

Bibliometric Analysis of Theses on Sustainable Nutrition in Türkiye

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Abstract

As sustainability has become a central concern across various domains, scholarly interest in this field has grown substantially. Among these domains, sustainable nutrition has emerged as a particularly prominent area of inquiry. This study aims to analyze the content of these theses on sustainable nutrition. In this study, where the bibliometric analysis method was used, and data were obtained from the Türkiye Council of Higher Education (CoHE) Thesis Center. A total of 33 theses completed between 2017 and June 2025 were examined. Theses not registered on the CoHE Thesis Center were not included in this study. The university, institute and department, the language, the type of the thesis (master's or doctoral thesis), the year and keywords were recorded using Microsoft Excel. The data were analyzed using descriptive statistical methods. The findings showed that a large portion of theses on sustainable nutrition were prepared in the Nutrition and Dietetics Departments of universities (69.70%). As of 2023, there has been a significant increase in the number of theses written on the subject. Also, 93.94% of these were master's theses and 90.91% were written in Turkish. The universities where the most theses were prepared on the subject were Bahcesehir University, Istinye University and Baskent University. Although the number of theses completed on sustainable nutrition is increasing, this subject has not been sufficiently researched, especially in departments other than Nutrition and Dietetics. Doctoral-level theses on sustainable nutrition were found to be limited. This study offers a foundation for further interdisciplinary academic work and highlights areas requiring further research.

Keywords: Bibliometrics, Nutritional sciences, Sustainable development, Sustainable nutrition.

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1. Introduction

Sustainability is a difficult concept to define because it covers different areas. According to the definition of the United Nations Brundtland Commission on Sustainable Development in 1987, sustainable development is meeting the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment and Development [WCED], 1987). Accordingly, sustainable nutrition can be defined as the ability of food systems to provide the balance of energy and essential nutrients to maintain good health of the population and without adversely impacting the ability of future generations to meet their nutritional needs (Asghar & Khalid, 2023). EAT–Lancet Commission has emphasized the adoption of a universal diet that will provide significant health benefits and also enhance

sustainability (Bastian et al., 2021). For this purpose, The World Health Organization (WHO) and FAO have published the document entitled “Sustainable healthy diets – guiding principles”. This document addresses three main issues: (1) the role of breastfeeding in early life; the use of unprocessed or minimally processed foods that are free from foodborne and non-communicable disease agents, (2) gas and chemical pollution, water and land use, biodiversity conservation, (3) sociocultural aspects; making food accessible and affordable to all members of the population, taking into account local culture and culinary practices. In order to meet these principles, it is important to apply interdisciplinary approaches and conduct research on sustainable nutrition (Gibas-Dorna & Żukiewicz-Sobczak, 2024). Despite the growing global interest, there is limited data on postgraduate research trends in sustainable nutrition in Türkiye.

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Bibliometric studies are types of research that provide solid foundations for advancing a research field, provide a general overview of the subject, identify gaps in knowledge in the field, and contribute to the generation of new ideas for the field (Donthu et al., 2021). Although there are some bibliometric analyses on sustainability, most of them focus on areas such as the business sector, education, and poverty (Yamaguchi et al., 2023). For these reasons, we aimed to conduct a bibliometric analysis of theses on sustainable nutrition prepared in Türkiye and to analyze the extent and development of interest in this subject.

2. Material and Methods

Bibliometric analysis is a technique used to examine the scientific production in a field of research. It allows researchers to examine the evolution of knowledge on a certain subject over a certain period of time (Belmonte-Ureña et al., 2021; Zupic & Čater, 2015). In this study, the bibliometric analysis method was used.

The research data were obtained from the Türkiye Council of Higher Education (CoHE) Thesis Center database as a result of the scan conducted on June 28, 2025 (CoHE, n.d.-a). The universe of the study consists of theses on sustainable nutrition. Theses were identified using the keyword 'sustainable nutrition' in the title. Within the scope of the research, a total of 33 theses available in CoHE Thesis Center were examined. Only open-access theses available as of June 28, 2025, were included. Theses that were not registered on the CoHE Thesis Center were not included in the study. The university, institute and department where the theses were conducted, thesis type (master's thesis or doctoral thesis), the language in which they were

written, the year they were conducted and keywords were recorded using Microsoft Excel. The data were analyzed using descriptive statistical methods. Since this research included basic data (year, type, keywords, etc.) from published theses, ethics committee approval was not required.

