

## INNOVATIVE MARKETING STRATEGIES IN THE FIELD OF PACKAGING FOR ORGANIC FOOD PRODUCTS

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**Abstract-** In both the global and Romanian markets, there is a growing emphasis on ecological packaging and innovations in food packaging to address environmental concerns. Specially designed packaging for food products can captivate consumers' curiosity, encouraging them to explore the unique aspects of the product. This presents an advantage for companies adopting eco-friendly packaging, fostering a positive perception among consumers, who view both the product and the company as environmentally responsible, thus more attractive. It is essential to recognize that organic products should distinguish themselves not only through their content but also through their packaging. Taking this aspect seriously is crucial for promoting the purchase of these products.

This paper presents quantitative marketing research conducted to understand the opinions and attitudes of Romanians regarding the significance of packaging in the purchase of organic food products. Additionally, the research aims to uncover consumers' expectations concerning the design, information, and presentation of the packaging for these products.

**Index Terms-** innovation, marketing strategies, organic food, packaging

### INTRODUCTION

Organic products are gaining an increasing market share, with greater accessibility through mainstream channels like discount stores, supermarkets, and pharmacies.

The term "ORGANIC" encompasses a variety of names, such as 'organic,' 'eco,' and 'bio,' all conveying the same concept. It is crucial to note that organically grown food should not be confused with products labelled as "natural." The term "natural" is frequently employed in food marketing with diverse and often vague definitions, generally implying minimally processed foods whose ingredients are all natural. [1]. Consumers of organic food assert that it is more nutritious, safer to consume, and has a superior taste. This is attributed to the absence of synthetic compound fertilizers, pesticides, herbicides, hormones, medicated feed, antibiotics, or chemicals used in food processing. However, a common concern among consumers is the cost. Organic food is typically pricier due to the increased demand for manual labour and meticulous care associated with organic farming [2].

Consumers of organic food perceive themselves as more health-conscious and are inclined to adopt preventive health measures compared to the general population. The primary motivations for purchasing organic food include considerations for health, the avoidance of chemicals, environmental friendliness, and a superior taste. The distinction between consumers and non-consumers implies that choosing organic food is integral to a lifestyle. It emanates from a specific ideology linked to a set of values, influencing personality traits, attitudes, and consumption behaviour [3].

In global and Romanian markets alike, there is a prevailing emphasis on environmentally friendly packaging and the development of innovative solutions in food packaging to safeguard the environment. In this context, cardboard is emerging as the preferred packaging material for stakeholders in the food and beverage industry.

In a bid to promote packaging recycling, the European Union is enforcing Directive 94/62/EC, mandating EU Member States to implement measures curbing the generation of packaging waste and mitigating its environmental impact. The primary goal is to achieve, by December 31, 2025, a minimum recycling rate of 65% for the weight of all packaging waste. Consequently, EU countries must ensure that market-placed packaging exhibits low levels of hazardous substances and materials, is reusable, recyclable, or organic, and is designed for energy recovery [4].

This paper endeavours to explore the most innovative marketing strategies employed in the field of packaging for organic food products. Within this framework, we conducted quantitative marketing research to understand the opinions and attitudes of Romanians regarding the significance attributed to the packaging of organic food products during the purchase process.

The primary aim of this research is to directly glean insights from consumers, uncovering their expectations concerning the design, information, and presentation of the packaging associated with these types of products.

The findings of this quantitative marketing research will be accessible not only to producers and traders of organic products but also to marketing specialists seeking insights into the opinions of Romanians concerning the packaging and labelling of organic products.

### **Literature review**

The global organic food market has experienced rapid growth in the past decade, with international trade in organic food showing an annual growth rate of approximately 20-22% during this period. Notably, many retail chains and supermarkets have attained green status, enabling them to sell organic food [5].

