

Food Labeling and Consumer Behaviour in Punjab's Agri-food Sector

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Abstract

The present study examines consumer practices and preferences regarding food labeling. Data were collected from 600 respondents across three districts of Punjab through a structured non-disguised questionnaire. The results revealed that a majority of consumers (77.3%) read food labels, with the manufacturing/expiry date, vegetarian/non-vegetarian declaration, name of the food product, and list of ingredients emerging as the primary reasons. The most frequently reported reasons for not reading labels were difficulty understanding (19.3%) and time-consuming (18.8%). Further, consumers indicated a significant preference for making label information easier to understand and introducing front-of-package label formats ($p < 0.001$). Demographic analysis indicated that females, younger consumers, and those with higher educational qualifications placed greater emphasis on labeling information. The findings establish food labeling as a vital policy instrument for promoting consumer safety, informed food choices, and transparency across the agricultural value chain. These findings offer useful insights for policymakers, food manufacturers, and agripreneurs to improve label clarity and effectiveness, thereby guiding consumers in making healthier food choices.

Keywords: Consumer awareness, Food labels, Agribusiness, Nutritional information, Packaged food, Purchase decisions

JEL Classification: Q13, M31, D12, Q18

Introduction

Food safety has become a global concern, as unsafe and unhealthy food is associated with obesity and Non-communicable diseases (NCDs) such as diabetes, cardiovascular disease, and cancer, which together account for nearly 60 per cent deaths in India (Nethan *et al.*, 2017). As a consequence, food labeling is increasingly recognized as a vital public health tool that guides consumers in making healthy food choices and avoiding costly health outcomes (Kodali and Telaprolu, 2018).

Over the past few years, consumers have become increasingly aware of the quality of food they consume and its implications for their health, prompting the food industry to provide more detailed nutritional information on food labels (Jadapalli and Somavarapu, 2018). Food labels are designed to promote and protect public health by providing accurate nutritional information, thereby enabling consumers to make informed food choices (Ali and Kapoor, 2009). Food labeling also plays a critical role in strengthening value chains by ensuring transparency from farm production to consumer markets, thereby helping agripreneurs in building consumer trust. Beyond their informational role, labels also

serve as a powerful marketing tool, influencing consumer perceptions of quality and trust while aiding governments in achieving social goals, such as safeguarding health, reducing environmental risks, and ensuring food safety standards (Silva *et al.*, 2022). Hukker *et al.*, (2024) highlight that branding and labeling are central to consumer behaviour and serve as essential marketing strategies for agribusinesses, aiming to enhance product recognition, consumer trust, and loyalty for agricultural goods and agri-food markets.

The transformation of food systems in developing countries has been driven by urbanization, rising incomes, changing lifestyles, and demand for convenience foods, leading to greater consumption of packaged and processed foods. This shift has increased the importance of food labeling in guiding consumer purchase decisions. In the agri-food sector, marketing tools such as branding and labeling play a strategic role in enhancing product competitiveness and strengthening market linkages. Alemu (2012) emphasized that the effective use of such tools by farmers and value chain actors contributes to improved visibility, consumer trust, and overall competitiveness of agricultural products in developing economies. This has become even more critical as farmers and agripreneurs diversify into value-added ventures such as packaged foods, beverages, and organic products,

where labeling directly affects consumer acceptance and marketability.

Globally, nutrition labeling has evolved from back-of-package (BOP) information, such as ingredient lists, to front-of-package labels (FOPLs), which are considered more effective in influencing healthy food choices (Jones *et al.*, 2019). It has also been observed that consumers find BOP labels difficult to comprehend due to excessive or technical information (Moreira *et al.*, 2019). Moreover, consumers spend only a few seconds scanning labels before making purchase decisions, underlining the need for clearer, simpler, and credible labeling formats (Sanjari *et al.*, 2017; Elshiewy and Boztug, 2018). In response, international agencies such as the World Health Organisation (WHO) have recommended adopting FOPLs as a strategy to reduce diet-related NCDs.

