

CONSUMER'S PERCEPTION TOWARDS HERBAL PRODUCTS WITH RESPECT TO PATANJALI AYURVEDA: AN EMPIRICAL STUDY

Mr. Arun Kumar Singh^{1*}, Dr. Manish Shrivastava^{2*}

¹Research Scholar, Department of Management, Quantum University, Roorkee, Uttarakhand, India

²Professor, Department of Management, Quantum University, Roorkee, Uttarakhand, India

ABSTRACT

This study examines consumer perception toward herbal products, specifically focusing on Patanjali Ayurveda. It aims to analyze the level of awareness, attitude, and satisfaction of consumers regarding herbal products. A descriptive research design was adopted, and data were collected through a structured questionnaire using an interview schedule method. The study employed a simple random sampling technique, with a sample size of 420 respondents. Various statistical tools, including descriptive statistics, frequency distribution, Chi-square test, independent sample t-test, Canonical Correlation Analysis, one-way ANOVA (F-test), Principal Component Analysis, Rank Analysis, and Regression, were used for data analysis.

Results: Social economic variables such as gender, age, education, employment, and marital status were found to have a substantial influence on the frequency and brand of herbal goods purchased. Marketers could consider adapting their products and techniques according on the demographics of their target audience, given the association between socioeconomic characteristics and herbal product consumption.

Keywords: buying behavior, attitude, awareness, consumer perception, herbal products, Patanjali Ayurveda.

1 INTRODUCTION

In recent years, there has been a notable shift in consumer preference and behavior particularly in the Indian market towards a more holistic and natural approach to healthcare and well-being. This shift is underscored by a growing fascination with herbal products often rooted in traditional Ayurvedic and indigenous medicinal systems. Consumers are increasingly drawn to the promise of natural remedies, wellness and sustainability that herbal products offer. As such understanding the intricate dynamics of consumer perception towards herbal products has gained paramount importance both for

business operating in this sector and researchers seeking to unravel the complexities of this evolving market.

The Indian subcontinent has a rich heritage of herbal remedies with a vast array of botanical resources that have been employed for centuries to address various health and wellness needs. The surge in interest in herbal products is not merely a revival of ancient practices but also a response to contemporary concerns such as environment sustainability, health consciousness and the search for safer alternatives to chemical-based products. India with its diverse consumer base and deep-rooted traditions provides a unique and intriguing backdrop for examining consumer attitudes and behaviors surrounding herbal products.

The rise of herbal products in India is not confined to a niche market but it has garnered mainstream attention and substantial market share. As consumers increasingly scrutinize product labels and seek transparency in their purchases, herbal products have emerged as a viable and trusted choice. The availability of wide range of herbal products from cosmetics to dietary supplements and over the counter medications has made it imperative to explore the factors that shape consumer perception. Furthermore Covid 19 pandemic has accentuated the demand for immunity-boosting, natural remedies, pushing herbal products into spotlight.

The way a consumer typically thinks or feels about particular goods and services is known as their consumer perception. It is essential to recognize that consumer perception is a dynamic interplay of cultural, social, economic and

environmental factors. By comprehensively exploring the drivers, barriers and implications of consumer choices in this domain, it aims to shed light on the evolving market dynamics and offer insights that can guide businesses, researchers and policymakers about the nuances of consumer mindset and how it can be harnessed to foster sustainable growth, innovation and positive change in the herbal products industry.

The significance of this research extends beyond the immediate business implications as it aligns with the broader social and environmental concerns. The cultivation, extraction and processing of herbal products often involve local communities, sustainable practices and the preservation of biodiversity. Consumer choices have the potential to either encourage or undermine these efforts with far reaching implications for sustainability and indigenous knowledge preservation. As the world is navigating through an era of climate change and other environmental issues the study will delve into

how consumer perception influences sustainable choices and practices with the herbal product industry.

1.1 RESEARCH OBJECTIVES

The objectives of the study are:

1. To examine how customers see Herbal Products;
2. To determine consumers' awareness level concerning Herbal Products;
3. To determine how frequently the customers purchase the Herbal Products;
4. To assess the variables influencing the decision to purchase Herbal Products.