The food packaging market, a vast sector ensuring the protection of all food products against physical and chemical factors, boasted a global size of \$323.81 billion in 2020. Notably, the market experienced significant growth of 6.3% amid the overall impact of COVID-19. Currently in a booming phase, the market is anticipated to surge by 30% by 2025, reaching \$1 trillion from \$770 billion, reflecting an average annual growth rate of 5.6% over the past 5 years<sup>1</sup>. Simultaneously, the consumer demand for packaged products has witnessed substantial growth, driven by evolving eating habits and lifestyles, including an increasing preference for organic food [6].

To establish or sustain an optimal market position, the product's quality alone is insufficient; it must also captivate the consumer's attention, a feat achieved through effective packaging [7].

Despite its paramount importance, packaging often doesn't receive the attention it deserves. While some may deem it less relevant, packaging proves to be more useful, influential, and valuable than commonly acknowledged. Essential for protecting products during transit, showcasing them on shelves, and, most importantly, facilitating sales, packaging is a crucial marketing tool for all food

products.

Packaging serves several primary roles, including protection and containment, convenience, information, and promotion. Additionally, it plays secondary roles, offering the possibility of alternative uses.

The foremost and crucial role of packaging is to shield the product both within the store and in the customer's home. This involves impeding spoilage, prolonging shelf life, and preserving the quality and safety of packaged food. Simultaneously, packaging serves as a barrier against environmental influences such as heat, light, humidity, oxygen, enzymes, odours, micro-organisms, insects, dirt, and dust. An illustrative example highlighting the protective role of packaging is evident in carton-packaged milk, which remains aseptic when the carton is intact, providing crucial protection. In the case of powdered milk, where moisture can impact shelf life, packaging that prevents moisture penetration is recommended to maintain product quality.

The second pivotal role of packaging involves containment and protection, acting as a form of 'insulation.' Packaging serves as a crucial means to transport food from one location to another, providing a secure enclosure. Additionally, it contributes to environmental preservation by helping mitigate pollution [8] [9].

The third role of packaging is dedicated to creating consumer convenience by addressing both the internal content and external packaging requirements. Convenience, in this context, refers to pre-prepared food that doesn't require removal from the package for heating or cooking, providing consumers with ease of use. Achieving this level of convenience involves ensuring the packaging is resealable to maintain the contents' quality until fully consumed, and the quantity should be manageable to prevent spoilage before consumption completion.

The fourth and final role of packaging is to serve as a tool for information and promotion. Through packaging, consumers receive essential information about the food product, including storage instructions, usage guidelines, preparation methods, country of origin, ingredients, nutritional values, and guidance on handling the packaging during the waste disposal stage.

Information and promotion can be aptly described as playing the role of the "silent salesman" because all the pertinent details that a salesperson might convey about the food product are already presented on the packaging. The packaging serves as an effective promotional tool, showcasing both the product and the brand. Maintaining clarity is paramount, so the size of the packaging should align with the amount of information displayed, preventing confusion for the consumer and ensuring ease of readability. Additionally, elements of brand identity, such as the logo and representative images, are essential components that should be prominently featured on the packaging [10].

In contemporary business landscapes, product design emerges as a potent competitive asset. A thoughtfully crafted design not only draws attention but also enhances product quality, providing a distinct competitive advantage in the market. Recognizing the necessity to strike a balance between consumer demands, brand identification, and regulatory requirements, companies are increasingly aware that meeting consumer needs and desires requires skilled designers. These

professionals play a pivotal role in creating packaging that not only captivates with its visual appeal and uniqueness but also aligns seamlessly with the preferences of the target audience [11] [12].

The consumer experience is elevated when packaging transcends its fundamental roles of protection, transportation, and information. This elevation can result in heightened product purchase frequency and increased consumer loyalty. Consequently, marketers must not only concentrate on understanding consumers' opinions, wants, and needs but also strive to deliver a distinctive and impactful experience. Success in transforming an unfamiliar and inexperienced brand into one that is recognized and favoured by the target consumer group hinges on the ability to provide a unique and memorable experience [13].

