



ORIGINAL RESEARCH PAPER

Marketing

CONSUMER PERCEPTION OF FOOD QUALITY AND PACKAGED FOOD LABELLING: A STUDY IN LALMONIRHAT DISTRICT, BANGLADESH.

KEY WORDS: food habit, food quality, labelling, packaged food

Abu Sayed Md. Shahiduzzaman

PhD Research Scholar, Raiganj University

Dr. Manas Naskar

Associate Professor, Department of Commerce, Raiganj University

ABSTRACT

Human health mostly depends on quality food habits. In the rural area of Bangladesh, the people are in ill health due to the consumption of impure food which affects normal daily life. The study investigates rural, educated people thinking about purchasing quality foods and package food labelling. A field study was conducted at Hatibandha and Kaliganj Upazila of the Lalmonirhat district of Bangladesh with a structured questionnaire. The study shows that the people of rural areas are highly aware of their attitudes about food quality. Those with a comparatively high educational background are more conscious of maintaining food quality. The Study results also find that the rural people have very little knowledge and understanding of government rules and regulations regarding food quality and labelling.

INTRODUCTION

A market economy is based on customers, and without them, no organization can survive. Customers are extremely relevant because they determine whether or not an organization can continue to exist. When consumers make a purchase decision, the quality assessment may be a factor they consider. Therefore, food marketing organizations should be aware of how customers compare packaged food quality and label information when purchasing food products. It is not just the quality of the product that influences customers, but also the labelling. To be successful in today's market, product quality has become a critical component of both the consumer's decision-making process and the producer's marketing strategy. The concept of quality takes on a special emphasis.

Perceptions of quality may vary depending on the level of economic development of a country (Chowdhury and Islam, 2003). One of the most common metrics used by marketers is market share, which reflects the proportion of the total sales in a certain product category that each brand takes. Maximum companies emphasize the quality of their products to gain an edge in this competitive market. For these companies, measured quality distinguishes the apparent quality of consumers. This study will focus on how consumers perceive quality. This will help to understand consumers' evaluation. By analyzing the perception of quality by consumers, marketers will be able to produce the right product and develop the right marketing campaign thereby providing a competitive advantage. The behavior of consumers in relation to products is not just regulated by a straight logic that is inherent in the consciousness of the customers. Consumer perception, defined as an impulsive connection generated by brands, humans, and businesses when consumers see certain visuals associated with them, has broader significance in the field of study. Every person's perception is unique, and it is not simply an objective fact. Individual variations depending on perception may exist for different people. There are several organizations in Bangladesh that play an important role in ensuring the quality and integrity of food products and labelling, including the Bangladesh Standards and Testing Institution (BSTI) and the Bangladesh Food Safety Authority (BFSA).

Literature Review

Food quality is essential in food production as food consumers are susceptible to infections that might occur during manufacturing. It is essential to clean the environment in which food is packaged to ensure the healthiest food is available to consumers. The literature so reviewed is listed below.

Hardie and Walsh (1994), show that the concept of product quality stems from the differences between actual products and the alternative products that would be offered by the actual industry.

Zeithaml & Dawar (1999). Described Product quality, in a general sense, refers to a product's superiority or excellence. Kotler and Armstrong (2016) point out that the key component of a market presence that provides value to customers is the product. Services, design, performance, quality, and packaging are all included in the product definition. The performance of a product or service is directly linked to the quality of the product or service.

Gravin (1984), defined Product quality as the combination of eight dimensions: performance, features, reliability, conformity, durability, serviceability, aesthetics and perceived quality.

Sallis (1992), argues that, quality is consistent conformance to a general. The quality of one's diet has a direct impact on one's overall health, making it an essential part of daily living for everyone.

Zugarramurdi (2003), states that humans are increasingly more involved in nutrition, and meal safety as a cause in a position fee. Marketers face hard and fast environmental issues that substantially determine purchaser's acceptance of their products.

Kotler (2009), pointed out that The purpose of labelling is to identify or give information about the package or its owner, use, nature, destination, etc. Using paper, fabric, plastic, or similar materials, the label gives information about the package.

Ababio (2012), observed that The government regulates food labelling in order to protect the health and safety of consumers. Thus, governments around the world have developed policies to require food companies to disclose information on food labels. Labelling of food allows consumers to make informed decisions regarding what they purchase and consume.

