indexed in Latindex and SciELO.

Country	Author(s) & Year	Metho-dology	Population & Sample	Results and/or Conclusions	Resultados y/o conclusiones
Colombia	Gamboa-Delgado *et.al.*[18]	2019	Analytical cross--sectional study	43 university students	Student practices were found to be associated with positive engagement, influenced by demographic and socioeconomic factors, contributing data for future research.
Argentina	Fortino *et al.*[19]	2020	Cross-sectional, descriptive, and comparative study	164 university students	Emphasizes the importance of designing interventions to promote and/or improve eating habits and physical activity in line with healthier lifestyles.
Chile	Espejo *et al.*[20]	2022	Systematic review	7 articles	The population faces chronic diseases that demand proper nutrition. Understanding eating habits and social factors is essential for developing effective nutritional strategies.
Nicaragua	Aviles-Peralta *et al.*[21]	2023	Analytical cross--sectional study	914 university students	Greater nutritional knowledge is associated with healthier eating practices and lower prevalence of overweight.
Ecuador	Vásquez & Guanga[22]	2023	Literature review	57 scientific documents	Knowledge, attitudes, and eating practices determine maternal and child nutritional status, with nutritional education being fundamental to preventing complications.
Spain	Okutan *et al.*[23]	2023	Literature review	14 articles	Highlights the need to adapt methods to context and foster intercultural collaboration to design interventions that improve the health of immigrants in vulnerable situations.
Cuba	Gil *et al*.[24]	2023	Observational, descriptive, and cross-sectional study	67 patients	Participants showed limited knowledge about nutrition, reinforcing the urgency of implementing educational tools to encourage healthy habits and strengthen immunity.
Paraguay	Ortiz, J. A.[7]	2024	Quantitative approach	33 students	Recognizes the importance of consuming fresh foods, although indecision persists among students. Proposes school gardens as a nutritional and educational strategy.
Brazil	Bueno & Tarricone[21]	2025	Qualitative, exploratory, and descriptive study	11 physicians and 9 nurses	Promotes adequate nutrient-based diets, criticizes ultra-processed foods, and highlights the role of environment in dietary health.
Ecuador	Gómez-Alvarado, C. G., & Eva-Romero, V. M.[25]	2025	Mixed approach (qualitative and quantitative)	36 parents	The *Growing with Our Children* program contributed positively to child development but requires adjustments and complementary policies for greater effectiveness.
Ecuador	Santillán-Rojas, M. X., *et al.*[10]	2025	Mixed, exploratory, descriptive, and cross-sectional approach	180 students (n = 35)	Unhealthy eating habits predominate, with high intake of ultra-processed foods, low hydration, and limited knowledge of the role of nutrition in learning and BMI.
Ecuador	Gaibor, R. E., *et al.*[26]	2025	Mixed approach with action research	Students, teachers, and parents (n = 37)	Child malnutrition persists in Ecuador due to poor eating habits and lack of nutritional education, requiring interventions in schools and families.

Source: Data compiled by the authors based on Latindex and SciELO databases.

Table 1 presents results on healthy eating practices for optimal nutrition and well-being in scientific articles indexed in Latindex and SciELO. First, the importance of nutritional education and food knowledge was categorized, as several studies agree that knowledge about nutrition is a determining factor in improving eating habits.

In Nicaragua, it was shown that greater nutritional knowledge is associated with better eating practices and lower prevalence of overweight[27]. Conversely, in Cuba, participants demonstrated limited knowledge, underscoring the urgency of implementing educational tools[24]. Similarly, in Ecuador, it is emphasized that child malnutrition is linked to the lack of nutritional education[26] and that eating practices directly affect maternal and child nutritional status[22].

Secondly, the need for interventions and strategies to promote healthy habits was analyzed. In Argentina, the importance of designing interventions to improve university students' eating and physical activity habits is highlighted[19]. In Chile, a systematic review shows that understanding eating habits and personal and social factors is essential for implementing effective nutritional strategies[20]. In Spain, the importance of adapting interventions to the sociocultural context is stressed, particularly in vulnerable populations such as immigrants[23].