The value of packaging extends beyond the costs associated with the materials employed in the packaging process. It encompasses expenses related to development and special considerations for art and design. Consequently, understanding the needs and preferences of consumers regarding food packaging is crucial. This knowledge ensures that companies do not incur significant financial losses through ineffective packaging strategies [14].

As technology advances each year, most food technology developers are increasingly focusing on processing food in a sustainable, efficient manner, aiming for lower costs and higher levels of quality and safety. In tandem with this evolution, food manufacturers are extending these advancements to packaging. Traditionally viewed as a source of waste and environmental pollution, there is a growing shift towards developing packaging solutions that are more resource-efficient and environmentally friendly.

In the pursuit of environmental protection and meeting consumer needs, specialists are advancing the concept of "intelligent packaging." This new and exciting field of technology, known as smart packaging, has garnered positive feedback from today's consumers. Two primary forms of smart packaging exist: active and intelligent packaging.

Active packaging systems involve the incorporation of active compounds either into sachets within the packaging or directly onto the packaging material. Intelligent packaging, on the other hand, incorporates indicators describing the safety, quality, product history, and the container's environment. Unlike traditional packaging, which acts as a passive barrier, merely delaying environmental impacts on the food product, these innovative systems enable packaging to interact with both the environment and the food. From this perspective, they play a crucial role in food preservation [15] [16].

Marketing strategies employed in the organic food sector wield significant influence over consumer perceptions and purchasing decisions.

Some prominent innovative strategies include: Eco-Friendly Packaging; Transparency Emphasis through providing detailed information on provenance, production processes, and ingredients on the packaging; QR Codes or NFC Tags; Storytelling and Branding; Interactive Packaging which incorporates augmented reality (AR) or QR codes on packaging for added interactivity, such as sharing information, recipes, or product stories. Moreover, simple and elegant designs convey a sense of purity and quality associated with organic products. Other important strategies include limited edition or seasonal packaging, engaging consumers with creative contests or campaigns

centred around unique packaging uses or stories, functional and reusable packaging, as well as certifications and logos [17] [18] [19].

### Research Methodology

To achieve the objectives of this paper, we conducted a quantitative marketing research study to discern the opinions and attitudes of Romanians regarding the significance they attribute to the packaging of ecological food products in their purchase decisions.

The research employed a survey, with a questionnaire serving as the primary data collection tool. The questionnaire was distributed in electronic format through a web-based platform, utilizing the Computer Assisted Web Interviewing (CAWI) method [20]. In this approach, the questionnaire questions are presented on a web page, allowing respondents to directly input their answers within the browser interface.

The data collection phase took place between June and July 2023, encompassing a timeframe critical for capturing contemporary perspectives on the matter.

The questionnaire, comprised of 24 questions, is structured into four parts. The initial section explores the consumption behaviour of Romanians concerning organic food products. The subsequent part delves into their opinions and attitudes regarding the packaging of these products. The third segment focuses on questions related to innovative and ecological packaging. The concluding section of the questionnaire aims to characterize the respondents.

The surveyed population encompasses the entirety of the Romanian population. The target audience comprises women and men aged between 18 and 65, without restrictions based on gender, background, or income. As of January 1, 2023, the population of Romania stood at 21,922,000 people, with women accounting for 51.2% and men for 48.8%, according to the National Institute of Statistics of Romania [21].

The analysis of the obtained results utilized SPSS (Statistical Package for the Social Sciences) [22]. The research aimed to achieve the following objectives:

- Q1. To discern the consumption behaviour of Romanians concerning organic food products.*
- Q2. To understand the opinions and attitudes of Romanian consumers regarding organic food packaging.*
- Q3. To determine the information that consumers consider important on organic food packaging.*
- Q4. To explore the opinions and attitudes of Romanian consumers regarding innovative organic food packaging.*

The validation of the sample will be conducted by analysing the obtained results related to the gender distribution of the respondents. If, statistically, the percentages obtained show no significant differences, the sample can be considered valid, with 747 registered respondents (refer to Table 1).