The study questions aimed to be answered as a result of the bibliometric analysis were as follows:

- i. What is the distribution of theses on sustainable nutrition by year?
- ii. What are the types of theses on sustainable nutrition (master's or doctoral thesis)?
- iii. In which universities, institutes and departments are theses on sustainable nutrition conducted?
- iv. In which languages are theses on sustainable nutrition written?
- v. What keywords do theses on sustainable nutrition contain?

3. Results and Discussion

A total of 33 theses prepared on sustainable nutrition between 2017 and June 2025 were included in this study. The names of the included theses and the years they were conducted are presented in Table 1.

Figure 1 shows the increase in the number of theses on sustainable nutrition over the years. It is seen that the first thesis prepared on sustainable nutrition was completed in 2017. 75.76% of the theses have been completed since 2023. There was a fivefold increase in theses on sustainable nutrition between 2022 and 2024, suggesting heightened interest.

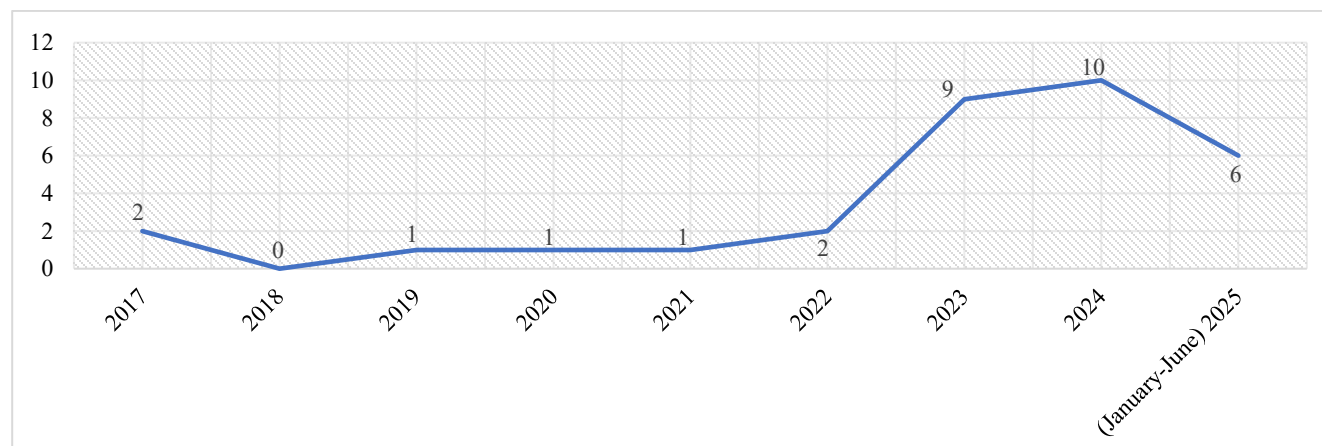


Figure 1. Distribution of theses on sustainable nutrition by year

Table 1. Theses included in the research

<i>Title</i>	<i>Year</i>
Assessing teacher education students' behaviors and internal locus of control pertinent to sustainable diets	2017
The evaluation of the levels of knowledge and practice on sustainable nutrition of individuals' aged twenty years and over	2017
Assessing the knowledge and attitudes of dietitians and dietitian candidates with regards to sustainable diet	2019
Evaluation of the knowledge levels of university students studying health about sustainable nutrition and environment relationship	2020
Evaluation of corporate company employees' knowledge, attitudes and behaviors about sustainable nutrition	2021
The relationship between knowledge and behaviors on sustainable nutrition with food preferences of Bahçeşehir University undergraduate students	2022
Evaluation of different diet models in terms of carbon and water footprint within the concept of sustainable nutrition	2022
An evaluation of national food systems according to sustainable nutrition security criteria	2023
Evaluation of the relationship between eating attitudes and sustainable nutrition in female clients applying to a private diet clinic	2023
Evaluation of healthcare workers' knowledge and practices on sustainable nutrition: Ankara Dr. Abdurrahman Yurtaslan Oncology Training and Research Hospital example	2023
Sustainable nutrition and nutritional waste generation of blue-collar and white-collar employees working in a factory	2023
Determining the knowledge and attitudes of university students on sustainable nutrition	2023
Evaluation of knowledge, attitudes, behaviors about sustainable nutrition and diet quality of family health center employees: The case of Kırklareli city center	2023
Survey of sustainable nutrition awareness of preschool teachers	2023
The analysis of the relationship between sustainable nutrition and eating awareness and body mass indices among sports sciences faculty students	2023