In India, Food Safety and Standards Authority of India (FSSAI) prescribes mandatory labeling requirements for pre-packaged foods. Currently, FSSAI is also planning to introduce front-of-package labeling as it is increasingly recognised as a best practice to discourage the consumption of unhealthy foods (The Tribune, 2021). Studies found that Indian consumers, especially the youth, actively seek information on expiry dates, nutrition, and suitability for vegetarians when purchasing packaged food products (Bandara *et al.*, 2016; Kumar and Kapoor, 2017). In India's growing agribusiness sector, consumer reliance on labeling highlights opportunities for agripreneurs to differentiate their products in competitive markets through branding, packaging, and certification-based labeling. Food labeling is, therefore, both an educational tool for health promotion (Chavasit *et al.*, 2017; Cecchini and Warin, 2016) and a marketing strategy that shapes consumer trust and loyalty (Manivannan, 2020).

Although the significance of food labeling has been widely acknowledged in consumer research, empirical evidence on how consumers in diverse socio-demographic settings actually engage with food labels remains limited. In Punjab, dietary habits are rapidly shifting towards packaged and processed foods. This transition underscores the pressing need to understand consumer behaviour towards food labels. Positioning labeling as part of agricultural marketing and value chain development ensures that consumer trust contributes to better market opportunities for producers and agripreneurs while supporting transparent and sustainable food systems. Against this backdrop, the present study examines consumer practices and preferences regarding food labeling, assesses the relative importance of several food labeling attributes, and analyzes variations in food labeling preferences across socio-demographic groups such as gender, age and education. Such insights are crucial for formulating effective food labeling policies and for guiding interventions that promote healthier food choices and strengthen the competitiveness of the agri-food sector.

Data Sources and Methodology

A descriptive research design was adopted for the study. The primary data were collected from three districts of Punjab with the highest population, namely, Ludhiana, Amritsar, and Gurdaspur, selected on the basis of the Census of India (2011). The data were collected from both urban (n=300) and rural (n=300) areas to ensure adequate representation. In urban areas, data were gathered from organised food and grocery retail stores located in the selected districts. From each district, hundred respondents were surveyed from the selected stores using a convenience sampling technique. In rural areas, a multistage sampling technique was followed. From each district, two blocks were selected, and two villages from each block were selected using simple random sampling. From each selected village, twenty-five respondents were surveyed using a convenience sampling technique based on their availability and willingness to participate. Hence, the final sample consists of 600 respondents.

The structured non-disguised questionnaire was used to collect primary data from respondents. The questionnaire was divided into two sections. The first section captured the demographic profile of respondents, including age, gender, education, occupation, and annual family income. The second section consists of a set of questions focused on understanding consumer interaction with the food labels and their preferences towards food labeling attributes. The respondents were asked about their label reading behaviour, primary reasons for or not reading food labels (Bandara *et al.*, 2016; Jadapalli and Somavarapu, 2018; Moreira *et al.*, 2019; Tadesse, 2019), suggestions for improving food labeling practices, and perceived importance of different food labeling attributes (Bandara *et al.*, 2016; Food Safety and Standards (Labelling and Display) Regulations, 2020).

The data were analysed using SPSS software. Appropriate statistical tools such as descriptive statistics, one-sample t-test, independent sample t-test and one-way ANOVA with Tukey's HSD post-hoc test were used. A brief description of these tools is given below:

One-sample t-test

A One-sample t-test is a statistical procedure used to determine whether the sample mean is statistically different from the hypothesized value. It is a parametric test usually performed on continuous data that is drawn randomly from a normally distributed population. The formula for the one-sample t-test is as follows:

$$t = \frac{\bar{x} - \mu}{s / \sqrt{n}}$$

The hypothesis for the one-sample t-test is framed as follows:

$$\begin{aligned} H_0 : \mu &= 3 \\ H_1 : \mu &\neq 3 \end{aligned}$$

In the present study, the one-sample t-test was applied to determine whether consumer responses to various labeling attributes significantly differed from the neutral point of the scale (3), thereby indicating either agreement or disagreement with the given statements.

Independent sample t-test

An Independent sample t-test is a statistical procedure used to determine whether there is a significant difference between the means of two unrelated groups. The test is suitable when the samples are independent of each other and are drawn from a normally distributed population with equal variances. The formula for the Independent Sample t-test is as follows:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

In the present study, it was used to examine whether consumers' preferences for different labeling attributes significantly differ based on demographic variables such as gender. If the computed p-value is less than 0.05, it indicates a statistically significant difference between the group means, leading to the rejection of the null hypothesis.