TABLE I  
GENDER OF RESPONDENTS FOR SAMPLE VALIDATION

Gender of respondents	Total population (%)	Total sample (%)	$t_{obs}$
Female	51,2	53,5	0,76
Male	48,8	46,5	0,76

*Author's own processing*

The calculations revealed that the observed t-value ( $t_{obs}$ ) is less than the critical t-value ( $t_{\alpha,df}=1.96$ ). Therefore, it can be confidently asserted that, from a statistical standpoint, the gender percentages of the Romanian population and the respondents do not differ significantly. As a result, the sample is deemed valid.

**Results and discussion**

The data collected from the questionnaire were analysed based on the specified objectives.

*Q1. To discern the consumption behaviour of Romanians concerning organic food products.*

When queried about their consumption of organic food products, 66% of the respondents indicated that they are consumers of organic products, while 34% stated that they do not consume such items. Among the consumers of organic products, the primary sources were supermarkets/ hypermarkets (37.9%), local producers (29%), specialty shops (20.6%), and online platforms (11%). A mere 1% of respondents mentioned producing their own organic products.

Regarding the frequency of consumption of such products, the results show that 23.7% of the respondents declared that they consume organic food products 3-4 times a month, 20.9% consume once or twice a month. We find that 14.5% of the respondents consume organic food quite often, several times a week (see Table 2).

TABLE 2  
FREQUENCY OF PURCHASING ORGANIC FOOD PRODUCTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Several times a week	108	14.5	22.0	22.0
	3-4 times a month	177	23.7	36.0	57.9
	1-2 times a month	156	20.9	31.7	89.6
	Less than once a month	51	6.8	10.4	100.0
	Total	492	65.9	100.0	
Missing	99.00	255	34.1		
Total		747	100.0		

*Author's own processing*

Respondents who indicated that they do not consume organic food products provided the following reasons: 43% cited high prices for such products, 32% mentioned personal reasons for not purchasing, 21% expressed concerns about the limited variety of organic products in the market, and 4% reported not trusting that these products are genuinely organic or not noticing a discernible difference between organic and regular products.

*Q2. To understand the opinions and attitudes of Romanian consumers regarding organic food packaging.*

To gauge the opinions of Romanians regarding the significance of organic food packaging in their purchasing decisions, we incorporated four questions related to this objective. The obtained results are presented in Table 3.

TABLE 3  
PURCHASE DECISION FACTORS FOR ORGANIC FOOD

Aspects	Mean
Packaging	3,97
Price	3,97
Quality	4,44
Taste	4,16
Trust	4,29

*Author's own processing*

The results indicate that the average importance rating for packaging and price in the purchase decision is 3.97. Quality received an average rating of 4.44, taste was rated at 4.16, and trust garnered an average score of 4.29. Consequently, the accepted hypothesis is as follows: "The average score derived from assessing the importance of packaging for organic food products in influencing the purchase decision will deviate from 3."

In response to the question, "To what extent do you consider packaging to be an indicator of the quality of organic food products?", the data analysis revealed that 33.34% of respondents deemed packaging to be highly significant when selecting a product. Additionally, concerning packaging characteristics, the preference was for products with user-friendly packaging.

*Q3. To determine the information that consumers consider important on organic food packaging.*

The question, "How important is the following information on organic food packaging when making a purchasing decision?" was employed to fulfil this objective. As depicted in Figure 1, it is evident that details such as shelf life, ingredients, country of origin, and nutritional values hold significant importance for consumers. Conversely, information regarding the grammage of the

product falls between the spectrum of unimportance and importance, with a neutral rating. (Ratings were considered on a scale from 1 – Not at all important to 5 - Very important.)