Evaluation of the knowledge and attitudes of the ministry of environment, urbanization and climate change employees on sustainable nutrition	2023
Turkish adaptation of questionnaire on food sustainability knowledge and attitudes to sustainable eating: Application to blue and white collar employees	2024
The effect of sustainable nutrition behaviors and nutritional knowledge level on anthropometry and body composition in health workers	2024
Analysis of nutrition knowledge levels and sustainable nutrition awareness of women demand for online nutrition counseling in the preconceptional period	2024
Evaluation of food security, sustainable nutritional behaviors and nutritional status of Syrian immigrant adult women living in İzmir	2024
Investigation of sustainable eating behaviors and diet quality in adults	2024
Determination of sustainable nutrition behaviors and Mediterranean diet compliance of individual who benefit from Erciyes University dining hall	2024
The effect of university students' perspective on genetically modified organisms and sustainable nutrition behaviours on anthropometric measurements	2024
The effect of sustainable nutrition education on diet quality, carbon footprint and water footprint values in university students	2024
Investigation of the relationship between mindful eating, sustainable nutrition and food choice in adults	2024
Early childhood sustainable nutrition and active life good practice education model development	2024
Studying the impact of sustainable nutrition education on sustainable nutrition practices for student and personnel refectory staff: iu-cerrahpasa case	2025
The evaluation of sustainable nutrition knowledge level and adherence to the Mediterranean diet in adults	2025
Investigation of sustainable nutrition behaviors and food waste behaviors of generation X and Z individuals	2025
The relationship between sustainable nutrition knowledge levels and food purchasing behaviors of faculty of health sciences students	2025
Evaluation of university students' behaviors towards sustainable nutrition and food waste creation situations	2025
Evaluation of knowledge, attitudes, and behaviors regarding sustainable nutrition among undergraduate students residing in dormitories: The case of Erzurum, Turkey	2025
Development of a sustainable nutrition education model for mass nutrition systems personnel and evaluation of its effectiveness	2025

When the types of theses completed on sustainable nutrition (master's or doctoral thesis) and the languages in which they were written were examined, it was determined that 93.94% were master's theses and 90.91% were written in Turkish (Figure 2 and Figure 3).

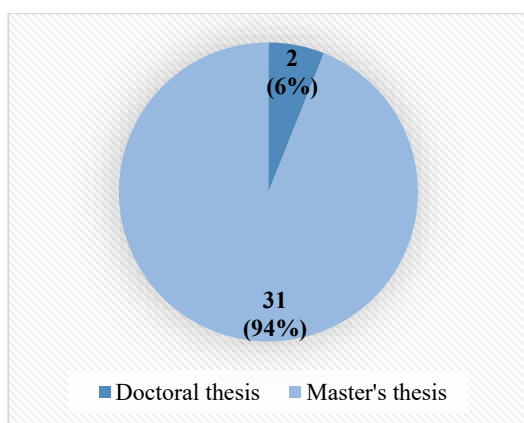


Figure 2. Distribution of theses according to their types (n, %)

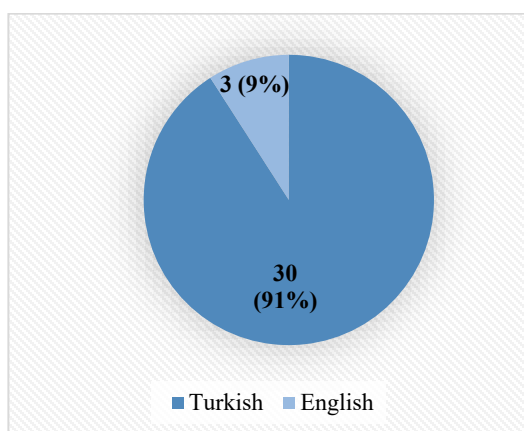


Figure 3. Distribution of theses according to the languages they were written in (n, %)

9.09% of theses on sustainable nutrition were prepared at Bahcesehir University, 9.09% at Baskent University and 9.09% at Istinye University. It is seen that at least one thesis on sustainable nutrition has been completed in 24 universities across Türkiye (Table 2).