2 REVIEW OF LITERATURE

Noronha, M. E. S. de, Silva, R., & Borges, F. M. (2023) in their research demonstrates demonstrates that the consumerist attitude from the instruction of energy efficiency certificates can corroborate with the fulfillment of sustainable development objectives, with emphasis on objective of access to

clean and renewable energy, promoting efficiency and stimulating production chains, ensuring consumption with a lower environmental impact and discouraging the use of products that require more energy. Siksimbaeva et al. (2023); Kalyani & Prabhavathi (2023) and Szente (2015) stated about how organic products affected people's health. According to the study, it is necessary to intensify outreach to the public to explain the advantages of organic products for preserving each family member's physical health; to keep up efforts to encourage organic product producers to enter a large domestic and international market; and to regulate the issue of legal support for organic production. Khatri (2023) investigated how men use herbal personal care products and their consumption. Male consumers were also very interested in discovering personal care and cosmetic items that fit their skin tone, body type, and complexion. Personal care and cosmetics are no longer thought to be exclusively for female consumers. However, there remains a gap in the market for male customers of personal care. Falola et al. (2023); Kansar & Kadhar (2022); Pandey (2021) and Ahmed et al. (2020) mentioned that the main factors influencing willingness to pay were price, corporate reputation, income, education, age, occupation, and awareness of herbal goods. Today's consumers were demanding more personal care products made with natural or organic components. Nithya et al. (2022) investigated consumers' attitudes and purchasing patterns regarding organic food items. Three indicators were identified by the study to gauge the customers'

preferences. Consumers often take action based on their knowledge, and as information shapes attitudes, it is necessary to examine consumers' perceptions, experiences, and expectations about organic food items. The more information consumers have, the more favorable their attitudes toward the product will likely be. Dubey (2022) stated that customer preferences and tastes were changing at an accelerating rate, and that the rapidly changing consumer products sector was dealing with an unparalleled degree of unpredictability. A person's health is crucial to their quality of life because it is seen as their greatest asset. Everyone wants to keep their health, regardless of wealth, age, gender, or physical condition. Despite the increased consumer desire for foods cultivated organically, Kumar et al.

(2021) noted that there was a shortage of information based on a systematic evaluation of the nutritional quality of these foods. To evaluate the differences in reported nutritional content between food farmed conventionally and organically, they employed quantitative measurement. It was discovered that there was no evidence of a difference in nutritional content between foods cultivated conventionally and organically. The minute differences in nutritional content that have been found are physiologically conceivable and are mostly related to changes in manufacturing techniques. Stankovic (2020) suggested potential directions for creating novel bio products based on the plant and also illustrated the need for protecting biodiversity in a threatened ecoregion. According to Balekundri & Mannur (2020) and Tachjian et al. (2010) The quality of the materials used in herbal goods is influenced by a variety of physical, chemical, and geographical factors. In addition, the quality of herbal material is becoming increasingly concerned with adulteration. To assess the quality of the herbal materials used in herbal medications, a variety of analytical methods, including hyphenated analytical techniques, chemical and phytochemical tests, are employed. Anbarasi & Kumar (2019) mentioned that customers are ready to pay for organic items, and the market for organic and herbal products is expanding quickly. Businesses that use organic tactics into their marketing, operational, and product development processes open up new avenues for competitive advantage. According to Singhal (2018) and Naidoo & Henry Ramatsetse (2016), there are several benefits associated with eating organic food, including improved health and sustainable farming practices. However, because there is a lack of data, trust, and understanding regarding these food goods, they typically lack customer support and hence have lower market demand. Birch et al. (2018) Juhl et al. (2017) examined the last instances within the receiving group of organic items based on board scanner data from a shop. Using a hidden Markov model, every single enrolled transaction of superior clients with a dependability card was dissected, identifying the components in

the buyers' purchase. The goal of Rock et al. (2017) and Hughner et al. (2017) was to compile information on aspects of organic food that are associated to wellness. The available data about the benefits of eating organic food is ambiguous, and the evidence supporting these benefits was insufficient to support organic eating in general. Skreli et al. (2017)