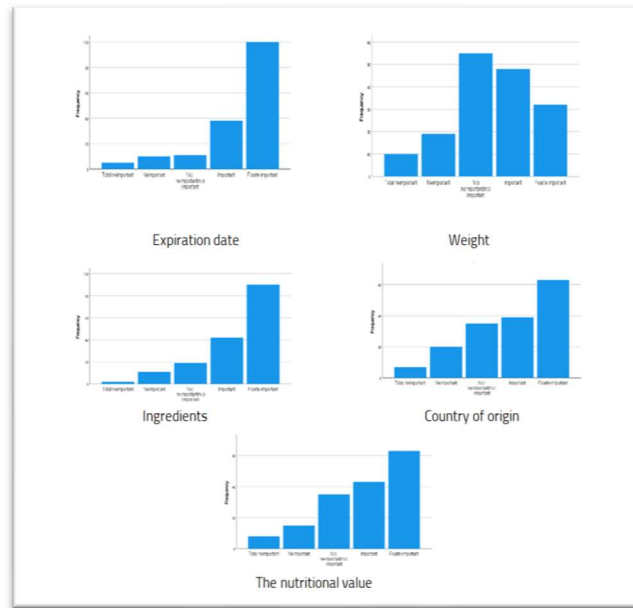


Fig. 1. The importance of the information on the packaging of organic products  
Author's own processing

Concerning the identification of packaging characteristics for which Romanians would be willing to pay more, the findings indicate that 36% of respondents favour coloured packaging that is durable and reusable, 28% prefer innovative packaging designed for transportation purposes. Additionally, 21% opt for innovative packaging with an open-close system, while 15% prioritize packaging with an attractive design.

To identify the characteristics that Romanians deem innovative in a food product, the analysis yielded the results presented in Table 4.

TABLE 4  
INNOVATIVE PACKAGING CHARACTERISTICS: ROMANIANS PERSPECTIVES

Characteristics	Responses		Percent of Cases
	N	Percent	
Recyclability / ecological aspect of packaging	381	20.5 %	52.3 %
Packaging design	360	19.4 %	49.4 %
Product transportability	366	19.7 %	50.2 %



	Packaging multi-functionality	402	21.6 %	55.1 %
	Package open-close system	339	18.2 %	46.5 %
	Other	12	0.6%	1.6%
	<b>Total</b>	<b>1860</b>	<b>100.0 %</b>	<b>255.1 %</b>

*Author's own processing*

It is noteworthy that all presented characteristics exhibit similar percentages, indicating that each is perceived as innovative by the respondents.

*Q4. To explore the opinions and attitudes of Romanian consumers regarding innovative organic food packaging.*

We also sought the opinion of Romanians regarding the utility of substituting plastic packaging for organic food with edible alternatives.

TABLE 5  
UTILITY OF SUBSTITUTING PLASTIC PACKAGING WITH EDIBLE ALTERNATIVES FOR ORGANIC PRODUCTS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not at all useful	93	12.4	12.4	12.4
	2.00	51	6.8	6.8	19.3
	3.00	171	22.9	22.9	42.2
	4.00	141	18.9	18.9	61.0
	Very useful	291	39.0	39.0	100.0
	Total	747	100.0	100.0	

*Author's own processing*

In response to this question, it was found that 39% of respondents rated the innovative idea of replacing plastic packaging with edible alternatives as very useful and attractive. Conversely, at the opposite end, 12.4% of respondents considered this replacement unnecessary.

When respondents were asked to express their agreement or disagreement with the statement, "The use of biodegradable packaging for organic food products will contribute to Romania's ecological future," the results, detailed in Table 6, demonstrate that the majority of respondents, specifically 51%, fully agree with the notion that biodegradable packaging for organic food products will significantly contribute to the ecological future of Romania.

TABLE 6  
IMPACT OF BIODEGRADABLE PACKAGING ON THE ECOLOGICAL FUTURE OF ROMANIA

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Totally disagree	42	5.6	5.6	5.6
	2.00	48	6.4	6.4	12.0
	3.00	135	18.1	18.1	30.1
	4.00	141	18.9	18.9	49.0
	Totally agree	381	51.0	51.0	100.0
	Total	747	100.0	100.0	

Author's own processing

We also investigated the correlation between the interest in purchasing a product with eco-friendly and innovative packaging at a higher price and the gender of the respondents (see Table 7).