Subsequently, the influence of demographic, social, and environmental factors was considered. In Colombia, it was identified that students' eating practices are influenced by demographic and socioeconomic factors[18]. In Brazil, evidence demonstrated how the environment and ultra-processed foods negatively affect healthy eating, while nutrient-based diets are promoted[21]. In Paraguay, although the importance of consuming fresh foods is recognized, indecision persists among students, with school gardens proposed as an educational and nutritional alternative[7].

In the fourth point, persistent challenges in eating practices and the need for public policies were categorized. In Ecuador, a study with students revealed high consumption of junk food, low hydration, and lack of awareness regarding the importance of nutrition in learning[10]. Another study highlighted that, although the Creciendo con Nuestros Hijos program favored child development, adjustments and complementary policies are necessary to optimize its outcomes[25].

Table 2 - Results of studies on healthy eating practices for optimal nutrition and well-being (2019–2025), indexed in the Scopus database.

Country	Author(s) & Year	Methodology	Population & Sample	Results and/or Conclusions	Resultados y/o conclusiones
United Kingdom	Liao, L. L., *et al.*[28]	2019	Cross-sectional design	220 university students	Revealed that nutritional literacy among students was suboptimal, with higher levels being associated with healthier eating habits, highlighting the importance of its promotion.
Mexico	López-Maupomé *et al.*[29]	2020	Experimental design	CG = 15; IG = 17	The psychoeducational program significantly improved body composition, nutritional knowledge, and eating habits in the intervention group compared to the control group.
USA	Martin, S. y McCormack, L.[30]	2022	Cross-sectional study	180 university students	A significant relationship was identified between the high perceived cost of a healthy diet and reduced fruit consumption.
USA	Szczepanski, J. R., *et al.*[31]	2022	Nutritional education program – Culinary Boot Camp (CBC)	86 CBC participants	The CBC proved effective in improving culinary and nutritional skills, as well as the diet quality of university students.
Spain	Marí-Sanchis, A., *et al.*[8]	2022	Nutritional assessment of athletes with EDs	Athletes with eating disorders (EDs)	EDs significantly affect sports performance and represent comorbidity risks, requiring early detection as part of pre-competition assessments.
Spain	Hun, N., *et al.*[14]	2023	Analytical cross-sectional study	542 students from 1st to 8th grade	Food insecurity among Chilean and migrant children exceeded 70% at all levels, with no significant differences, and was higher than in the pre-pandemic period.
Brazil	Trivisiol, *et al.*[32]	2024	Quantitative descriptive study	Parents or guardians of children (n = 70)	9.68% presented feeding difficulties (3.33% severe and 6.45% moderate); the remainder showed atypical eating behaviors, including forced strategies and impacts on family dynamics.

to be continued...

...continuation - Table 2.

Country	Author(s) & Year	Methodology	Population & Sample	Results and/or Conclusions	Resultados y/o conclusiones
United Kingdom	Enriquez *et al.*[33]	2024	Quasi-experimental study	Experimental group (n = 85); control group (n = 80)	Nutritional interventions improved the habits of the experimental group, whereas the control group showed no changes; slight differences were observed in eating motivations.
United Kingdom	Orihuela, C. A., *et al.*[34]	2024	Qualitative study	21 students from five secondary schools	Although students understood what healthy eating is, they rejected school food options and suggested improvements in food offerings.
Spain	Lara *et al.*[35]	2024	Observational study	137 children aged 6 to 23 months	55.96% of caregivers adopted appropriate practices; 77.89% demonstrated adequate knowledge and 77.55% adequate attitudes, with a significant association to children's nutritional diagnosis.
Spain	Agama-Sarabia *et al.*[36]	2024	Cross-sectional study	766 university students in health sciences	Internalized stigma mediated the relationship between experienced stigma and eating patterns; anticipated stigma influenced behaviors such as emotional and uncontrolled eating.
Spain	Marconi *et al.*[37]	2024	Observational, descriptive, and cross-sectional study	3,592 adults	Inflation influences eating patterns according to educational level, affecting food security and underscoring the need for control to ensure the right to food.
Spain/Peru	Prado J. *et al.*[38]	2025	Descriptive relational, non-experimental study	650 primigravida women (n□ = 143 – EsSalud Huánuco; n□ = 149 – Maternal and Child Hospital)	Most pregnant women had normal weight, but more than 86% displayed inadequate eating practices, with no significant association to initial nutritional status.