Wardlaw (1997) argues that customers are more likely to become knowledgeable about the products they consume. In addition, the food company is expanding its operations. Consumers must therefore pay attention to food labels before making a decision to purchase a certain food product.

Darkwa.S (2014) recommended that food labels are

beneficial to both consumers and food producers. Consumers benefit from food labels since they enable them to make more educated purchasing decisions, while manufacturers benefit from increased sales.

Objectives of the Study

The specific objectives of the study are:

1. To identify the perception of common people regarding the quality of packaged food.
2. To understand consumer perceptions about food quality and labeling on packaged food.
3. To give suggestive measures based on people's perceptions.

Research Methodology

Study Area

The sample population consists of all adults aged eighteen and older who purchase packaged foods from different markets and shops in the Lalmonirhat district in Bangladesh.

Selection of Sample and Sample Size

There are five Upazilas in Lalmonirhat district, which are recognized as the poor economic zone in Bangladesh. Two Upazila namely Hatibandha and Kaligang have been selected for the study convenient by multi-stage sampling. Data have been collected from 151 through a structured questionnaire using convenience sample techniques.

Types of Data Collections

Both primary and secondary data have been used in this study. The perceptions of the local people have been collected using primary data, which has been supported by statistical evidence. Secondary sources include mainly the BSTI, Food Safety Act, 2013, and Packaged Food Labelling Act, 2017, laws, rules and regulations adopted by the Govt. of Bangladesh.

Statistical Methods Used

Statistical analyses such as descriptive statistics, cross-tabulation, frequency distribution, and the Chi-Square are used for testing the relationship between the variables using SPSS (Statistical Package for Social Sciences) version 20.

Data Analysis and Findings

Firstly, the tabulated data are placed for reliability test to check, whether the primary data so collected are reliable or not.

Data reliability

In the first face of data analysis, the tabulated data has been considered a reliability test.

Table No. 01: Reliability Test Results

	N of Items	Cronbach's Alpha	Inter-Item Correlations
Factors Impact on purchasing Packaged Food Products (table 2)	08	0.704	0.228
Observations on the labelling of packaged foods (table 3)	12	0.832	0.243

Using Cronbach's alpha, the internal consistency of the impact on purchasing packaged food products was investigated. The outcome indicated that the alpha for a total of eight items was 0.704, and the average inter-item correlation was 0.228 percent. The twelve related items have an average inter-item correlation of 0.243. Therefore, the outcome was acceptable.

Critical Analysis

The analysis has been made in different segments. In the first

part, the characteristics of the respondents have been discussed. After that, the awareness of the common people and the factors affecting the labelling of packaged food products have been dealt with.

A Brief Analysis of the Selected Consumers

Among the four age groups (18-30 years), (31-44 years), (45-60 years), and (above 60 years) who purchase packaged foods from various markets and shops in Hatibandha and Kaligonj Upazila, the majority is men (67.5 percent). Almost all the consumers were educated about which, the majority (42.4 percent) is postgraduates, only 6.0 percent crossed secondary level, and 27.2 percent graduated. In regards to family structure, 35.8 percent had 3-4 members, 19.2 percent had 2-3 members, and 23.2 percent had more than 5 members. 79.5 percent are married, 43.7 percent Govt employees, 16.6 percent are government employees, and others are retired (4.6 percent), agriculture (1.3 percent), and businessman (17.9 percent). The number of working members of the family is 1-2 (64.2 percent), 2-3 (21.2 percent), 3-4 (7.9 percent), and the rest 4-5 (6.6 percent). 41.7 percent families have monthly incomes between 10,001Tk-20,000Tk. Whereas the monthly income of a 6 percent family is above 50,001 Tk. (Table-01)

Table-02: An overview of the Respondents

		Age			
		18-30	31-44	45-60	>60
Gender	Male	29.4	47.1	22.5	1
	Female	30.6	57.1	10.2	2
Employment Status	Student	100	0	0	0
	Government employee	4	80	16	0
	Private employee	18.2	59.1	22.7	0
	Retired	57.1	42.9	0	0
	Agricultural	0	0	0	100
	Business	14.8	51.9	33.3	0
Monthly threshold family income	0 - 10,000 Tk.	61.8	38.2	0	0
	10,001 - 20,000 Tk.	30.2	52.4	14.3	3.2
	20,001 - 50,000 Tk.	11.1	57.8	31.1	0
	> 50,001 Tk.	0	44.4	55.6	0
Marital Status	Single	86.7	13.3	0	0
	Married	15.8	60	22.5	1.7
	Others	0	0	100	0