One-way ANOVA

The One-Way ANOVA (Analysis of Variance) is a statistical technique used to determine whether there are statistically significant differences between the means of three or more independent (unrelated) groups. The null hypothesis states that all group means are equal, and the alternative hypothesis states that at least one group mean is different. It computes a F-statistic, which is the ratio defined below:

$$F\text{-statistics} = \frac{\text{Variance between groups}}{\text{Variance within groups}}$$

If the calculated p-value is less than 0.05, the null hypothesis is rejected, indicating that there is a statistically significant difference in group means. In the present study, One-Way ANOVA was used to examine whether consumer preferences for different labeling attributes differ significantly across age groups and educational qualifications.

Tukey's Post Hoc test

Tukey's Honestly Significant Difference (HSD) post hoc test is a statistical technique used after a significant one-way ANOVA result to determine specifically which group means differ from one another. It is applied only when the ANOVA result is significant and identifies homogeneous subsets by comparing all possible pairs of means. The formula for Tukey's HSD is as follows:

$$HSD = \frac{M_i - M_j}{\sqrt{\frac{MSW}{N}}}$$

In the present study, Tukey's post hoc test was used to find out specific age and education groups that differed significantly in their preferences towards different labeling attributes.

Results and Discussions

Consumer Label Reading Behaviour

This section presents the consumer behaviour towards reading food labels. The results showed that a majority of respondents (77.3%) reported reading food labels (Table 1). This indicates a considerable level of consumer awareness and interest in information given on packaged food products. Previous studies have also highlighted the importance of food labels as a primary source of information in consumer decision-making (Kumar and Kapoor, 2017; Bandara *et al.*, 2016). Such awareness is particularly relevant for agricultural food products, where labeling not only assures consumers about safety and quality but also adds value to agricultural produce entering the market.

Table 1: Food label reading behaviour among consumers

Category	No of the respondents
Consumers who read food labels	464 (77.3%)
Total consumers	600

Note: Figures in parentheses are percentages of their respective values.

Further, consumers were asked about the reasons for which they do not read food labels. The results revealed that difficult to understand (19.3%) and time-consuming (18.8%) were the most frequently reported reasons (Table 2). Similar findings have been highlighted in previous research, which noted that most consumers do not read food labels because they find them time-consuming and difficult to understand. Consumers often perceive label information as complex, with excessive use of scientific or technical language (Jadapalli and Somvarapu, 2018; Moreira *et al.*, 2019; Tadesse, 2019).

Consumers who read food labels were asked about the primary reasons for which they read food labels while buying packaged food products. The results showed that all reasons were statistically significant at 5 percent level of significance. Checking the expiry date received the highest rating, with a mean score of 4.69, followed by confirming vegetarian suitability and reading the list of ingredients. These results indicated that health, safety and product suitability remain the foremost concerns guiding consumer purchase decisions. Similar observations have been reported by Tadesse (2019), Ambak *et al.*, (2018), and Bandara *et al.*, (2016), where consumers were found to read food labels primarily to check the expiry date and to assess the suitability of the food product for vegetarians.

Table 2: Reasons reported by consumers for not reading food labels

Reasons for Not Reading Labels	No of the respondents	Percentage
Difficult to understand	123.0	19.3
Time-consuming	120.0	18.8
Small font size	59.0	9.2
Not in the habit of reading labels	83.0	13.0
Brand confidence	14.0	2.2
Lack of interest and awareness	93.0	14.6
Use of scientific/technical words	101.0	15.8
Unable to locate the label on the package	9.0	1.4
Buying the same goods	36.0	5.6

Consumer preferences towards food labeling

This section provides an overview of consumer views on food labeling information. The analysis evaluates the perceived importance of several food labeling attributes while selecting packaged food products. The results showed that all labeling attributes were statistically significant at 1 percent level of significance. Among these, manufacturing/ expiry date, veg/non-veg declaration, and name of food product were rated most important, indicating that consumers focus on safety, trust, and product identification (Table 4). Similar findings were reported by Tadesse (2019), Ambak *et al.*, (2018), and Bandara *et al.*, (2016), who observed that consumers prioritise date markings to ensure product freshness, vegetarian or non-vegetarian symbols for dietary suitability and product name for identification when buying packaged food products. Attributes such as net quantity, retail sale price and consumer care information, and FSSAI certification were also considered important. Conroy and Lang (2021) reported that trust in supply chain transparency and certification practices further strengthens the impact of labels in agricultural markets. Hukker *et al.*, (2024) identified the need for food manufacturers, especially agribusinesses dealing in value-added agricultural products, to emphasize labeling attributes that communicate product integrity and differentiation.