Source: Data compiled by the authors based on the Scopus database.

The results presented in Table 2 highlight the contributions of various authors regarding healthy eating practices for optimal nutrition and well-being. The reviewed studies were first grouped around the importance of nutritional education and literacy for improving eating habits. Several studies agree that nutritional education is essential to promote healthy eating practices. In the United Kingdom, it was found that higher nutritional literacy is associated with healthier eating habits[28]. Complementarily, the psychoeducational program in Mexico showed significant improvements in body composition, knowledge, and nutritional habits[29]. Likewise, the Culinary Boot Camp program in the United States also proved effective in developing food-related skills and improving diet quality[31]. Moreover, in the United Kingdom, it was shown that nutritional interventions improved habits compared with groups without intervention[33].

Secondly, psychosocial and structural factors influencing eating practices were analyzed. Several studies emphasize how psychological, social, and economic factors affect dietary behaviors. In the United States, it was observed that the high perceived cost of a healthy diet reduces fruit consumption[30]. In Spain, it was reported that internalized and anticipated food stigma negatively affect eating patterns[36]. Furthermore, inflation was shown to condition access to healthy foods according to educational level, thereby affecting food security[37].

Another aspect found in the review concerned eating practices among children and caregivers, with implications for child nutrition. At this point, studies focused on childhood reveal the influence of caregivers and contexts. In Spain, it was found that caregivers' eating practices influence the nutritional diagnosis of children under two years old[35]. Similarly, in Brazil, moderate and severe feeding difficulties were identified among children, including forced practices and family impacts[32]. In the United Kingdom, it was shown that although students knew what healthy eating was, they rejected school food options, suggesting the need to adapt food offerings[34]. In addition, in Spain, high levels of child food insecurity were reported in the post-pandemic context[14].

Finally, risks associated with specific populations, such as athletes and pregnant women, were considered. In vulnerable populations like athletes and pregnant women, significant nutritional challenges were observed. In Spain, it was identified that Eating Disorders (EDs) affect sports performance and require early detection as part of pre-competition assessments[8]. Conversely, in Peru,

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it was found that although most pregnant women had normal weight, the majority showed inadequate eating practices, with no correlation to their nutritional status, suggesting the need for specific educational interventions[38]. These findings emphasize the urgency of public policies that not only inform but also facilitate access to healthy and sustainable diets.

Table 3 - Results of studies on healthy eating practices for optimal nutrition and well-being (2019–2025), indexed in the PubMed database.

Country	Author(s)	Year	Methodology	Population & Sample	Results and/or Conclusions
Finland	Uusitupa, *et al.*[39]	2019	Systematic review	N = 4,090 documents	Type 2 diabetes can be prevented in the long term through lifestyle changes, especially with the adoption of a healthy diet such as the Mediterranean diet. However, there is limited evidence regarding its effects on cardiovascular and microvascular complications.
Greece	Grammatikopoulou *et al.*[40]	2020	Systematic review	22 documents	Although maternal nutrition is essential and several institutions issue guidelines, the standards and contents of these recommendations can still be significantly improved.
Iran	Mirzay-Razaz *et al.*[41]	2022	Systematic review	27 articles	It is crucial to ensure adequate nutrition during the pandemic, promoting a balanced diet that strengthens the immune system, in addition to providing clear guidelines on caloric intake and hygienic practices in the food industry.
China	Yongchao *et al.*[42]	2024	Systematic review	78 trials	The combination of caloric restriction with physical exercise is the most effective strategy for weight loss and fat reduction without muscle mass loss. In women, intermittent fasting combined with exercise is beneficial, whereas the ketogenic diet is less effective and suboptimal.
Canada	Carducci *et al.*[43]	2025	Systematic review	288 articles	The analysis of school feeding policies and programs in Canada reveals significant gaps. It reinforces the need for governments to promote equitable environments that support child and adolescent nutrition.