conducted a conjoint choice experiment involving the most important product features, such as origin, price, manufacturing sort, and production system. Latent class analysis has shown four distinct groups that were quite important. Consumers who are bio-ready, price-sensitive, variety and quality-seeking might be summed up as belonging to these segments. Oroian *et al.* (2017) and Wier & Calverley (2002) looked at the attitudes and perceptions of consumers of organic food in Romania's North-West Development Region. Using thirty products, the impression of organic food among consumers was examined. The identification of customer groups was done using a factor-cluster technique. The results showed that the main drivers of high consumption of organic food items were concerns about weight, sustainability, sensory appeal, and health. Hwang (2016) and Anufrieva (2015) suggested that while natural problems and a positive self-image did not improve a customer's buying target, self-introduction and sustenance security challenges were thought to enhance experienced consumers' buy expectations. Furthermore, an analysis involving younger consumers discovered further insights into the component of positive customer behavior. According to Aschemann-Witzel & Zielke (2015), the primary perceived obstacle to purchasing organic food is its cost. Simply said, psychographic factors have rendered income as a somewhat instructional element obsolete. Price sensitivity was lower for organic customers than for occasional or consumers who do not use organic products, and cost information was inaccurate. Pillai & Meghrajani (2013) analyzed the fact that consumers do not favor eco-friendly products because they are expensive, poorly promoted, and labeled, making it hard for them to tell them separately from conventional ones. Dholakia & Shukul (2012) and Gil & Soler (2006) researched ways to increase the consumption of organic food and looked at the extent to which women, who often provide health care for their families, are aware of various elements of their wishes for organic food. The majority of women, it has been provided, were well-informed about organic food; nonetheless, they chose not to purchase it since, in addition to being more expensive than conventional food, organic food was not readily available. The absence of a standardized symbol or certification process further discouraged people from buying organic products. Price and safety were determined to be the next most important considerations in food selection, after sensory elements (Zakowska-Biemans,

2011). When it came to purchasing organic food goods, customers who prioritized price and convenience above novelty were less likely to do so than those who were open to trying new cuisines. Huber et al. (2011) looked at the health benefits of eating organic food and provided a system for calculating the research' scientific significance, further looked at the problems brought on by diverse study methodologies. Chen (2009) and Gracia & De Magistris (2007) suggested that living a healthy lifestyle might have a favorable intervening effect on the positive relationships between air mentalities and wellbeing cognizance. Additionally, it should be pushed to make the client feel much more positively about natural food. Arvola et al. (2008) examined how the Theory of Planned Behavior (TPB) may be used to predict the purchase objectives of organics by balancing the quantities of moral and genuine emotions. The operational definition of the moral state of mind is happy, self - rewarding feelings that come from doing the appropriate thing.

There are a ton of articles about customers' awareness, mentality, and motives for buying herbal/organic items related to these products. When people think of herbal items, they typically think of herbal medicines. There are many studies on herbal medicines, however there aren't many publications on herbal foods and cosmetics. In particular, no research has been conducted on the comprehensive method of assessing the socioeconomic standing, consumer awareness, attitude, and perception of herbal food and cosmetic items. This was the research gap that guided the completion of the current study. As a result, this study is unique in that it offers a comprehensive understanding of how customers feel about herbal goods.

3 METHODS

The study was descriptive, based on sample survey. The study has been carried out on empirical level and it is based on the interview schedule method. The required data for the current study were collected using a formal schedule of interviews. In the interview, the personal and occupational data relating to sample respondents, their prevailing knowledge about the purchase pattern,

awareness level, attitude and perception of herbal products were collected. The instrument used to collect the data is a well-structured questionnaire which is incorporated with items measuring socio-economic status, awareness about herbal products, attitudes and perception of herbal products and factors influencing the purchase of herbal products. The questionnaire was created in away that made it simple for responders to understand and answer. There were both closed-ended and open-ended questions on the survey. The

sampling technique used is Convenience Sampling. The size of the study's sample was arrived at using the following formula suggested by Bill Godden's

Figure 1.

Formula suggested by Bill Godden's

$$New\ SS = \frac{SS \cdot Z^2 \cdot X(P)X(1-P)}{C^2 \cdot (1 + SS \cdot 1/POP)}$$

where:

"SS" stands for sample size,

while "Z" denotes the associated confidence level (the relevant Z values are 1.96 and 2.57 for the 95 and 99 percent confidence intervals, respectively).

and C is confidence interval,

P is Percentage of population picking a choice, expressed as decimal.

Based on this formula a sample size was arrived at 347 and anything above that number is acceptable. The sample size was 420. The number of users includes a variety of consumers of herbal products.

3.1 RESEARCH HYPOTHESIS

H₁ : The socio-economic status of the respondents and frequent purchase of herbal products are significantly correlated.

H₂ : The respondent's socioeconomic status Family Type and the frequent purchase of herbal products are significantly correlated.