TABLE 7  
CORRELATION BETWEEN INTEREST IN PURCHASING A PRODUCT WITH ENVIRONMENTALLY FRIENDLY AND INNOVATIVE PACKAGING AT A HIGHER PRICE AND RESPONDENT'S GENDER

		Gender		Total
		Female	Male	
Interest in purchasing a product with environmentally friendly and innovative packaging at a higher price	Not at all interested	24	33	57
	2.00	15	27	42
	3.00	87	81	168
	4.00	138	69	207
	Very interested	141	132	273
Total		405	342	747

Author's own processing

We observe a notably high interest in purchasing a product with environmentally friendly and innovative packaging among both female and male respondents. Therefore, there is no significant difference in the interest to purchase a product with environmentally friendly and innovative packaging for a higher price based on the gender of the respondents (see Table 8).

TABLE 8  
CORRELATION BETWEEN INTEREST IN PURCHASING A PRODUCT WITH ENVIRONMENTALLY FRIENDLY AND INNOVATIVE PACKAGING AT A HIGHER PRICE AND RESPONDENT'S GENDER

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)

Pearson Chi-Square	16.402 <sup>a</sup>	8	.037
Likelihood Ratio	16.695	8	.033
Linear-by-Linear Association	8.590	1	.003
N of Valid Cases	747		

*Author's own processing*

The survey results indicated no discernible difference between awareness of organic certification and the respondents' background.

Additional findings from the analysis of research data revealed that the majority of respondents are well-informed about the certification of organic products and hold the view that a product can only be considered certified if it bears the official logo provided by the European Union on its label. Unfortunately, there remains a segment of the population uninformed about this aspect, making them susceptible to deceptive practices by certain traders.

### **Conclusion**

The fundamental functions of packaging include protection, containment, convenience creation, as well as information dissemination and promotion. In packaging marketing, the roles of promotion and information are particularly crucial, as a well-executed presentation of a food product significantly influences the consumer's purchasing decision. The consumer, thus, gains the ability to differentiate between products. Consequently, when packaging surpasses its basic functions, enhancing the consumer experience, it can result in heightened product purchase frequency and increased customer loyalty.

In the global and Romanian markets, there is a notable emphasis on environmentally friendly packaging and on the development of innovative solutions in food packaging to safeguard the environment.

Emerging trends in this market encompass the utilization of smaller packaging containers to mitigate food waste and enhance affordability. Additionally, there is a growing adoption of the food traffic light system for product labelling, responding to consumers' demand for increased transparency regarding the health impact of products. Other noteworthy trends include the rise of smart packaging, characterized by reduced raw material usage, integration of advanced technologies, and low production costs, as well as the prevalence of biodegradable and compostable packaging.

Organic food products constitute a distinctive category, placing greater emphasis on content rather than packaging. However, research results indicate that packaging remains a significant factor in the purchasing decision.

While individuals typically opt for organic products due to the perceived purity and safety they offer, there is a notable inclination to select products with packaging that evokes emotions. Previous studies have revealed that nearly half of consumers have purchased an organic food

product solely based on its packaging, demonstrating a willingness to choose products that embody an 'eco-friendly/nature care concept' in their visual presentation.

Research indicates a growing consumer inclination towards purchasing innovative products that not only fulfil their needs but also leave a positive impression. This trend has spurred the development of the concept of innovative packaging, which is poised to become an added value for food products. The study reveals that Romanians are willing to pay a premium for products featuring aesthetically pleasing, durable, and reusable packaging.

The findings from this research, along with the entire paper, offer valuable insights for marketing specialists and company managers aiming to evolve and innovate in this sector. Implementing such strategies can position companies as environmentally responsible in the eyes of consumers, ultimately enhancing their corporate image.