Source: Data prepared by the authors based on the PubMed database.

In Table 3, the results are presented and analyzed according to similarities. First, a healthy diet was examined as a means of preventing disease and promoting well-being. Several studies highlight the central role of a balanced diet in preventing chronic diseases and improving overall well-being. In Finland, studies concluded that following a healthy diet, such as the Mediterranean diet, can prevent type 2 diabetes in the long term, although more evidence is needed regarding its impact on cardiovascular complications[39]. Complementarily, the study conducted in Iran underscores the importance of maintaining a balanced diet during the pandemic to strengthen the immune system, in addition to providing clear guidance on caloric intake[41].

Regarding dietary strategies and physical exercise for weight management, in China it was identified that the combination of caloric restriction and exercise is the most effective intervention for weight and fat loss without affecting muscle mass[42]. Furthermore, it was indicated that intermittent fasting combined with exercise is beneficial for women, whereas the ketogenic diet is less advisable.

Finally, nutrition at key life stages and the need for solid policies were categorized. In this regard, two studies highlight gaps in the application of nutritional guidelines and policies. In Greece, it was shown that despite the existence of numerous recommendations on maternal nutrition, their content and standardization still require significant improvement[40]. Conversely, in Canada, deficiencies were identified in the evidence related to school feeding programs, and governments are urged to develop equitable policies that strengthen child and adolescent nutrition[43].

This grouping makes it possible to observe how healthy eating practices are related not only to disease prevention but also to the formulation of public policies and individual strategies to maintain optimal nutrition.

Table 4 - High-impact journals with scientific publications on healthy foods and their impact

Nº	Country	Journal	Database	Quartile (2023)	SJR	H-index	Area and Category
01	United States	Journal of American College Health	Scopus	*Q2*	0.73	111	Medicine: Public Health, Environmental and Occupational Health
02	United Kingdom	Health Education Journal	Scopus	*Q2*	0.46	40	Social Sciences: Education Health (social science)
03	United Kingdom	American Journal of Health Education	Scopus	*Q3*	0.32	36	*Medicamento: Salud Pública, Salud Ambiental y Ocupacional* *Ciencias Sociales: Salud (ciencias sociales)*
04	Spain	*Endocrinología, Diabetes y Nutrición*	Scopus	*Q3*	0.36	33	*Bioquímica: Genética y Biología Molecular* *Endocrinología* *Medicamento: Endocrinología, Diabetes y Metabolismo* *Enfermería: Nutrición y dietética*
05	Spain	*European Public & Social Innovation Review*	Scopus	*Q3*	0.171	6	*Economía, Econometría y Finanzas (varios)* *Ciencias Sociales: Desarrollo* *Sociología y Ciencia Política*
06	Spain	*Revista Española de Nutrición Humana y Dietética*	Scopus	*Q4*	0.17	13	Agricultural and Biological: Sciences Food Science Nursing: Nutrition and Dietetics
07	Brazil	*Revista O Mundo da Saúde*	Scopus	*Q4*	0.12	11	Medicine: Public Health, Environmental and Occupational Health

Source: Data compiled by the authors.

The results of Table 4 present the analysis of scientific journals on healthy eating practices and reveal a variety of approaches and levels of prestige according to their country of origin and impact metrics. Notably, publications from the United States stand out, with the Journal of American College Health showing the highest impact (Q2, SJR 0.73, H-index 111), suggesting greater relevance in public health. In contrast, Spanish journals such as the *Revista Española de Nutrición Humana y Dietética* show lower impact (Q4, SJR 0.17, H-index 13), reflecting possible limitations in reach and citations.