H₃: The respondents' socioeconomic status and the type of herbal products brand purchased are significantly correlated.

3.2 FRAMEWORK OF ANALYSIS

The data were analyzed by using Statistical tools such as, Descriptive statistics, Frequency Distribution Analysis, Reliability and Item analysis, Cross tabulation analysis with Chi-square test, independent sample t-test, Canonical Correlation Analysis, One way ANOVA (F test). Principle Component Factor Analysis, Rank Analysis and Regression.

4 RESULTS

4.1 PERCENTAGE ANALYSIS

One of the most crucial factors in determining the respondents' opinions on the specific issues is their age; as age generally reflects an individual's degree of maturity, it becomes increasingly significant when analyzing the response. Table 1 displays the age group analysis of the chosen respondents in the current study.

Table 1.

An analysis of the respondents' age distribution

Age	Number of Sample Respondents	Percentage(percent)
Less than 20	25	6.0
21-30	48	11.4
31-40	70	16.7
41-50	142	33.8
51-60	113	26.9
61&above	22	5.2
Total sample	420	100.0

Source: Primary Data

From the Table it is observed that a larger part of the respondents was in the category of 41- 50 years of age (33.8%), succeeded by the respondent group with age level 50-60 years(26.9%), 31-40 years (16.7%), 21-30 years(11.4%), and

less than 20 years (6%). The respondents aged 61 & above years constitute 5.2% of the total sample.

Globalization is not an exception to the rule that gender is a significant variable in every particular Indian social context, which is influenced differently by social and economic phenomena. For this reason, the parameter gender is examined in this research. It is observed that 53.3 percent of respondents are female and 46.7 percent respondents are male. It is observed that the respondents in the rural area are 41.7 percent, followed by the same in the urban area 37.9 percent. One of the most significant factors that might influence a person's opinions and perspective on any given social phenomenon is their level of education. Since a person's perception is largely influenced by his or her educational background, it is crucial to understand the respondents' educational qualifications. The largest portion of respondents 31.9% in the sample are those who have earned a postgraduate degree followed by the under graduates with 31%, diploma with 27.4% and up to high school was 9.8%. Majority of the respondents 81.9% were married followed by the unmarried with 13.1%, widow 3.6% and divorcee 1.4%.

A person's profession does impact their personality; thus, it is important to consider how they approach the issue at hand. The income he earns also have an impact on his quality of life. Stated differently, an individual's approach to an issue may be influenced by the kind of work they do and so various occupations were investigated by the researcher. It is found that agriculturist is the job status for 24 % of the respondents succeeded by home makers who constitute 20.2% of the sample, 19.3% respondents employed and 14.3% of the respondents were professionals

It was found that 42.1% of the respondents frequently use the herbal products, 37.4% moderately use the herbal products and 20.5% occasionally use the herbal products. It was found that majority of the respondents frequently use the herbal products in the total sample. 43.6% of the respondents purchase the herbal products from the shopping mall, 26.4% purchase the herbal products through online platforms, 17.9% purchase the herbal products from the exclusive shops, 12.1% purchased the herbal products from the clinics. 41.7% purchased herbal products for personal care, followed 40% of respondents purchased herbal products for health care, 12.4% for home care, 6% purchased herbal material for homemade preparation. It is found that majority of the respondents purchased herbal products for personal care in the

Table 2.

Reasons for Purchase of Herbal Products by the Respondents

Reasons	Frequency	Percent
Trust	45	10.7
Betterquality	86	20.5
Lesssideeffect	91	21.7
Moreflavored	61	14.5
Organicnature	59	14.0
Quickrelief	45	10.7
Brandname	29	6.9
Availability	4	1.0
Total	420	100.0

Source: Primary Data

From the above table it is inferred that, 21.7% of the respondents purchased herbal products because they caused lesser side effect followed by 20.5% for the purpose of better quality, 14.5% because they were more flavored, 14% for their organic nature, 10.7% for trust and quick relief. 6.9% for their brand name and 1% because of their availability. It is found that majority of the respondents purchased herbal products for less side effect in the total sample.