Source: Compiled by the Author's from survey data

Awareness Level of the People on the Role of Bangladesh Regulatory Authorities (BRA)

According to the study, 25.17 percent of males and 8.61 percent of females are aware of the laws of BRA. The majority of men and women lack awareness and understanding of the law. The Pearson Chi-Square shows Asymp. Sig. (2-sided) is .035 at the 5 percent level of significance, which is less than 0.05. Based on the p-value approach, there is a significant relationship between gender and awareness of the roles of the Bangladesh regulatory authorities.

Table No. 03: Chi-square test

Chi-Square Tests			
	Value	d.f	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.317a	4	0.035
N of Valid Cases	151		

Source: Author's calculation from survey data

Frequency of Purchasing Packaged Foods

It is observed that 45.7 percent of customer buys packaged foods on a weekly basis; 37.1 percent buys daily; 4.6 percent buys on a monthly basis and 12.6 percent never buys. Men are more likely than women. 49 percent opined that they purchase packaging food products after reading the labels. A total of 22.5 percent of men and 18.4 percent of women buy

packaged food seldom, while the remaining 2.9 percent never buy this type of food packet.

Factors Impact on Purchasing Packaged Food Products

Some motivating factors play in the mind of the customer while purchasing any packaged food products. Eight motivating factors are identified to know the perceptions of the customers. 44.37 percent of respondents read labels in a store while purchasing food. 31.13 percent strongly agreed that they always identify whether the product is approved by BSTI or not before buying any food products. 33.11 percent agreed that BSTI is working properly as the food quality regulatory body. 44.37 percent of customers read the product labels to know the ingredients. Most of the respondents (49.67 percent) agreed that they prefer a particular brand for a particular product. 37.09 believe in the good qualities and food values as mentioned on the printed product package. 62.25 percent strongly agreed that Consumption of adulterated foods affects health badly. The mean value and the Standard Deviation of the perception of the customer are shown in table 02.

Table No. 04: Factors Impact on Purchasing Packaged Food Products

Factors Impact on purchasing Packaged Food Products	No.	Mean	Std. Deviation
Use the products of a particular company or brand when for health reasons.	151	3.80	1.007
Check whether the product is BSTI-approved.	151	3.85	1.063
BSTI is functioning properly as the food quality regulatory body in Bangladesh.	151	3.41	1.298
The labels on food products influence in buying of the products.	151	3.83	.969
Verifying the ingredients of the products.	151	3.76	.978
Check the food qualities and food values as mentioned on the printed product package.	151	3.52	1.171
The packaging attracts the consumer.	151	3.84	1.120
Consumption of adulterated foods affects our health badly.	151	4.39	.931

Source: Developed by the Author(s)

Consumers' Knowledge of the Reading Labels

Consumers read food labels differently. According to the survey, 49 percent of males always read labels, 25.5 percent read labels frequently, and 2.9 percent do not read labels at all. However, 46.9 percent of females always read the label, 34.7 percent reads it seldom and the remaining 18.4 percent reads it on a frequent basis (figure 1).

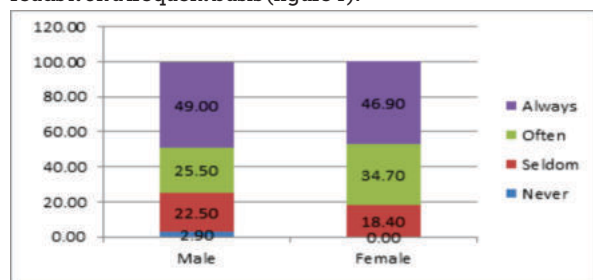


Figure-01: Gender Specified Response on Reading Label of Packaged Food (As Percentage)

The study of how consumers read food labels found that 51.1 percent of 18-30-year-olds always read labels, 31.1 percent often read labels, and 17.8 percent seldom read labels. In the age group of 31-44 years, 50 percent always read, 26.3 percent

read often, 19.7 percent seldom, and 3.9 percent never read (Figure -2).