This highlights the need to strengthen the visibility and rigor of research in Spanish-speaking countries in order to compete with high-impact publications. Furthermore, the classification into different quartiles and categories underscores the multidisciplinarity of nutrition research, which demands greater integration across disciplines to achieve a more holistic understanding of healthy eating practices.

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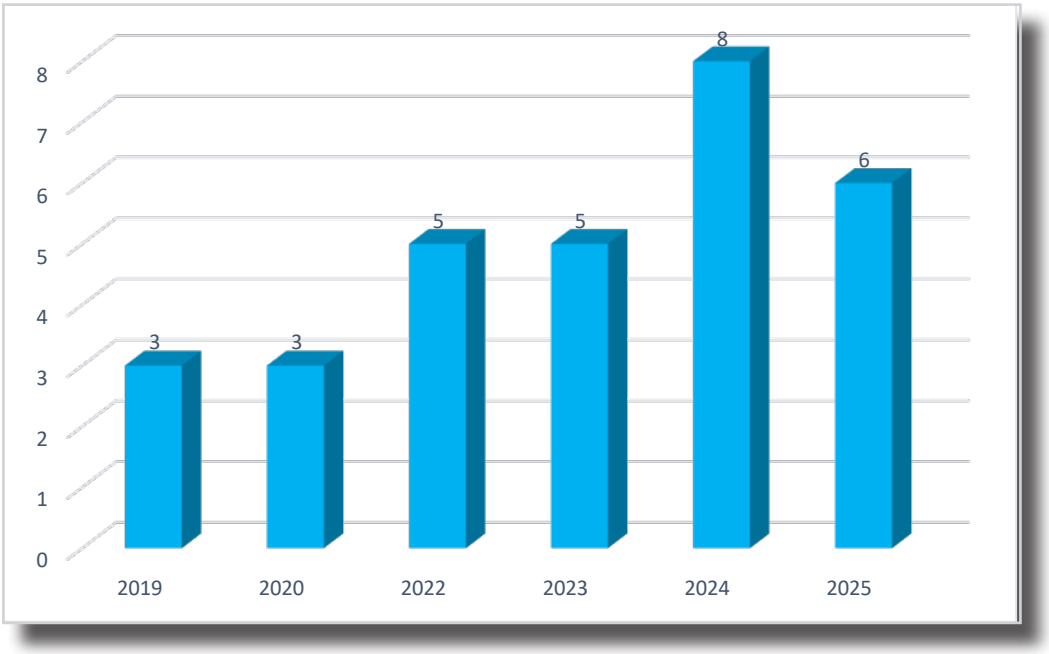

Figure 2 - Distribution of scientific documents produced per year from 2019 to 2025.

In Figure 2, the results of the distribution of scientific documents produced per year on healthy foods for optimal nutrition and well-being are presented, showing an increase in research in recent years. In 2019 and 2020, only three articles per year were found, whereas in 2022 and 2023 there was an increase to five publications. In 2024, a significant peak was recorded with eight publications, indicating growing interest in the topic. For 2025, up to June (still ongoing), six documents have already been identified, suggesting that the production trend remains higher compared with previous years.

From a critical perspective, the increase in the production of scientific documents does not necessarily guarantee advances in the quality of information, since the proliferation of studies may include repetitive research or studies with lower scientific rigor. It is essential to assess whether this growth translates into practical applications and changes in public health policies, or if it merely reflects academic trends without significant societal impact.

