

OUR EVERYDAY FOOD AND CONSUMER BEHAVIOUR

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ABSTRACT. This study explores the relationship between food labelling and consumer behaviour, with the primary aim of identifying the factors influencing food choices and evaluating the impact of education level and gender on the consultation of labels. The methodology involved data collection through a questionnaire distributed on Facebook, ensuring a varied geographic and demographic coverage. The results revealed significant differences in food choice behaviour influenced by area of residence and gender, with important criteria such as price and packaging appearance. A significant association was found between education level and the criteria for selecting products, and no notable differences were identified in label consultation between men and women. Contrary to the formulated hypothesis, there was no evidence that the level of education leads to significant difficulties in understanding label information. The study contributes to a deeper understanding of the factors influencing consumer behaviour in the food sector, although limitations related to the online data collection method and sample size may affect the generalisability of the results. Future research could benefit from a larger sample and additional methods to gain more comprehensive and precise insights.

Keywords: food, label, package, consumer, expiration date.

Introduction

Food labels hold a particularly important role for both consumers and producers, being directly connected to the safety and quality of food. Consumers are increasingly attentive to details such as how products are manufactured,

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their nutritional value, and the impact of diet on health, especially in relation to obesity. Moreover, they are interested in global efforts to reduce food waste and promote sustainability.

Producers and other participants in the supply chain, such as distributors and retailers, can use food labels to communicate effectively with consumers. Through these labels, they have the opportunity to present their products in a unique way, highlighting their distinctive qualities and setting themselves apart from other brands on the market. Labels offer an excellent opportunity to emphasize the superior quality of products, which can more easily capture consumers' attention and foster customer loyalty, thereby contributing to the creation of a lasting competitive advantage in the long term (Iancu and Nedelea, 2018: 70).

Obesity has become a major public health concern for governments around the world. One approach that has gained notoriety in recent years to help reduce the global obesity epidemic is the use of nutrition labelling. As scientific evidence on the link between obesity and associated chronic diseases has grown, the World Health Organization (WHO) has strongly advocated the use of nutrition labelling schemes and the provision of nutrition information as key strategies to improve healthy food choices (Araya et al., 2021: 2).

In line with WHO recommendations, many countries have required food suppliers to disclose information on caloric and nutritional content. However, a potential disadvantage of this approach is that consumers may misunderstand or use nutrition information incorrectly, preventing effective communication. To overcome this problem, some retailers have voluntarily provided simplified information about healthy products to persuade interested customers to improve their food choices at the point of sale. More countries tend to adopt simplified mandatory front-of-pack labelling, focusing on unhealthy products, to change consumer behaviour (Araya et al., 2021: 2).

Due to disputes arising in the food industry and the influence of social media, as well as due to the discovery of an increasingly pronounced link between the products consumed and the state of health, the consumer is becoming more attentive and informed when making decisions regarding the purchase of food. A significant factor in guiding successful food choices is the nutritional information provided on the label. Thus, the consumer aims to analyse and understand this information (Grigoraș, 2017: 19).

Consumer behaviour refers to a process by which the individual responds to a need. This process involves both cognitive phases (decisions) and action phases (purchase and actual consumption). A clear distinction is made between consumption and purchasing behaviour. Buying behaviour focuses on

the actions that the consumer takes when deciding to buy a product. In contrast, consumption behaviour includes actions related to product use, consumption, and subsequent disposal of the product or related services (Tincu, 2009: 212).

The American Marketing Association defines consumer behaviour as an interaction between impressions and perceptions, behaviour and everyday natural events, through which people manage changes in their lives (Peter, 2010: 5). This definition emphasizes the existence of fundamental processes that must be considered in the formulation of consumer behaviour, namely: perception, information and learning process, attitude, motivation and actual behaviour (Remeşovschi, 2018: 55).

Consumer behaviour can be thus described as the set of all decision-making actions taken at the individual or group level, directly related to the purchase and use of goods and services to satisfy current and future needs. This includes the decision-making processes that precede and influence these actions (Morariu and Pizmaş, 2001: 5).

A key element that can influence consumer behaviour, particularly when it comes to food choices, is the product label. For many shoppers who are unfamiliar with the technical details of the food industry, interpreting labels can be challenging. Whether it is the order in which ingredients are listed or the small print, such information can be difficult to decipher. While consumers appreciate the presence of both the label and the nutritional table on packaging, the level of trust in the accuracy of this information varies significantly. Confidence in the information provided on labels is built through repeated positive experiences with the products in question, but it can quickly diminish if even a few negative incidents arise that cast doubt on the reliability of the data. Clear and consistent communication is therefore crucial to maintaining consumer trust over the long term (Iancu and Nedelea, 2018: 71).