5 DISCUSSION

The study's results indicated that the most of those who used herbal products were educated to a post-graduate degree and between the ages of 41 and 50. This can be attributed to a greater awareness and understanding of alternative personal care practices among the individuals. Majority users of the herbal products are women and this aligns with existing research that often highlights women's proactive approach towards personal care and wellness. It was discovered that the frequency of purchasing herbal goods and the brand that was purchased were significantly influenced by socioeconomic characteristics such as gender, age, education, employment, and marital status. This correlation between the socioeconomic factors and herbal

product purchasing suggests that marketers should consider tailoring their products and approaches based on the target audience's demographics. For instance, marketing strategies for herbal products may need to be nuanced to appeal specific age group or educational backgrounds. When selecting the type of herbal product brand to buy, customers often prioritized quality, affordability, and comfort. The emphasis on quality, affordability and comfort in selection of herbal products mirrors general consumers behaviour. Consumers regardless of the product type, tend to prioritize these factors when making purchasing decisions. The study's findings highlight the intricate interplay of demographic and socioeconomic factors in shaping the herbal product market. This information can be valuable for businesses aiming to target specific consumer segments effectively seeking to promote herbal foods and cosmetics. Understanding the preferences decision-making processes of consumers in this context can contribute to development of more targeted and useful herbal products.

REFERENCES

- Ahmed, S., Ferdous Alam, C. S., Talib, B. A., Chamhuri, N., & Idris, N. D. (2020). Consumers' willingness to pay for Malaysian organic food product. *International Journal of Psychosocial Rehabilitation*, 24(02), 2591-2601. <https://doi.org/10.37200/ijpr/v24i2/pr200555>
- Anbarasi, M., & Kumar, S. P. (2019). Research on strategic transformation of marketing organic and herbal products with respect to Chennai city. *Indian Journal of Public Health Research & Development*, 10(8), 711. <https://doi.org/10.5958/0976-5506.2019.01972.7>
- Anufrieva, E. (2015). Organic food purchase motivations, the investigation of the mind-set of an urban Chinese consumer. *Advances in Social Science, Education and Humanities Research*. <https://doi.org/10.2991/icemct-15.2015.25>
- Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the theory of planned behaviour. *Appetite*, 50(2-3), 443-454. <https://doi.org/10.1016/j.appet.2007.09.010>
- Aschemann-Witzel, J., & Zielke, S. (2015). Can't buy me green? A review of consumer perceptions of and behavior toward the price of organic food. *Journal of Consumer Affairs*, 51(1), 211-251. <https://doi.org/10.1111/joca.12092>
- Balekundri, A., & Mannur, V. (2020). Quality control of the traditional herbs and herbal products: A review. *Future Journal of Pharmaceutical Sciences*, 6(1). <https://doi.org/10.1186/s43094-020-00091-5>

Birch, D., Memery, J., & De Silva Kanakarathne, M. (2018). The mindful consumer: Balancing egoistic and altruistic motivations to purchase local food. *Journal of Retailing and Consumer Services*, 40, 221-228. <https://doi.org/10.1016/j.jretconser.2017.10.013>

Chen, M. (2009). Attitude toward organic foods among Taiwanese as related to health consciousness, environmental attitudes, and the mediating effects of a healthy lifestyle. *British Food Journal*, 111(2), 165-178. <https://doi.org/10.1108/00070700910931986>

Dholakia, J., & Shukul, M. (2012). Organic food: An assessment of knowledge of homemakers and influencing reasons to buy / Not to buy. *Journal of Human Ecology*, 37(3), 221-227. <https://doi.org/10.1080/09709274.2012.11906467>

A. (2022). Understanding the consumer: A comparison of buying behavior among consumers of Hindustan Unilever and Patanjali products. *Applied Marketing Analytics*, 7(3), 276-287.

Falola, A., Mukaila, R., & Oyeyinka, O. O. (2023). Consumers' willingness to pay for organic beans in Southwest Nigeria: Towards food safety

Kalyani, R., & Prabhavathi, Y. (2023). Understanding consumer behavior in the organic food market: Perceptions, preferences and purchase factors. *Asian Journal of Agricultural Extension, Economics & Sociology*, 41(10), 992-1004. <https://doi.org/10.9734/ajaees/2023/v41i102253>

Kansra, P., & Khadar, A. A. (2022). Awareness and willingness to pay for herbal products among young consumers in Punjab. *International Journal of Business and Globalisation*, 32(1), 7. <https://doi.org/10.1504/ijbg.2022.127363>

Khatri, R. N. (2023). A study on consumption pattern of herbal personal care products among male consumers with reference to city of Mumbai. *International Journal For Multidisciplinary Research*, 5(2). <https://doi.org/10.36948/ijfmr.2023.v05i02.1979>