## References

- [1] I. Katsarova, “ Organic food: Helping EU consumers make an informed choice”, *EPRS | European Parliamentary Research Service*, 2015, pag.2
- [2] The free dictionary by Farlex, <https://encyclopedia2.thefreedictionary.com/Biological+Food>
- [3] N.J.Hendrik , Peter A.M. Schifferstein, Oude Ophuis, “Health-related determinants of organic food consumption” in The Netherlands, in *Food Quality and Preference*, vol. 9, nr. 3, 1998, pp. 119-133
- [4] Eur-LEX, Packaging and packaging waste, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:l21207>
- [5] M.R. Thomsen, G. Kyureghian, R.M.Jr. Nayga, “Food Marketing”, in *Encyclopedia of Agriculture and Food Systems*, 2014, pp.196-212  
<https://www.sciencedirect.com/science/article/abs/pii/B9780444525123001145>
- [6] Food Packaging Market Report by Packaging Type, <https://www.imarcgroup.com/food-packaging-market>
- [7] P. Bajpai, “Recent trends in packaging of food products”, *Biobased Polymers*, vol. 1, nr. 6, 2019, pp. 139–169
- [8] E. Frank Pringle, Edward J. Monahan, and Elwood F. Caldwell, “Packaging technology and food quality”. *Breakfast Cereals and How They Are Made*, vol. 3, nr. 18, 2020, pp. 343-373
- [9] A.L. Brody, B. Bugusu, H.H. Jung, C. Koelsch Sand, T. Mchugh, “Innovative Food Packaging Solutions”, *Journal of food science*, vol. 73, nr. 8, 2008, pag. 2  
[file:///C:/Users/user/Downloads/Brody et al-2008-Journal of Food Science.pdf](file:///C:/Users/user/Downloads/Brody%20et%20al-2008-Journal%20of%20Food%20Science.pdf)
- [10] A. Emblem, (2012), Packaging functions, *Packaging Technology*, vol.1, nr. 3, pp. 40-49
- [11] C. Lefter, G. Brătucu, M. Bălăşescu, I. Chiţu, C. Răuţă, A. Tecău. *Marketing*, Transilvania University Publishing House, Braşov, vol.2, Second Edition, 2006, pag. 387
- [12] D. Millman, (2011), *Brand Thinking and Other Noble Pursuits*, Ed. Allworth Press, New York, pp. 254-278
- [13] G. Robertson, Definitions, Functions, Attributes and Environments of Food Packaging, Reference Module in *Food Science*, 2018, pag. 3

- [14] N. Farmer, “Packaging and marketing”, *Packaging Technology*, vol. 1, nr. 6, 2012, pp. 90-95
- [15] U. Joshi, T.S. Bisht, L. Rawat, A. Mamgain,, “Smart packaging: Modern way for reducing post-harvest losses of horticultural produce”, *International Journal of Agricultural Sciences*, vol.17, 2021, pag.1
- [16] Packhelp magazine,  
<https://packhelp.com/ro-ro/eco-properties/materiale/biodegradabil/>
- [17] G. Sacchi, V. Caputo, R. M. Nayga, “Alternative Labeling Programs and Purchasing Behavior Toward Organic Foods: The Case of the Participatory Guarantee Systems in Brazil”, June 2015, *Sustainability* 7 (6):7397-7416
- [18] J. Weissenberger, “Organic production and the European Union”, *EPRS | European Parliamentary Research Service*, 2015, pg.10
- [19] J.H. Han, D.S. Lee, S.-I. Park, “Eco-Design for Food Packaging Innovations”, *Innovations in Food Packaging*, vol. 2, 2014, pp. 537–547
- [20] P. Sowa, B. Pedzonski, M. Krzyaak, D. Maslach, S. Wojcik, A. Szpack, “The Computer-Assisted Web Interview Methodas Used in the National Study of ICT Use in Primary Healthcare in Poland – Reflections on a Case Study”, *Studies In Logic, Grammarand Rhetoric*. 2015. 43 (56). pp. 137-146.
- [21] National Institute of Statistics of Romania <https://www.recensamantromania.ro/rezultate-rpl-2021/rezultate-provizorii/>
- [22] C.P. Constantin, A.S. Tecău, “Introduction to marketing research” *Transylvania University Publishing House*, Braşov, 2013, pp. 65-157