In Romania, Regulation 1169/2011 on the food products labelling includes specific regulations, formulated in negative terms, establishing what the labelling must not contain: must not mislead the buyer, attribute to the food products properties to prevent, treat or cure human diseases, nor suggest such properties. These prohibitions and restrictions also apply to the presentation of food products, including the shape, appearance of the packaging and packaging material used, the way of presentation, the environment in which they are displayed and their advertising (Nuţă and Moldoveanu, 2016: 30).

Complying with legal requirements for the correct labelling of food products has a significant impact on consumers and their eating habits. It protects consumers from unfair and misleading practices, such as food adulteration. Labels provide crucial information regarding product ingredients and nutritional claims, allowing consumers to make more informed choices. For instance, a

product high in saturated fatty acids may indicate the need to limit consumption, whereas a product rich in monounsaturated and polyunsaturated fatty acids might be favoured for its potential health benefits. Educating, especially children, about reading labels correctly can help make healthier food choices and reduce the incidence of diet-related diseases such as obesity (Nuță and Moldoveanu, 2016: 30).

Food labelling serves as a means of communication that reflects the quality of the ingredients, so that consumers are sure that the products purchased correspond to their wants and needs (Asp and Bryngelsson, 2008). When accurate and clear, food labels can inform consumers about the origin of products, the production methods used or their nutritional content. This information can help consumers make healthy, green and socially responsible choices by giving them the opportunity to 'vote with their forks', i.e. make informed purchasing decisions that better match their values (Howard and Allen, 2010: 247).

In the case of food products, in Romania, the label must contain the following information: the exact name of the food product, the complete list of ingredients and their quantity, the net weight of the product, the expiration date or the period of validity, the optimal storage conditions and use, manufacturer's name and address, production batch number, and for alcoholic beverages, the alcohol concentration must be specified. Imported products must have a label in Romanian and, in addition to the previously mentioned information, must also include the name and address of the importer or distributor registered in Romania, as well as the country of origin (Meijer et al., 2021: 48).

Previous studies on the Romanian population have focused especially on awareness and understanding of food labels. For example, Festila, Chrysochou, and Krystallis (2014) investigated Romanians' perceptions on 11 most used food labels, regarding their awareness, usefulness, understanding and trust. Results showed that Romanians had at that time a low level of awareness of food labels, except for Guideline Daily Amount label, and reported an average level of trust, understanding and usefulness in what concerns food labelling.

Georgescu et al. (2016) analysed the understanding of food labels on a sample of 504 residents from the city of Sibiu. 54% of the respondents expressed mistrust on food labels, price and brand were the most important criteria for buying a product, country of origin of the producer was significant for 63% of the sample, and the expiration date for 76% of the consumers.

In a recent study, Avram et al. (2022) investigated awareness and understanding of food labels of Romanian consumers, with a specific focus on food additives mentioned by the labels. The authors correlated the answers

with variables such as frequency of going shopping, level of education, gender, income and residence area, and found that education, income and frequency of purchasing food are important factors that influence consumers' behaviour.

Unlike previous studies that focused on the attitudes of Romanian consumers, this research evaluates the influence of several socio-demographic variables (such as the level of education, area of residence and gender) on consumption habits and label consultation. Also, the methodology used, which included the distribution of a questionnaire through social networks, allowed for a more geographically diverse sample, which provides a more comprehensive representation of the population. Another innovative aspect consists in testing the hypotheses related to the association between the level of education and the difficulties encountered in understanding the information on the labels. Unlike previous studies, which generally looked at consumer perception, we directly assessed interpretation difficulties and found that there was no significant association between the level of education and challenges in understanding labels, thus providing a new perspective in the field.

Methodology

This study aimed, through a cross-sectional approach, to investigate the relationship between food labelling and consumer behaviour. The study set four objectives:

Ob. 1. To investigate the factors that influence the eating behaviour of consumers.

Ob. 2. To analyse the relationship between the level of education of consumers and their decision in choosing a product.

Ob. 3. To determine the relationship between the level of education and the degree of familiarity with the content of food labels.

Ob. 4. To analyse whether the consumer's gender influences the consultation of food labels before purchasing a product.

The following hypotheses were considered during the investigation:

H1. There is an association between gender, area of residence (rural/urban) and the criteria for choosing food products.

H2. There is an association between the level of education and the factors that determine the choice of a food product.

H3. People with a lower level of education have more difficulty understanding the information on food labels.