Table 2. Distribution of theses according to the universities where they were conducted

Number of Theses	University
One	Ankara Medipol University
	Ankara University
	Ankara Yildirim Beyazit University
	Ataturk University
	Cukurova University
	Ege University
	Erciyes University
	Hacettepe University
	Halic University
	Istanbul Medipol University
	Izmir Democracy University
	Karabuk University
	Lokman Hekim University
	Mardin Artuklu University
	Mugla Sitki Kocman University
	Necmettin Erbakan University
Two	Middle East Technical University
	Yeditepe University
Two	Biruni University
	Hasan Kalyoncu University
	Trakya University
Three	Bahcesehir University
	Baskent University
	Istinye University

Data on the departments in which the theses included in the study were prepared are presented in Figure 4. The findings show that the vast majority of theses (69.70%) were conducted in the Department of Nutrition and Dietetics. It has been determined that sustainable nutrition, which requires a multidisciplinary approach, is limited to certain branches.

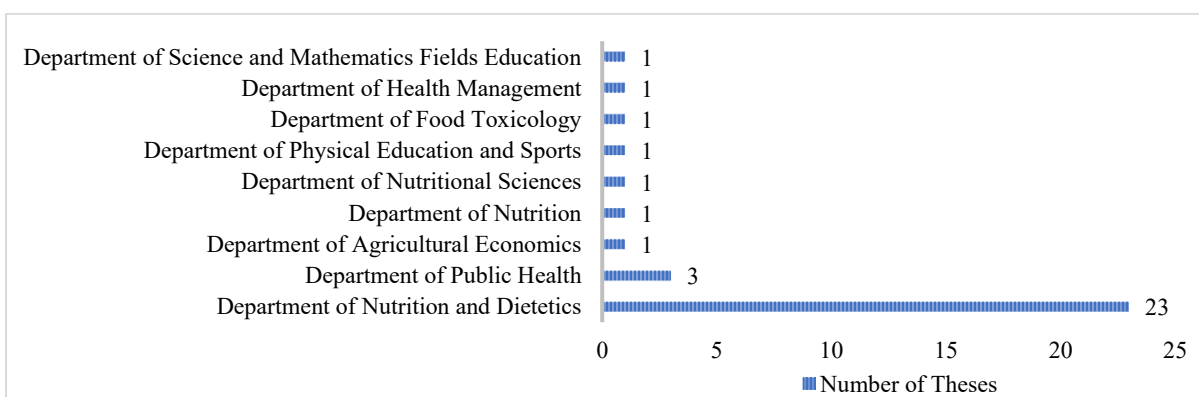


Figure 4. Distribution of theses according to the departments in which they were conducted

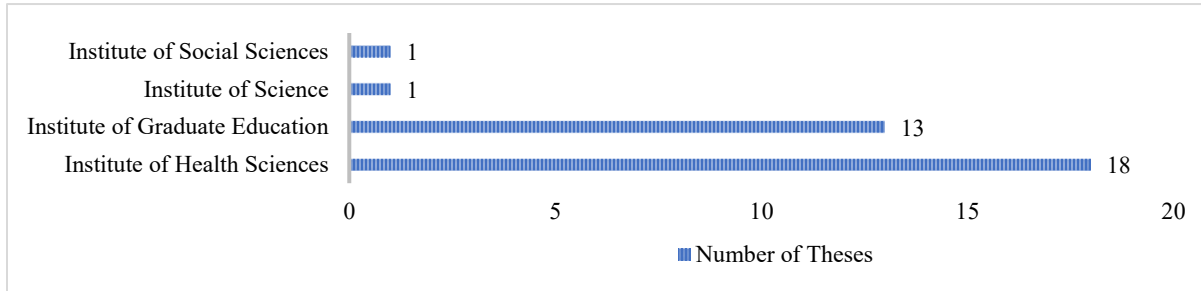


Figure 5. Distribution of theses according to the institutes where they were conducted