To understand consumer expectations, respondents were asked to provide their suggestions for improving food labeling practices. Consumers showed the strongest preference for making label information easier to understand, with a mean score of 4.41, followed by the introduction of front-of-package labels and the use of colourful and attractive labels. The findings suggest that consumers want easy and clearly visible information on food labels. Jones *et al.*, (2019) reported that promoting simplified front-of-package nutrition labeling is a means to guide healthier food choices. Research done by Moreira *et al.*, (2019) observed that time constraints and technical complexity hinder effective label usage. Addressing these concerns can strengthen the role of labeling as an educational tool, improve consumer confidence and support informed decision-making. Such improvements in labeling practices further enhance transparency and trust among food value chain actors, thereby strengthening both consumer confidence and the credibility of agribusiness and food enterprises (Macready *et al.*, 2020).

Socio-demographic differences in preferences for food labeling attributes

This section examines variations in consumer preferences towards key food labeling attributes. Among several food labeling attributes, five attributes with the highest mean scores were identified and further examined across socio-

Table 3: Reasons reported by consumers for reading food labels

Reasons for reading labels	Mean	SD	t-value	p-value
Expiry date	4.69**	0.47	78.466	0.001
List of ingredients	3.51**	1.11	9.815	0.001
Food allergens and warnings	3.18**	1.13	3.491	0.001
Instructions for use	3.44**	0.98	9.624	0.001
Appropriate for vegetarians	4.48**	0.81	39.006	0.001
Verify an organic product	2.87*	1.17	2.372	0.018
Learn about new products	3.26**	1.16	4.787	0.001

Note: * $p < 0.05$; ** $p < 0.01$; SD: Standard Deviation

Table 4: Consumer evaluation of food labeling attributes

Labeling attributes	Mean	SD	t-value	p-value
Name of food product	4.32**	0.75	42.976	0.001
List of ingredients	3.46**	1.18	9.430	0.001
Nutritional information	3.36**	1.21	7.266	0.001
Declaration with regard to veg or non-veg	4.39**	0.74	45.960	0.001
Declaration with regard to food additives	3.20**	1.11	4.465	0.001
Manufacturer's name and address	3.52**	1.08	11.836	0.001
FSSAI logo and license number	3.61**	1.02	14.584	0.001
Net quantity, retail sale price and consumer care	3.78**	0.99	19.369	0.001
Lot/code/batch identification	3.18**	1.08	4.041	0.001
Manufacturing/expiry date	4.63**	0.55	73.120	0.001
Country of origin	3.11**	0.99	2.806	0.005
Instructions for use/storage	3.47**	0.99	11.583	0.001
Declaration of food allergen	3.25**	1.06	5.754	0.001
State health claims	3.56**	1.06	13.031	0.001
Certification labels	3.32**	1.07	7.307	0.001

Note: * $p < 0.05$; ** $p < 0.01$; SD: Standard Deviation

Table 5: Consumer suggestions for improving food labeling practices

Suggestions	Mean	SD	t-value	p-value
Standardise the presentation	3.92**	0.61	36.974	0.001
Colourful and attractive labels	3.97**	0.65	36.267	0.001
Make information easier to understand	4.41**	0.56	61.463	0.001
Increase the font size	3.90**	0.73	30.256	0.001
Introduce front-of-package labels	4.07**	0.87	30.271	0.001
Multilingual labels for diverse consumers	3.82**	0.82	24.372	0.001

Note: * $p < 0.05$; ** $p < 0.01$; SD: Standard Deviation

Table 6: Difference in preference for labeling attributes among group of consumers based on their gender

Labeling attributes	Mean (SD)		t-value	p-value
	Male	Female		
Manufacturing/expiry date	4.59* (0.56)	4.70* (0.52)	2.408	0.016
Declaration with regard to veg or non-veg	4.31** (0.79)	4.52** (0.64)	3.446	0.001
Name of food product	4.26** (0.75)	4.42** (0.75)	2.634	0.009
FSSAI logo and license number	3.62 (1.02)	3.59 (1.03)	0.417	0.677
Net quantity, retail sale price and consumer care	3.77 (1.01)	3.80 (0.95)	0.373	0.709

Note: * $p < 0.05$; ** $p < 0.01$; SD: Standard Deviation

demographic factors such as age, gender and education. The results highlight variations in preference among different consumer groups.