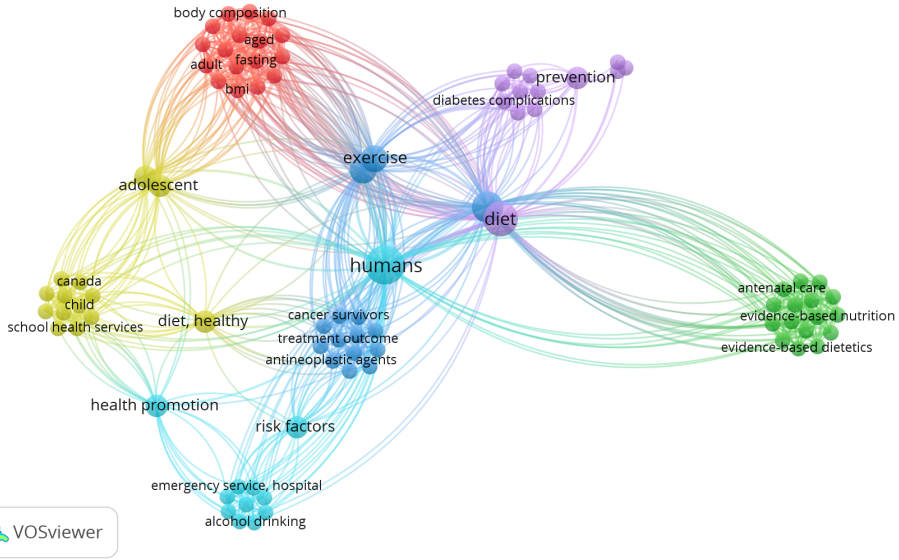

Figure 3 - Co-occurrence of the keywords "Healthy eating practices" and "optimal nutrition and wellness" in the PubMed database (2019–2025).

Figure 3 shows the co-occurrence of keywords, where the term "humans" was most frequently used, associated with the red cluster (focus on body composition and age). This group includes terms such as body composition, adult, aged, fasting, and BMI, indicating that research in this cluster focuses on how healthy eating practices and optimal nutrition influence body composition and weight, particularly in adults and older populations. The relation with exercise suggests an integrated approach combining diet and physical activity to improve physical well-being. The yellow cluster (childhood, adolescence, and school services) contains terms such as adolescent, child, school health, and services, indicating a focus on healthy eating practices in early life stages. This cluster highlights the importance of promoting optimal nutrition from childhood and adolescence, often through school programs and public policies, emphasizing the role of geographical and educational context. On the other hand, the green cluster (evidence-based nutrition and maternal care) includes terms such as evidence-based nutrition, evidence-based dietetics, and antenatal care, suggesting a technical and professional approach to nutrition, especially during pregnancy. This group underscores the role of scientific evidence in developing healthy eating practices that impact both mothers and their future children, promoting long-term well-being. The blue cluster (physical activity and general health) groups terms such as exercise, humans, treatment outcome, and cancer survivors, indicating a connection between nutrition, physical activity, and recovery/maintenance of health, particularly in populations with chronic conditions or a history of illness. This explores how proper nutrition can improve therapeutic outcomes and quality of life. The purple cluster (prevention of chronic diseases) contains terms such as prevention and diabetes complications, reflecting a focus on how healthy eating practices contribute to preventing non-communicable diseases, especially diabetes. Nutrition is emphasized as a key tool to avoid complications and promote long-term well-being. Finally, the cyan cluster (health promotion and risk factors), with terms such as health promotion, risk factors, alcohol drinking, and emergency service, addresses the social and behavioral determinants that affect health. It focuses on promoting healthy habits not only through diet but also by reducing risk factors such as alcohol consumption, within a broader public health approach.

DISCUSSION

The results found are consistent with another study reporting that an adequate, nutrient-rich, and balanced diet is fundamental for health, as it contributes to the prevention of various diseases[44]. On the other hand, another study indicates that a healthy diet consists of the varied consumption of foods, preferably in their natural state or minimally processed[45]. This type of diet provides the essential energy and nutrients the body needs to maintain health, promoting better quality of life across all stages of life.

Several studies also highlight the importance of nutritional education and its impact on eating habits in different populations. One study pointed out that university students have poor nutritional literacy, which affects their eating patterns[28]. Other researchers emphasized the effectiveness of the Culinary Boot Camp program in improving participants' diets and culinary skills[31]. In the same context, another study demonstrated that nutritional interventions generate improvements in eating habits, reinforcing the need to implement educational strategies[33]. In addition, one study suggested that projects such as school gardens can foster better nutrition and environmental awareness among students[7].