Within the scope of the study, the keywords determined by the thesis authors in the analyzed theses were recorded. A total of 67 different keywords were used, and the keywords repeated at least twice are given in Figure 6. The most frequently used keywords were sustainable nutrition ($f=22$), sustainability ($f=11$), environment ($f=6$), nutrition ($f=5$), diet quality ($f=4$) and Mediterranean diet ($f=4$).

The concept of sustainability has become a remarkable research area not only for policy makers and producers but also for researchers. In this study, the extent to which the subject of sustainable nutrition, which has a wide range in the literature, is the subject of theses completed at universities in Türkiye was analyzed.

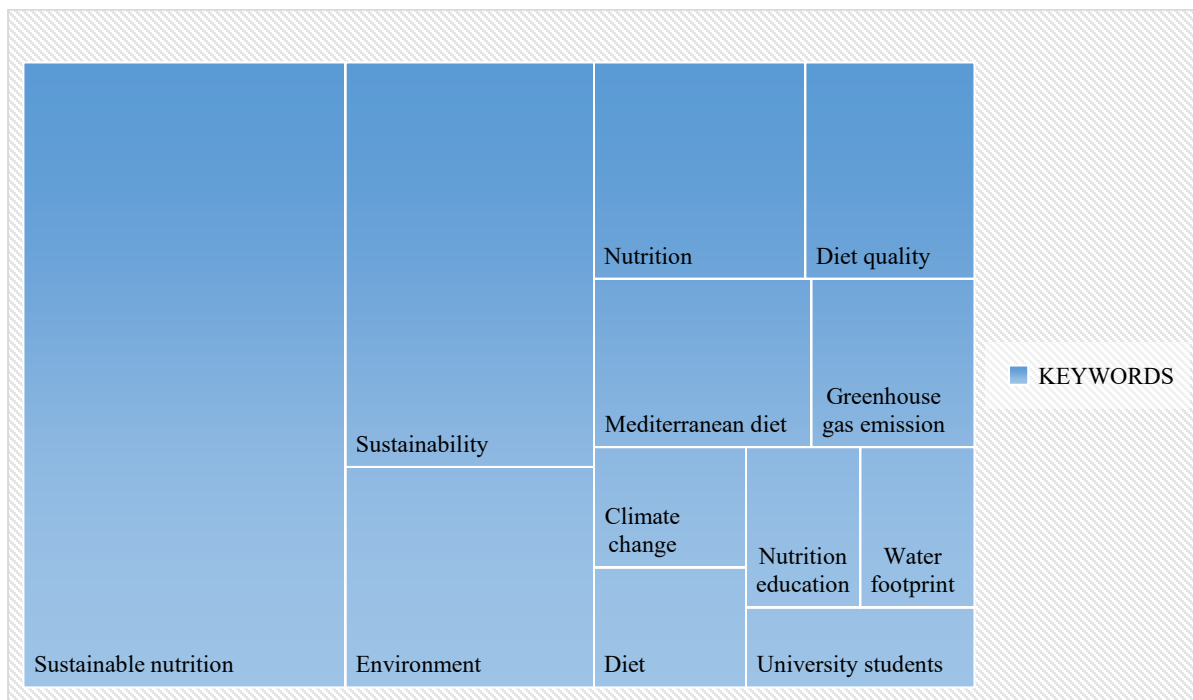


Figure 6. The most frequently used keywords in theses

4. Discussion

The concept of sustainability has become a remarkable research area not only for policy makers and producers but also for researchers. In this study, the extent to which the subject of sustainable nutrition, which has a

wide range in the literature, is the subject of theses completed at universities in Türkiye was analyzed.