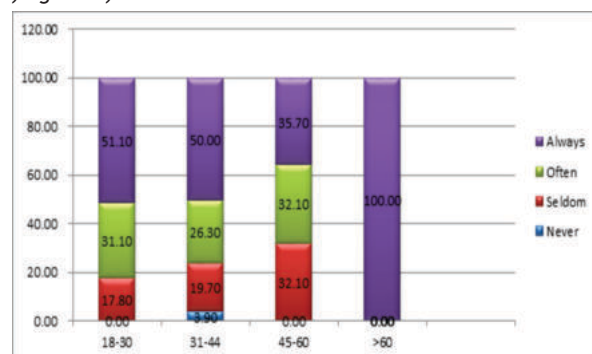


Figure-02: Age Specified Response on Reading Label of Packaged Food (As Percentage)

Among the group of 45-60 years, 35.7 percent always reads and 32.1 percent rarely. study of how consumers read food labels, it is found that 51.1 percent of 18-30-year-olds always read labels and only 17.8 percent rarely read labels. In the age group between 31 and 44 years, 50 percent of individuals read and only 3.9 percent never read (Figure -3).

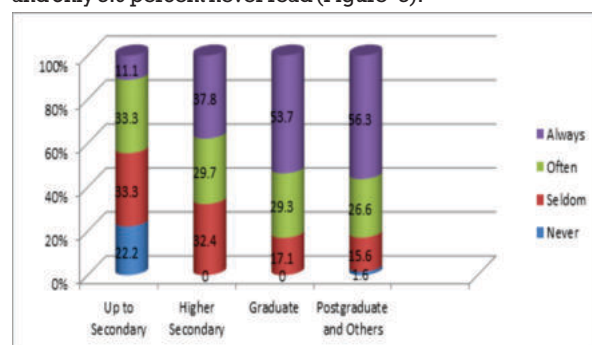


Figure-03: Responses according to Level of Education in Reading Label of Packaged Food (As Percentage)

Source: Author's calculation from survey data

Observations on the labelling of Packaged Foods

According to the Bangladesh Packaged Food Labelling Act 2017, the information, like product price, manufacturing date, best before and expiration date, must be clearly stated on the label. Manufacturer, packager, supplier, or marketer's name and address; Health risk warning/instruction/ instruction with dietary content information; Quantitative data like an artificial component used; Net weight, volume, safety precautions; nutritional content; food additives; storage instructions and ethical information must be printed on the levels.

The education level of the respondents influences the importance of the information contained on the packaged food label.

The Pearson Chi-Square (Asymp. Sig. 2-sided) values are 0.000 for manufacturing date, the best before and expiry date; 0.034 for the name and address of the manufacturer, packager, supplier, or marketer; 0.021 for Precaution for children; 0.048 for Storage instruction and 0.050 for net weight or volume or number and total weight, respectively at the 5 percent level of significance, which is less than 0.05. Based on the p-value approach, there is a significant relationship between the information provided in labels on buying behavior across education groups of consumers.

Table-05: Observations on the labelling of packaged foods: (Data shown as a percentage) Not Priority= 1,

Moderate Priority= 2, High Priority=3

Level of Education (percentage)	Up to Secondary	Product Price			Name and address of the manufacturer, packager, supplier or marketer;			Manufacturing date, the best before and expiry date			Warning / instruction about health risk with details of nutritional contents		
		NP	MP	HP	NP	MP	HP	NP	MP	HP	NP	MP	HP
Level of Education (percentage)	Up to Secondary	33.3	55.6	11.1	11.1	77.8	11.1	0.0	88.9	11.1	0.0	77.8	22.2
	Higher Secondary	8.1	51.4	40.5	10.8	51.4	37.8	5.4	43.2	51.4	10.8	43.2	45.9
	Graduate	12.2	46.3	41.5	14.6	34.1	51.2	4.9	29.3	65.9	7.3	36.6	56.1
	Postgraduate and others	10.9	42.2	46.9	9.4	28.1	62.5	4.7	12.5	82.8	9.4	28.1	62.5
Total		11.9	46.4	41.7	11.3	38.4	50.3	4.6	29.1	66.2	8.6	37.1	54.3
Asymp. Sig. (2-sided)		0.320			0.034			0.000			0.129		