Economic and sociocultural factors also influence diet and access to healthy food. Researchers found that the perceived cost of healthy foods limits fruit consumption among university students[30]. Another study analyzed how inflation affects food consumption patterns, especially in populations with lower educational levels[37]. In more vulnerable populations, such as children and pregnant women, a high prevalence of food insecurity[14] and inadequate maternal and child feeding practices[38] was identified, highlighting the need for preventive interventions and access to a balanced diet.

Experiences in countries such as Nicaragua, Cuba, and Ecuador showed that the level of nutritional knowledge directly influences eating practices and the prevalence of problems such as overweight, child undernutrition, or maternal malnutrition. Nutritional literacy, as demonstrated in experiences in the United Kingdom, Mexico, and the United States, can be decisive in transforming habits and reducing nutritional risks. Furthermore, studies agree on the need for sustainable, context-specific interventions that promote healthy lifestyles.

In countries such as Argentina, Chile, and Spain, the importance of designing strategies that consider social, economic, and cultural conditions, as

well as variables such as the food environment, available resources, and social perceptions of food, is emphasized. The school, university, and family environments are also recognized as key spaces for intervention, as shown in cases from Paraguay, Colombia, and Brazil. Finally, examples from Finland and China reflect the benefits of a balanced diet combined with physical activity in preventing metabolic diseases.

The relationship between eating habits and mental health has also been addressed in recent studies. It was identified that internalized stigma influences emotional eating and lack of control in food consumption[36]. Another study highlighted the impact of eating disorders on sports performance, emphasizing the importance of early detection[8]. Among children and adolescents, it was found that although there is knowledge about healthy eating, food preferences influence their choices, suggesting the need for more engaging strategies to improve adherence to healthy diets[34].

As for the journals analyzed, these belong to different fields of health and education, indexed in Scopus, with variations in their impact (Q2 to Q4). The increase in the production of scientific documents on healthy foods reflects a growing interest in the relationship between nutrition and well-being. Although fluctuations occurred between 2019 and 2024, the publication peak in 2024 suggests higher research priority. The partial number of publications in 2025 indicates that the trend remains upward, demonstrating the continued relevance of the topic in the academic and scientific spheres[46,47].

The keyword co-occurrence analysis revealed a predominance of the term "humans", highlighting a generalized focus on human health and well-being at different life stages. A strong relationship is observed between healthy eating practices, optimal nutrition, and factors such as age, physical activity, and clinical conditions. The recurrence of terms related to childhood, adolescence, maternity, and chronic diseases suggests a comprehensive and multidimensional approach. In addition, the use of scientific evidence and a focus on health promotion are emphasized as cross-cutting themes in the contexts analyzed.

CONCLUSION

It is concluded that nutritional education and food knowledge are fundamental pillars for improving eating habits in different populations. This research made it possible to identify and analyze relevant scientific information on dietary practices aimed at adequate nutrition and overall well-being, through a literature review of high-impact databases such as Scopus, PubMed, SciELO, and Latindex, among others. The analysis of the 30 selected sources revealed common patterns on the importance of nutritional education as a central axis for modifying eating behaviors, promoting more conscious and healthy choices in diverse population contexts.

The results showed that the most effective nutritional interventions are those designed considering the sociocultural and economic context of the populations. The fundamental role of eating practices based on scientific evidence was also highlighted, as they enable the establishment of clear and effective recommendations for the prevention and control of diet-related diseases. These strategies are reinforced by comprehensive public policies that address the life cycle, recognizing that nutritional needs vary from childhood to old age.

The findings of this review reflect the need to coordinate efforts among research, clinical practice, education, and public policy formulation to ensure optimal nutrition. Approaching food from a scientific and multidisciplinary perspective contributes not only to improving individual health but also to strengthening collective well-being. Therefore, it is concluded that an integral, contextualized, and evidence-based approach is essential to address current nutritional challenges.

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