The findings show that the number of theses on sustainable nutrition prepared in our country has increased as of 2023. The results of the bibliometric study conducted by Ellili in 2024 show that the number

of articles published on sustainable development has started to increase significantly as of 2020 (Ellili, 2024). In their study, Yamaguchi et al. (2023) examined articles on sustainable development goals in the Web of Science database between the years 2015-2022. The researchers showed that studies on sustainable development goals increased significantly between 2017 and 2018 (Yamaguchi et al., 2023). Similarly, it was observed that theses on sustainable tourism prepared in universities in our country increased after the 2000s (Güdü Demirebulat and Tetik Dinç). A large portion of theses on sustainable gastronomy were conducted in 2017 and later (Şeyhanlioğlu, 2023). These data support the findings of our study and show that sustainability and sustainable nutrition-themed studies are increasingly attracting attention from researchers. This increase in interest in sustainable nutrition is promising.

The study examined which universities prepared theses on sustainable nutrition and it was determined that a total of 33 theses were prepared in 24 universities. There are 208 universities in Türkiye (CoHE, n.d.-b). These findings show that in approximately 9 out of 10 universities no theses have been written on this subject. The fact that the universities that produce the most theses on this subject are in Istanbul and Ankara can be explained by the fact that the number of universities in these cities is higher. The study also examined in which departments theses on sustainable nutrition were prepared. The fact that a large portion of theses were prepared by students of the Department of Nutrition and Dietetics shows that the subject has not been sufficiently studied by different disciplines. However, human, animal and environmental health are interconnected and the term "one health" has been introduced. In this context, it is of great importance to produce multidisciplinary knowledge on sustainable nutrition by considering many interconnected factors (Martini et al., 2021). However, there is still a lack of interdisciplinary interest in this topic. This may be due to the inadequacy of sustainability-related courses in educational curricula, low sustainability awareness among students, sustainability being outside the field of interest of advisors, or a lack of interdisciplinary collaboration.

Almost all of the theses examined are at the master's level. These findings show that the subject of sustainable nutrition does not receive sufficient attention in theses produced at the doctoral level. The low number of doctoral programs and doctoral students in our country may be one reason for this

situation. Another possible reason is that sufficient fundamental evidence has not yet been obtained to support the production of doctoral theses. The increasing interest in this topic over the years promises that more advanced theses will be produced in the coming years.

In a bibliometric analysis examining studies on sustainable development (2024), the keywords used in articles on this subject were grouped under 6 categories: (1) environmental sustainability, (2) sustainable development, (3) urban sustainability, (4) ecological footprint, (5) environment, and (6) climate change (Ellili, 2024). Similarly, in our study, it was determined that the most frequently used keywords in theses were sustainable nutrition, sustainability and environment. In addition, the presence of keywords such as diet quality, nutrition education, water footprint shows that the relationship between the concept of sustainable nutrition and concepts such as environment and human health is also a subject of studies.

The strength of our study is that there is no other bibliometric study that has previously examined the tendency towards sustainable nutrition in our country. The limitation of the study is that only theses that were available in CoHE Thesis Center were examined. There is a possibility that theses that have not yet been registered in the database will be excluded. In future studies, it may be recommended to conduct bibliometric analyses of articles, books and reports prepared on sustainable nutrition.


5. Conclusions


This study, which presents a bibliometric analysis of theses and dissertations on sustainable nutrition in Türkiye, yields some key findings. A notable trend identified is the growing academic interest in sustainable nutrition over recent years. However, doctoral-level engagement with the topic remains limited, indicating a gap in advanced research. Further research should expand beyond theses to include articles, funded projects, and interdisciplinary collaborations. Universities are encouraged to foster sustainability-focused scholarship, particularly at the doctoral level and across diverse academic disciplines.

Declaration of Competing Interest

The authors declare that they have no financial or non-financial competing interests.

Author's Contributions

E. Güner ( [0000-0003-0575-5587](https://orcid.org/0000-0003-0575-5587)): *Conceptualization, Data Curation, Formal Analysis, Investigation, Methodology, Validation, Visualization, Writing – Original Draft Preparation, Review & Editing*

Ç. Güner ( [0000-0003-1937-0047](https://orcid.org/0000-0003-1937-0047)): *Conceptualization, Writing – Original Draft Preparation, Review & Editing.*

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