Kumar, D. (2021). Nutritional quality of organic foods: A systematic review. *Asian Journal of Research in Social Sciences and Humanities*, 11(11), 604- 608. <https://doi.org/10.5958/2249-7315.2021.00273.2>

Naidoo, V., & Henry Ramatsetse, M. (2016). Assessment of the consumer purchase intentions of organic food at the hazel food market in Pretoria, South Africa. *Environmental Economics*, 7(3), 81-88. [https://doi.org/10.21511/ee.07\(3\).2016.10](https://doi.org/10.21511/ee.07(3).2016.10)

Nithya, N., Kiruthika, R., & Dhanaprakash, S. (2022). Shift in the mindset: Increasing preference towards organic food products in Indian context. *Organic Agriculture*, 12(2), 213-228. <https://doi.org/10.1007/s13165-021-00370-2>

Noronha, M. E. S. de, Silva, R., & Borges, F. M. (2023). Certifications in Consumer Chain: The Consumerist Attitude and Sustainability. *Journal of Lifestyle and SDGs Review*, 3(00), e01667. <https://doi.org/10.37497/2965-730X.SDGsReview.v3.n00.pe01667>

- Oroian, C., Safirescu, C., Harun, R., Chiciudean, G., Arion, F., Muresan, I., & Bordeanu, B. (2017). Consumers' attitudes towards organic products and sustainable development: A case study of Romania. *Sustainability*, 9(9), 1559. <https://doi.org/10.3390/su9091559>
- Pandey, N. (2021). Demand assessments of organic products and consumers willingness to pay for organic food products. *Singapore Journal of Scientific Research*, 11(1), 67-76. <https://doi.org/10.3923/sjsres.2021.67.76>
- Pillai, P., & Meghrajani, I. (2013). Consumer attitude towards eco-friendly goods – A study of electronic products in Ahmedabad city. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3757230>
- Rock, B., Suriyan, J., Vijay, B., Thalha, N., Elango, S., & Rajajeyakumar, M. (2017). Organic food and health: A systematic review. *Journal of Community Medicine & Health Education*, 07(03). <https://doi.org/10.4172/2161-0711.1000532>
- Siksimbaeva, G. T., Akhtaeya, S. M., Shayakhmetova, K. O., & Shynybaey, A. A. (2023). The impact of organic products on public health. *Qainar Journal of Social Science*, 2(1), 55-72. <https://doi.org/10.58732/2958-7212-2023-1-55-72>
- Singhal, N. (2018). A study of consumer behaviour towards genetically modified foods and the moderating effects of health consciousness. *Vision: The Journal of Business Perspective*, 22(3), 306-315. <https://doi.org/10.1177/0972262918786103>
- Skreli, E., Imami, D., Chan-Halbrendt, C., Canavari, M., Zhllima, E., & Pire, E. (2017). Assessing consumer preferences and willingness to pay for organic tomatoes in Albania: A conjoint choice experiment study. *Spanish Journal of Agricultural Research*, 15(3), e0114. <https://doi.org/10.5424/sjar/2017153-9889>
- Stankovic, M. S. (2020). *Medicinal plants and natural product research*. MDPI.
- Szente, V. (2015). Consumer motivations in the purchase of organic foods in Hungary. *Acta fytotechnica et zootechnica*, 18(Special Issue), 145-147. <https://doi.org/10.15414/afz.2015.18.si.145-147>
- Tachjian, A., Maria, V., & Jahangir, A. (2010). Use of herbal products and potential interactions in patients with cardiovascular diseases. *Journal of the American College of Cardiology*, 55(6), 515-525. <https://doi.org/10.1016/j.jacc.2009.07.074>
- Turkmen, N. C. (2022). Toward Sustainable Economic Growth: Aligning Macroeconomic Policies and Trade with SDG12. *Journal of Lifestyle and SDGs Review*, 2(00sdg), e01559. <https://doi.org/10.37497/2965-730X.SDGsReview.v2.n00sdg.pe01559>
- Wier, M., & Calverley, C. (2002). Market potential for organic foods in Europe. *British Food Journal*, 104(1), 45-62.

Żakowska-Biemans, S. (2011). Polish consumer food choices and beliefs about organic food. *British Food Journal*, 113(1), 122-137.
<https://doi.org/10.1108/00070701111097385>