H4. Women consult food labels more frequently than men before purchasing a product.

Data were collected between April-June 2024, on the Facebook platform, where a questionnaire with 15 items was distributed, using the demographic targeting functionality of the platform, to participants from various localities and social settings, thus ensuring a wide geographic and demographic coverage. Inviting users to complete the questionnaire was voluntary and anonymous, clearly explaining the purpose of the study and the use of the data for strictly research purposes. This distribution method on Facebook facilitated obtaining a heterogeneous convenience sample for the analysis. The data analysis was conducted using SPSS, version 25.

Limitations

There were some limitations and difficulties encountered during our data collection and research. The participation and response rates varied considerably, which affected the homogeneity of the sample. In addition, the correctness of the responses may be influenced by interpretation errors or social reactions. Another issue was geographical representativeness, as Facebook is used differently in different regions. Internet access was another limitation, as participants needed Internet access and an active account on Facebook to complete the questionnaire. In addition, the self-report method used for data collection introduced a potential bias because responses are based on individual perceptions and memories, and might not reflect the objective reality of the consumer behaviour. Another important limitation of our study is related to the small dimension of the convenience sample we used for our analysis, that does not allow generalisations for the entire Romanian population. These aspects must be considered in the interpretation and application of the study results.

Results

The respondents' sample for this study consists of 108 participants, with the following demographic characteristics:

Table 1. Socio-demographic features of the sample

Category	Subcategory	Number of Respondents	Percentage
Age Group	18-30	62	57.4
	30-45	16	14.8
	45-60	24	22.2
	+60	6	5.6
Gender	Male	44	40.7
	Female	64	59.3
Area of residence	Urban	80	74.1
	Rural	28	25.9
Education Level	Tertiary education	89	82.4
	Secondary education	19	17.6

As it can be seen, regarding the age category, the best represented is the 18-30-year-old group, with a number of 62 respondents (57.4%). Thus, our results mostly reflect the perceptions of young people. Regarding the gender variable, the majority of respondents were women (64 respondents, representing 59.3%). Most of our respondents come from the urban environment (80 people - 74.1%) and are graduates of tertiary education (post-high school or university) (89 respondents - 82.4%). A possible explanation for this situation is the convenience sampling and the method of distributing the questionnaire on social media using the snowball method.

One of the factors we consider that influences consumers' behaviour in matters of food choice is age. According to previous studies, young individuals are often influenced by dietary trends and social media, which can affect their food preferences and purchasing decisions (Patwardhan, Mallya, and Kumar, 2024; Rounsefell et al., 2020; Friedman et al., 2022). Investigating their eating behaviour can provide valuable insights into the increasing consumption of fast food and processed products, as well as ways in which food education can be improved to promote healthier choices. In contrast, older individuals frequently

exhibit greater concern for health and the impact of diet on chronic diseases (Mao et al., 2024; Kizil et al., 2020). Their eating behaviour may reflect preferences for more natural products, with a reduced content of additives or preservatives. Understanding how these consumers make decisions can help to adapt food offerings and develop marketing messages that better meet their needs and preferences. The data obtained from these age groups are essential for the development of public health policies and marketing strategies in the food industry. They provide a solid foundation for promoting healthier food choices and for continuing nutrition education, thereby contributing to the improvement of public health and the reduction of diseases associated with unhealthy diets, such as obesity and cardiovascular conditions.

In order to investigate whether age is as a factor influencing consumers' behaviour, we conducted several Crosstab analysis, verifying the association between age and the following variables: the criteria for choosing a food product (commercials, ingredients, packaging, producer, expiry date, price, labelling); the frequency of reading food labels; the degree of familiarity with the content of food labels; the main aspects of interest when reading a food label (origin of the product, ingredients, nutritional declaration, expiry date, ecological certification, allergens).