The results revealed that female respondents consistently attached greater importance to the manufacturing/expiry date, declaration of veg/non-veg, and name of the food product compared to their male counterparts and these differences were statistically significant at 5 percent level of significance. It has been noticed that females tend to be more interested in reading labels than males. Women are more likely to pay attention to food labels because they are responsible for the health of their family, particularly the children (Donga and Patel, 2018; Shireen *et al.*, 2022). Such gender-based differences in food label usage are important in agribusiness for designing targeted marketing and labeling strategies that can influence household-level food purchase patterns and, consequently, demand for agricultural products.

The results revealed significant age differences for the declaration of veg/non-veg, and name of food product, where younger consumers, particularly 18-25 and 25-35 year age groups, reported higher mean scores than those aged 55 or above. Similar patterns were observed for FSSAI logo and license number as well as net quantity, retail sale price and consumer care, where younger consumers consistently rated them more important than older age groups. However, no significant age-based difference was seen for manufacturing/expiry date, indicating that this attribute was valued similarly across all age groups. Kumar and Kapoor (2017) and Selvamurthy *et al.*, (2024) reported that the majority of young consumers actively check package labels and attach considerable importance to food labels while making their purchase decisions. Such age-based differences in food label usage are very important, since younger consumers represent a growing market segment that is more responsive to clear labeling practices. Therefore, addressing the informational needs of young consumers can enhance product acceptance, build brand trust, and long-term market growth for agricultural products.

The results revealed that education significantly influences all labeling attributes at 5 percent level of significance. Significant education differences were observed for the manufacturing/expiry date, declaration of veg/non-veg, name of food product, and FSSAI logo and license number, where graduates and post-graduates reported higher mean scores compared to respondents with matric or below matric education. Similarly, net quantity, retail sale price, and consumer care information were rated important by those with higher levels of education. Overall, education exhibited the strongest influence, as graduates and post-graduates consistently rated labeling variables more important than those with lower levels of education. Similar findings were reported by Paliwal *et al.*, (2025), who observed that individuals with higher educational qualifications show

greater awareness of food labels in the Indian context. This observation was further supported by Mehanna *et al.* (2024), who reported that university education or higher was a significant predictor of reading food labels. Prior studies have also noted that consumers with higher levels of education find labels easier to read and interpret compared to those with lower levels of education, reinforcing the link between education and effective label usage (Donga and Patel, 2018; Shireen *et al.*, 2022).

Conclusions and Policy Implications

The results indicate that food labeling plays a crucial role in shaping consumer awareness, preferences, and purchasing decisions. The majority of consumers (77.3%) actively read food labels, with expiry date, vegetarian declaration, and product name emerging as the most important labeling attributes. Consumers who don't read labels found them difficult to understand and time-consuming. Furthermore, consumers suggested clear, easy-to-read labels for better comprehension. Consumers also proposed introducing Front-of-package nutrition labeling to guide healthier food choices. The analysis further revealed that gender, age, and education significantly influence the way consumers engage with food labels, with females, younger individuals, and those with higher education attaching greater importance to labeling attributes. These findings confirm that food labeling is not only a regulatory requirement but also a vital tool for empowering consumers to make informed food choices.

The findings of this study carry practical implications for policymakers, food manufacturers, and agripreneurs engaged in value addition and marketing of agricultural products. Clear and standardized food labeling policies can strengthen consumer trust by improving access to information that consumers actively seek while purchasing packaged food products. Regulatory bodies such as FSSAI should focus on introducing front-of-package label formats to improve clarity and ease of understanding. Such improvements would help consumers not only make quicker and more confident food choices, but also help in branding, packaging and labeling India's agricultural produce in both domestic and export markets. Designing informative and attractive labeling formats can serve as a strategic marketing tool to communicate product quality, safety and nutritional value. Improved labeling practices provide an opportunity for emerging agripreneurs and farmer-producer organizations (FPOs) to position their products competitively in domestic and international markets. Training programs under agricultural universities and incubation centres can equip agripreneurs with knowledge of labeling requirements, and labeling attributes prioritised by consumers. Consumer awareness efforts can also help them interpret essential labeling information, thereby supporting informed decision-making. Investing in consumer education and awareness can not only improve public health outcomes but also strengthen