Source: Author's calculation from survey data

Table-06: Observations on the labelling of packaged foods: (Data shown as a percentage) Not Priority= 1, Moderate Priority= 2, High Priority=3

Level of Education (percentage)	Up to Secondary	Quantitative information about each artificial ingredients used			Net weight or volume or number and total weight			Use /preparation methods			Amount of nutrition		
		NP	MP	HP	NP	MP	HP	NP	MP	HP	NP	MP	HP
Level of Education (percentage)	Up to Secondary	22.2	33.3	44.4	11.1	33.3	55.6	0.0	66.7	33.3	11.1	55.6	33.3
	Higher Secondary	10.8	45.9	43.2	10.8	35.1	54.1	5.4	43.2	51.4	10.8	37.8	51.4
	Graduate	14.6	43.9	41.5	9.8	34.8	55.4	9.8	31.7	58.5	12.2	29.3	58.5
	Postgraduate and others	12.5	34.4	53.1	4.7	39.1	56.2	6.3	28.1	65.6	7.8	31.3	60.9
Total		13.2	39.7	47.0	7.9	29.8	62.3	6.6	35.1	58.3	9.9	33.8	56.3
Asymp. Sig. (2-sided)		0.834			0.050			0.283			0.725		

Source: Author's calculation from survey data

Table-07: Observations on the labelling of packaged foods: (Data shown as a percentage) Not Priority= 1, Moderate Priority= 2, High Priority=3

Level of Education (percentage)	Up to Secondary	Food additives			Storage instruction			Ethical information			Precaution for children		
		NP	MP	HP	NP	MP	HP	NP	MP	HP	NP	MP	HP
Level of Education (percentage)	Up to Secondary	22.2	55.6	22.2	11.1	88.9	0.0	22.2	55.6	22.2	11.1	55.6	33.3
	Higher Secondary	16.2	45.9	37.8	8.1	43.2	48.6	27.2	21.6	51.4	5.4	35.1	59.5
	Graduate	7.3	36.6	56.1	12.2	31.7	56.1	15.3	46.3	39.0	2.4	34.1	63.4
	Postgraduate and others	6.3	42.2	51.9	10.8	32.8	56.3	13.3	31.3	56.3	4.7	12.5	82.8
Total		9.9	42.4	47.7	10.6	38.4	51.0	17.3	34.4	48.3	4.6	26.5	68.9
Asymp. Sig. (2-sided)		0.270			0.048			0.092			0.021		

Source: Author's calculation from survey data

CONCLUSION

The customer wants to pick the best-packaged food for his or her family. An instant decision is needed to buy the product from the shop. They can directly read descriptive information on the label of the package. In general, customers check whether BSTI has approved any food products before purchasing them. The results of the study as a whole give evidence that rural customers who buy packaged food are aware of the quality of the food they purchase. This survey included nearly equal representation of both genders, high levels of education ranging from secondary to postgraduate degrees and above, and different age groups. Consumers in the Lalmonirhat Area have a high level of knowledge of food product quality, consumption of packaged food quality and labelling information. The findings indicate that the consumers have a high level of awareness regarding the labelling and quality of food. Over the past several years, spending money on food has emerged as one of the most significant aspects of the overall cost of living at home. The elements in the list of product price; name, address, and contact information about the manufacturer, packager, and supplier, in addition to nutritional information, are listed as the most critical aspects of reading food labels. It is also observed that some consumers did not read food labels either they are in a hurry or they already knew or the font size of the labels are too small. Bangladesh is trying to maintain all rules and laws regarding food production systems for establishing itself as a model for promoting food controls. It would protect the health of its population and also be economically beneficial to the nation.

Recommendations

The quality of packaged foods is becoming a growing issue for consumers. In the future, market growth and new technologies will influence food standard research and the prevention of foodborne infections among consumers. Bangladeshis must be protected against the purchase and consumption of impure food by means of stringent laws and regulations, regardless of whether the food is produced or supplied locally or imported. It is crucial to conform as closely as possible to the rules established by the different bodies responsible for implementing the law. In case of any impure food that shall be penalized if they are manufactured, marketed, or offered for sale. Consequently, it is essential that all parties engaged in food quality and labeling work clarify what customers would confront while reading and understanding food labels. This will help consumers better understand the quality of the food they are purchasing. It is also recommended that a number of research work is required to be conducted in this particular field.

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