Figure 1. Criteria for choosing food products

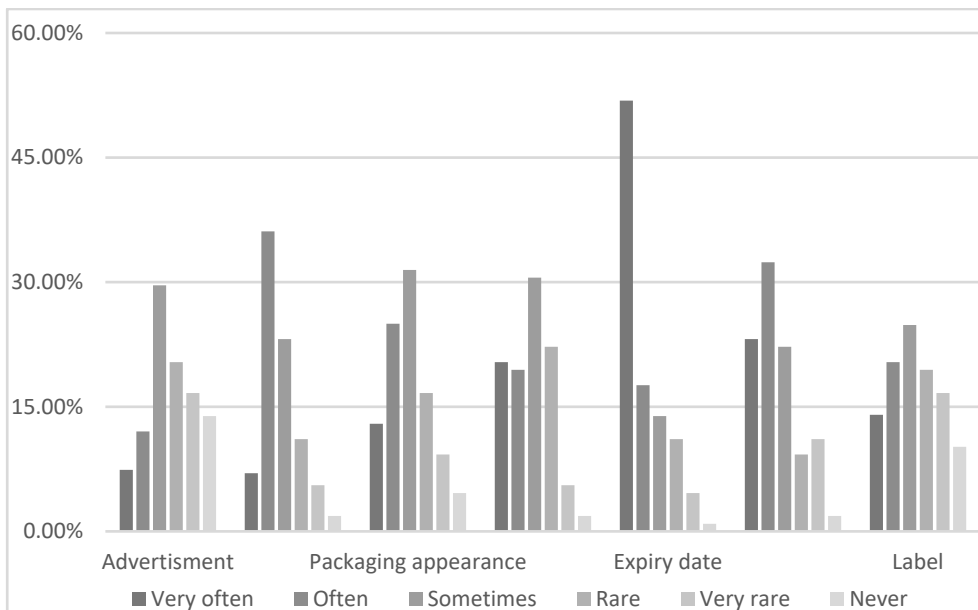


Table 2. Frequency of consulting criteria for choosing food products

Frequency of consulting	Advertisement	Ingredients	Packaging appearance	Price	Expiry date	Producer	Label
<i>Very often</i>	7.40%	7%	12.96%	23.14%	51.85%	20.37%	14.04%
<i>Often</i>	12.03%	36.11%	25.00%	32.40%	17.59%	19.44%	20.37%
<i>Sometimes</i>	29.62%	23.14%	31.48%	22.22%	13.88%	30.55%	24.84%
<i>Rare</i>	20.37%	11.11%	16.66%	9.25%	11.11%	22.22%	19.44%
<i>Very rare</i>	16.66%	5.55%	9.25%	11.11%	4.62%	5.55%	16.66%
<i>Never</i>	13.88%	1.85%	4.62%	1.85%	0.92%	1.85%	10.18%

Before proceeding with the statistical analysis, we should mention that the degree of familiarity with the content of the food labels has not been objectively measured, using a certain scale. The analysis will consider the self-perceived level of familiarity of the respondents, which might represent a limitation.

For the first Crosstab, we associated age with the criteria for choosing a food product (commercials, ingredients, packaging, producer, expiry date, price, labelling).

According to the frequency analysis, most often consumers are interested in checking the expiry date of the products (69.44% answered “often” and “very often”), the price (55.54%) and the producer (39.81%), and less preoccupied by advertisement (19.43).

From the Crosstabs analysis we notice the following:

Table 3. Association between age and criteria for choosing a food product

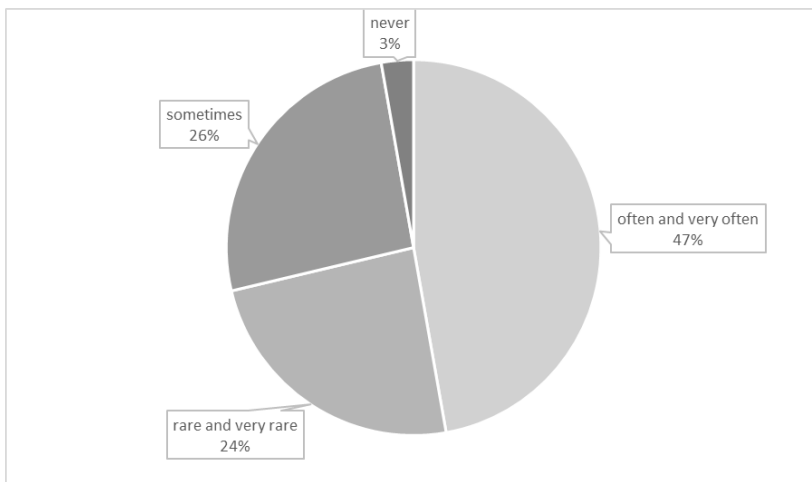
Criterion	Pearson Chi-Square Value	df	Asymptotic significance (2-sided)
<i>commercials</i>	31.277	15	.008
<i>ingredients</i>	14.202	15	.510
<i>packaging</i>	17.970	15	.264
<i>producer</i>	13.450	15	.568
<i>expiring date</i>	15.660	15	.405
<i>price</i>	35.696	15	.002
<i>labelling</i>	23.856	15	.068

Even though the price was the second most relevant criterion for choosing a food product, and the commercials the last in the preferences of the costumers, the results of the Chi-square test reveal a statistically significant association between respondents' age and the frequency with which they consider price ($\chi^2(15)=35.696$, $p=.002$) and commercials ($\chi^2(15)=31.277$, $p=.008$) as important criteria in food product selection. There are no statistically significant associations between age and ingredients, packaging, producer, expiring date or labelling.