Table 7: Difference in preference for labeling attributes among group of consumers based on their age groups

Labeling attributes	Age groups	Mean (SD)	F-value	p-value
Manufacturing/expiry date	18-25	4.69 (0.49)	1.741	0.139
	25-35	4.66 (0.57)		
	35-45	4.58 (0.53)		
	45-55	4.69 (0.51)		
	55 or Above	4.49 (0.68)		
Declaration with regard to veg or non-veg	18-25	4.47 ^{a*} (0.70)	3.845	0.004
	25-35	4.49 ^{a*} (0.68)		
	35-45	4.33 ^{ab*} (0.80)		
	45-55	4.39 ^{a*} (0.60)		
	55 or Above	4.03 ^{b*} (0.93)		
Name of food product	18-25	4.44 ^{a*} (0.74)	4.589	0.001
	25-35	4.45 ^{a*} (0.65)		
	35-45	4.23 ^{ab*} (0.74)		
	45-55	4.25 ^{ab*} (0.85)		
	55 or Above	4.00 ^{b*} (0.89)		
FSSAI logo and license number	18-25	3.84 ^{a*} (0.97)	5.364	0.001
	25-35	3.79 ^{ab*} (0.99)		
	35-45	3.39 ^{b*} (1.05)		
	45-55	3.53 ^{ab*} (1.02)		
	55 or Above	3.49 ^{ab*} (0.97)		
Net quantity, retail sale price and consumer care	18-25	3.83 ^{a*} (1.00)	3.647	0.006
	25-35	3.99 ^{a*} (0.93)		
	35-45	3.63 ^{a*} (1.02)		
	45-55	3.67 ^{a*} (1.00)		
	55 or Above	3.72 ^{a*} (0.94)		

Note: Superscripts on mean values show the homogeneity of subsets. Values with different letters differ significantly; * $p < 0.05$; SD: Standard Deviation.

Table 8: Difference in preference for labeling attributes among group of consumers based on their educational qualification

Labeling attributes	Educational Qualification	Mean (SD)	F-value	p-value
Manufacturing/expiry date	Below Matric	4.48 ^{b*} (0.63)	7.514	0.001
	Matric	4.46 ^{b*} (0.56)		
	Higher Secondary	4.50 ^{ab*} (0.60)		
	Graduate	4.74 ^{ab*} (0.47)		
	Post-Graduate	4.78 ^{a*} (0.47)		
	Diploma	4.67 ^{ab*} (0.48)		
Declaration with regard to veg or non-veg	Below Matric	4.21 ^{bc*} (0.76)	9.883	0.001
	Matric	4.15 ^{c*} (0.71)		
	Higher Secondary	4.14 ^{c*} (0.89)		
	Graduate	4.55 ^{ab*} (0.61)		
	Post-Graduate	4.61 ^{a*} (0.68)		
	Diploma	4.44 ^{abc*} (0.51)		
Name of food product	Below Matric	3.68 ^{d*} (0.74)	27.681	0.001
	Matric	4.04 ^{cd*} (0.73)		
	Higher Secondary	4.22 ^{bc*} (0.68)		
	Graduate	4.53 ^{ab*} (0.61)		
	Post-Graduate	4.65 ^{a*} (0.67)		
	Diploma	4.50 ^{ab*} (0.86)		
FSSAI logo and license number	Below Matric	2.60 ^{c*} (0.74)	41.357	0.001
	Matric	3.34 ^{b*} (0.97)		
	Higher Secondary	3.30 ^{b*} (0.90)		
	Graduate	4.05 ^{a*} (0.93)		
	Post-Graduate	4.02 ^{a*} (0.84)		
	Diploma	3.83 ^{a*} (0.92)		
Net quantity, retail sale price and consumer care	Below Matric	2.85 ^{c*} (0.85)	31.144	0.001
	Matric	3.56 ^{b*} (1.00)		
	Higher Secondary	3.60 ^{b*} (0.95)		
	Graduate	4.13 ^{a*} (0.86)		
	Post-Graduate	4.16 ^{a*} (0.80)		
	Diploma	3.94 ^{ab*} (1.00)		

Note: Superscripts on mean values show the homogeneity of subsets. Values with different letters differ significantly; * $p < 0.05$; SD: Standard Deviation.

the market for agripreneurs and food enterprises offering safe and differentiated products.

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- Received: January 15, 2026 Accepted: April 26, 2026