The Linear-by-Linear Association analysis indicates a significant trend ($p=.001$), suggesting the existence of a linear relationship between age and the emphasis placed on price. This finding implies that, as respondents' age increases or decreases, there is a consistent shift in the extent to which price influences purchasing decisions. For young people the high sensitivity to price is possibly due to limited financial resources or a greater emphasis on budgeting and saving, while for older individuals (+60 years) potentially due to pension management and budgetary constraints.

The Linear-by-Linear Association analysis also demonstrates a significant trend ($p=.039$), suggesting the presence of a linear relationship between age and the emphasis placed on commercials. Young adults may have a high susceptibility to advertising, potentially due to greater exposure to digital and social media marketing, or a stronger interest in promotional content, while older individuals (+60 years) appear to be less influenced by advertisements. This suggests that they are more likely to rely on prior experience, word-of-mouth recommendations, or personal preferences when selecting food products.

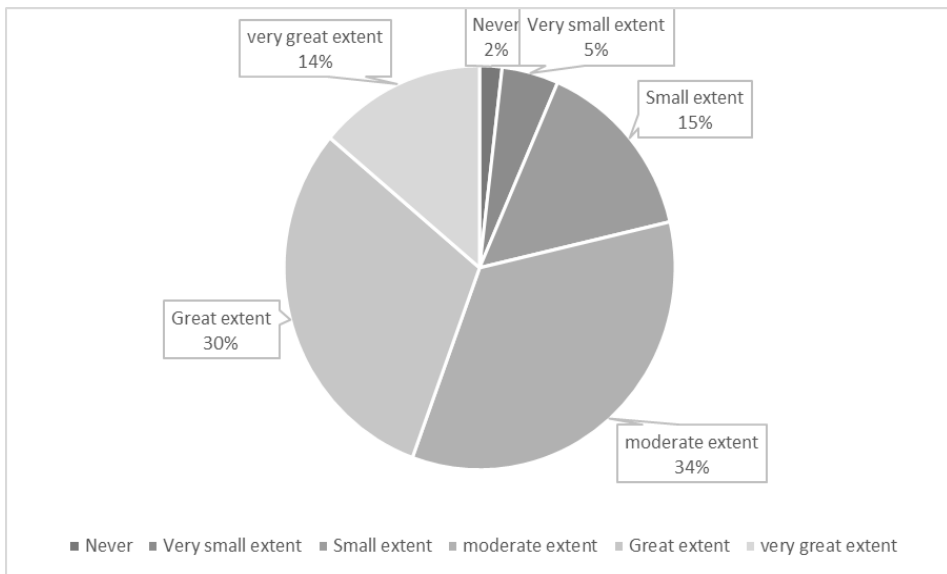
Figure 2. Frequency of Reading Food Labels Before Purchasing a Product



A second Crosstab test we performed for analysing the importance of age as a factor that influences consumer behaviour considered the frequency of reading food labels. 47,22% of respondents often and very often consult the information on the food label before purchasing a product, an aspect that we appreciate as positive. According to the Crosstabs test ($\chi^2(15)=15.923, p=.387$), there is no association between age and the frequency of reading food labels.

As for the association between age and the degree of familiarity with the content of food labels, the Crosstabs test shows no significant association ($\chi^2(15)=21.900, p=.110$).

Figure 3. Consumers' Familiarity with the Content of Food Labels



When selecting food products consumers place the greatest emphasis on the expiration date, ingredients, and the product origin. The expiration date is frequently scrutinised, indicating a heightened concern for food safety, while ingredients are carefully examined, reflecting an interest in maintaining a healthy diet. These findings underscore a growing consumer preference for informed choices, grounded in label transparency and considerations of health and safety.

Table 4. The main aspects of interest on food product labels

Aspect of Interest	Number of Responses	Percentage (%)
<i>Nutritional information</i>	36	33.3%
<i>Ingredients</i>	76	70.4%
<i>Allergens</i>	23	21.3%
<i>Expiry date</i>	94	87.0%
<i>Product origin</i>	56	51.9%
<i>Ecological/sustainable certifications</i>	19	17.6%
<i>Organic/bio product</i>	20	18.7%

The association tests highlighted the existence of a significant statistical association only between the age variable and the nutritional declaration ($\chi^2(3)=14.728$, $p=.002$). This result suggests that certain age groups are more interested in the nutritional information on the label than others. For example, young people (18-30 years) seem less interested in the nutritional declaration, while adults and seniors are more attentive to this aspect. For all other criteria there is no significant association with age ($p>0.05$), which means that regardless of age, consumers tend to pay attention to these elements equally.

In conclusion, the Crosstabs tests have shown that there is an association between age and the criterion by which buyers choose a food product, regarding its price and under the influence of advertisements. No association could be identified between the age of the respondents and the frequency of reading food labels or the degree of familiarity with the content of food labels. Regarding the main aspects of interest when reading a food label, a significant association was registered only with regard to the nutritional declaration. We can therefore conclude that age is a factor that influences consumer behaviour, but only for certain selection criteria. Buying behaviour is more complex and can be influenced by other factors, such as education, gender or residential environment, factors that we will check further on.

To test if there is an association between gender, area of residence (rural/urban) and the criteria for choosing food products, which is also the first hypothesis of our research, we used the Chi-square test.

Table 5. Chi-Square Test

Gender:	Area of Residence		What criteria do you choose a food product by? (Label)	What criteria do you choose a food product by? (Expiry Date)	What criteria do you choose a food product by? (Packaging)	What criteria do you choose a food product by? (Ingredients)	What criteria do you choose a food product by? (Price)	What criteria do you choose a food product by? (Producer)	What criteria do you choose a food product by? (Advertisement)
Female	Rural	Chi-Square	.500 ^a	2.000 ^b	3.333 ^c	2.667 ^c	3.000 ^a	8.000 ^c	1.333 ^a
		df	4	2	3	3	4	3	4
		Asymp. Sig.	.974	.368	.343	.446	.558	.046	.856
	Urban	Chi-Square	7.566 ^d	31.811 ^e	17.528 ^d	19.340 ^d	6.151 ^e	13.906 ^d	9.604 ^d
		df	5	4	5	5	4	5	5
		Asymp. Sig.	.182	.000	.004	.002	.188	.016	.087
Male	Rural	Chi-Square	1.706 ^f	12.118 ^g	5.941 ^f	11.000 ^h	3.294 ^g	3.882 ^g	2.706 ^g
		df	5	4	5	3	4	4	4
		Asymp. Sig.	.888	.016	.312	.012	.510	.422	.608
	Urban	Chi-Square	2.857 ⁱ	29.857 ⁱ	8.000 ⁱ	8.071 ^j	10.214 ^j	4.857 ^j	3.714 ⁱ
		df	5	5	5	4	4	4	5
		Asymp. Sig.	.722	.000	.156	.089	.037	.302	.591

The interpretation of the test shows that there are statistically significant associations between gender, area of residence and the criterion “producer” for female respondents, both in the rural ($p=.046, p<0.05$) and in the urban area of residence ($p=.016, p<0.05$). There are also statistically significant associations between gender, area of residence and the following criteria:

- “expiry date” (for female respondents in the urban area ($p=.000, p<0.05$) and for male respondents, both in rural ($p=.016, p<0.05$) and in urban area ($p=.000, p<0.05$);
- “packaging” (for female respondents in the urban area ($p=.004, p<0.05$);
- “ingredients” (for female respondents in the urban area ($p=.002, p<0.05$) and for male respondents in the rural area ($p=.012, p<0.05$);
- “price” (for male respondents in the urban area ($p=.037, p<0.05$))

In conclusion, female respondents from rural areas are influenced by the producer criterion, while female respondents from urban areas are influenced by the criteria of ingredients, expiration date, producer and packaging appearance. Male respondents from rural areas are influenced by the criteria of ingredients and expiry date, and those from urban areas by price and expiry date. The result indicates the existence of associations according to gender and the area of residence in the choice of the product due to some criteria, partially confirming the hypothesis.

The observed differences reflect not only the impact of socio-demographic factors but also how access to information and resources influences consumer behaviour. In urban environments, respondents come from both large cities—with greater exposure to product diversity and marketing campaigns—and smaller towns, where consumption habits are influenced by local economic and cultural factors. In rural areas, traditions and familiarity with certain producers play an essential role, while in urban areas, exposure to a wider variety of products leads to increased attention to label details and perceived product quality.

Thus, in accordance with the first objective of our research, that of investigating the factors that influence the eating behaviour of consumers, our study revealed age, gender and area of residence as factors that influence at a certain extent consumers' behaviour.

Another important factor that might influence consumer behaviour is education. According to the answers recorded by our respondents, we have grouped the variable education into two categories: tertiary education (89 respondents, representing 82.4%) and secondary education (19 respondents, representing 17.6%). In order to analyse the relationship between the level of education of consumers, the factors that influence their decision in choosing a product and the degree of familiarity with the content of food labels, we have formulated two hypotheses: H2. There is a significant association between the level of education and the factors that determine the choice of a food product and H3. People with a lower level of education have more difficulty understanding the information on food labels (according to the characteristics of our convenience sample, for the "lower level of education" we are referring to people with secondary education, due to the fact that there are no respondents with primary education in our sample).

To analyse the relationship between the level of education and the factors that determine the choice of a food product, we used Crosstabs and Chi-Square tests, that highlighted associations between the level of education and the following criteria: "price" ($\chi^2(10)=28.159, p=.002$); "packaging appearance" ($\chi^2(10)=42.214, p=.000$) and "ingredients" ($\chi^2(10)=19.339, p=.036$). Thus, the level of education influences the importance given to price, the list of ingredients and packaging when choosing a food product. These findings can be useful for marketing strategies and for customizing campaigns aimed at different educational groups. Also, this analysis highlights the importance of education in shaping food purchasing decisions. Future research could further explore this relationship to confirm how education influences decision-making processes.

A third objective approached in our study was to determine the relationship between the level of education and the degree of familiarity with the content of food labels. We have performed two Crosstabs tests that show that 50% of tertiary

education respondents consult the labels' information often and very often, compared to 36% of secondary education respondents. Those with university education thus tend to consult the information on the labels more often compared to those with high school education. As for the degree of familiarity to the content of the food labels, 82.55% of tertiary education respondents have answered they are familiar and very familiar, compared to 63.15% of secondary education respondents. So we can conclude the level of education is a factor that influences consumer behaviour related to food labels.

Based on the results obtained from the statistical analysis of participants' responses to the question "Have you ever encountered difficulties in understanding the information on food labels?", it is evident that a significant proportion of respondents experience such difficulties at least occasionally. The most frequently selected response was "Sometimes", chosen by 34.3% of participants. Furthermore, a cumulative 32.4% reported encountering difficulties either "Often" (16.7%) or "Very often" (15.7%). This indicates that a total of 66.4% of respondents have faced challenges in understanding food labels at least occasionally ("Sometimes" or more frequently). These findings highlight that difficulties in comprehending food labels are widespread, affecting a considerable proportion of consumers. The frequency distribution suggests that only 13.9% of respondents reported never experiencing such difficulties, while the majority have encountered some degree of difficulty. Given this trend, it would be beneficial for food manufacturers and policymakers to consider enhancing the clarity and accessibility of information presented on food labels, ensuring that consumers can interpret and utilise this information more effectively.

We have assumed that people with a lower level of education have more difficulty understanding the information on food labels. To test this hypothesis, we conducted an ANOVA test. The hypothesis of homogeneity of variances is verified, according to the value of the Levene test ($p=.927$, $p>0.05$). From the ANOVA results, the sum of squares between groups (.902) is very small compared to the sum of squares within groups (166.088), suggesting that differences between groups are negligible. The mean square between groups (.451) is significantly lower than the mean square within groups (1.582), indicating that the variation between groups is comparable to the variation within groups. The F-statistic (.285) is low, and the p-value (.752) is considerably greater than 0.05, indicating no significant differences between the groups. There is no statistically significant difference between the groups regarding the difficulties encountered in understanding the information on food labels. This result suggests that, regardless of the group to which they belong (tertiary education or secondary education), respondents do not exhibit notable variations in their perception of the challenges associated with understanding food labels.

The final objective of our research was to analyse the influence of consumer gender on the frequency of consulting food labels before purchasing a product. To test the hypothesis that "Women consult food labels more frequently than men before purchasing a product," we employed the Mann-Whitney test to compare the statistical means recorded by the two respondent categories. It was observed that women obtained a mean rank of 52.23, while men recorded a mean rank of 57.81. This result suggests that, on average, men tend to consult the information on food labels slightly more frequently than women, although the difference is relatively small. In the comparative analysis using the Mann-Whitney test, the obtained U value was 1262.500, and the Z value was -.933. The p-value (Asymp. Sig. 2-tailed)=.351, which is greater than the significance threshold of 0.05. This result indicates that there is no statistically significant difference between women and men regarding the frequency of consulting food labels before purchasing a product. Therefore, although the data suggest a slight tendency for men to consult food labels more often than women, this difference is not considered statistically significant.

Discussions

A first idea highlighted after our study is that the main aspects that respondents look for on a food label are the expiry date (87%), ingredients (70.4%) and the origin of the product (51.9%). This is in line with the study of Alshukri, Elramli, and Albkoush (2020) and Riaz et al. (2022). Alshukri, Elramli, and Albkoush (2020) found that expiry date and country of origin are the main elements sought for on food labels by consumers in Libya. 70% of respondents from Tripoli municipality in Libya were paying attention to the expiry date, while 67.3% to the country of origin. Riaz et al. (2022) focused on female students from King Khalid University, Abha (Saudi Arabia), and found that 83.7% of the students were concerned with the expiry date. The research of Hoteit et al. (2022) showed that Lebanese population is mostly interested in the expiry date of the products (75.2%), followed by price (60.6%) and brand (50.5%). Ingredients scored fourth place on the options of the respondents (47%), followed by the country of origin (33.5%).

Another study result is that age, gender, education and area of residence are factors influencing consumer purchasing behaviour. The finding that consumers' behaviour is influenced by area of residence is in line with Chopera, Chagwena and Mushonga (2014: 580), who also highlighted differences between rural and urban respondents, concerning reasons for reading food labels, and most important sought information on labels or factors that influence buying a

food product. While urban area respondents consider ingredients and date of expiry important on a food label, rural area respondents paid attention to weight or volume.

Education influences consumer perceptions and decisions to buy food products. Our study found associations between the level of education and food price, respectively packaging. The association between education and consumers' behaviour relative to responsible food products buying is also underlined by many studies, including Alshukri, Elramli, and Albkoush (2020), Jeruszka-Bielak et al. (2018), Christoph et al. (2018), Chopera, Chagwena and Mushonga (2014), Rashaideh et al. (2023), or Hoteit et al. (2022). In a previous study on 261 respondents from the city of Galati (Romania), Radu and Alexe (2018) found a positive correlation between the level of education and food labels' consulting and understanding of.

In our approach, no significant differences were found between tertiary and secondary education graduates in what concerns the difficulties in understanding food labels. 66.4% of respondents have faced challenges in understanding food labels at least occasionally, no matter their level of education. This is in line with Chopera, Chagwena and Mushonga (2014), who found that most consumers consider difficult to read the labels (40.9% mostly understand labels, and 51% only partial understand them), 80.6% of the respondents requesting for education on food labels. In the study of Alshukri, Elramli, and Albkoush (2020) 82% of the respondents claimed that the language used on food labels impedes to understand them. Language is also mentioned by Perumal et al. (2022) as a factor influencing food labels' understanding.

Our results imply that while men seem to check food labels slightly more frequently than women, this discrepancy is not large enough to be statistically significant. Previous studies, such as Chopera, Chagwena and Mushonga (2014), Bueno et al. (2022), Jeruszka-Bielak et al. (2018), Christoph et al. (2018), Hoteit et al. (2022), Rashaideh et al. (2023), or dos Santos et al. (2023), have highlighted that women are the one more frequently reading food labels. Zugravu et al. (2011) concluded, after a survey on 514 respondents from southern Romania, that women read food labels more frequently than men. A possible explanation for our results may be related to the limitation of our study in matter of sample size and diversity of sample, which could influence the results. Also, psychological, demographical characteristics or cultural background of the respondents may represent factors to influence their behaviour, idea sustained also by Hoteit et al. (2022). Future studies should consider a representative sample and also delve deeper into the factors affecting food label consultation and consider other variables like nutritional knowledge and health attitudes.

Conclusions

This research has contributed to understanding the factors that influence consumer behaviour in the food field. We have explored age, gender, education and the area of residence as factors that influence the consumer behaviour related to food and we observed that there is a relationship between age and price, commercials and nutritional declaration on the food labels. Another conclusion is that there is a statistical association between gender and area of residence, especially concerning the producer of food products (for women) and the expiry date (for men). Education influences the consumers' behaviour in relationship to price, ingredients and the packaging appearance. Tertiary education subjects read food labels more often than secondary education respondents, that explains the higher degree of familiarity with the food labels that tertiary education subjects report. No matter their level of education, our respondents claimed different degrees of difficulties in understanding food labels. As for differences between genders, our analysis did not show statistically significant differences between women and men regarding the frequency of consulting food labels.

It is important to note that the use of an online and limited convenience sample may influence the results and their generalizability.

For a deeper understanding of these behaviours, further analysis would be useful to explore additional variables such as income, occupation, and the frequency of exposure to healthy eating awareness campaigns. Moreover, expanding the sample would contribute to strengthening these conclusions and provide a better understanding of the factors that influence purchasing decisions in different socio-economic contexts.

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