



Management

ASSESSMENT OF CONSUMER AWARENESS ABOUT USAGE OF FOOD LABELS AND ITS IMPACT ON FOOD BUYING BEHAVIOUR

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ABSTRACT

Food labeling enables consumers to make informed decisions when purchasing and consuming food products. Consumption of packaged food items has grown tremendously in the recent past. Despite this, the issue of consumer awareness about usage of food labeling information has attracted little research attention in developing countries. Food regulations and increased consumer awareness are forcing packaged food companies across the world to display more and more information on packaged food products. However, little is known about consumer response to such information in emerging economies. For this the data was collected with the help of interview schedule conducted amongst 60 respondents out of which 30 were male and 30 were females from higher education institutes of Pilibhit District of Uttar Pradesh. The study assesses the level of awareness about different categories of information generally displayed on food labels. The study also examines the usage of food labels information during purchase decisions of the respondents about packaged food. All 60 subjects had knowledge about food labels. Amongst male respondents 56.66 per cent were those who purchased packaged food more than once a week, 16.66 per cent purchased it once a week, 6.66 per cent purchased it once a month and 20 per cent purchased it occasionally which is quite similar as females. Gender was significantly associated with the frequency of buying packaged foods and reading food label. The usage of the information printed on packaged food was relatively high amongst the consumers while buying packaged food products. Despite a high frequency of purchasing packaged foods, the percentage of males and females reading food labels and components of food labels on a regular basis was found very less. It is found that consumers in these three education institutes were fairly aware about the information provided on the food labels; though the level of awareness about different types of information varied. The results indicated that particular category of information was used more by the consumers while purchasing packaged food products. The results had very strong implications for researchers as well as the food companies.

Keywords:

Food labels; Consumer Awareness; Buying Behavior; Information; Packaged food.

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1. INTRODUCTION

Food product labeling, as policy tool for ensuring provision of nutrition and health information to consumers and as product differentiation strategy by food companies, has gained importance in the recent past across the globe [1]. Over the past few years there has been a considerable amount of change in the food consumption pattern of the Indian population. Demand for healthy and wellness food is also on rise. With the change in lifestyle and consumption pattern, food safety standards are becoming important from public policy perspective [2].

Many studies found that, in general, consumers were confused with nutrition label information, especially with the use of some technical and numerical information [3][4][5]. One of the important information which is found on the packaged food these days includes Health Claims. The presence of a combination of both, shorter health claims on the front of the package and a more complete valid information on the back, leads the consumer to give more attribute specific thought regarding the product [6]. Longer claims may lead to general evaluated thought. Shorter claims may lead to more favorable beliefs about the product and thereby a more positive image of the product [7]. New forms of food labeling and ‘front-of-pack’ nutrient signposting in particular, are viewed as potential tools for improving the nutrition of the population [8]. A number of different front-of-pack nutrient signposting have been developed [9] and the most effective format has been vigorously debated [10]. In 2006, the UK Food Standards Agency (FSA) recommended that food retailers and manufacturers in the UK place front-of pack traffic-light labels on products in a range of categories. The FSA states that a key objective of this traffic-light labeling is to help people make healthier food choices. It is proposed that the focus with food label research should divert to consumer education [11], and should therefore explore ways to educate and aware consumers of all walks of life to use food labels more purposefully during the various stages of the consumer decision-making process, in order to empower consumers to use food label information to their best advantage during purchase of packaged food.

In the context of emerging economies, very little is known regarding consumers’ expectations and their response to food label information [12]. Indian consumers are in the process of changing their consumption/buying behavior especially with respect to food products. Consumption of packaged food items has grown tremendously in the recent past. Demand for healthy and wellness food is also on rise. With the change in lifestyle and consumption pattern, food safety standards, transparency in dissemination of information related to food product and legal regulations are becoming important on food labels.

The expenditure on labeling will be of useful only if consumers are aware of and are able to understand, comprehend and their purchasing behavior are based partially on the information given on the food labels.

In order to maximize benefits from food product labeling, it is imperative to assess the level of awareness among Indian consumers towards such information on food labels and how far that information influences their purchasing behavior in the shopping malls or marketplace. Researchers have not paid adequate attention to this issue therefore the present study proposes to exploring the level of awareness among Indian consumers regarding content and nutritional information on food product labels. The outcomes of the study will help to understand the complexity of issues involved in buying process of consumers related to food product labeling and helpful for food companies for designing strategies to maximize benefits from resources spent on food labeling.

2. MATERIAL AND METHODS

2.1.CONSTRUCTION OF TOOL

A preliminary survey was conducted in Pilibhit District to develop a rapport with all the respondents taken for study. The interview schedule was consisted of several types of questions related to their frequency of purchasing packaged food and awareness, knowledge, importance and preferences about information given on food labels.

2.2.SELECTION OF SAMPLES

Purposive sampling design was used to select the study area and respondents. The stage included selection of locale and selection of respondents.

2.2.1. SELECTION OF LOCALE

To assess the awareness of consumers about food labels and how it impact on their purchase decision during selection of packaged food, present study was carried out in three institutes of Pilibhit District (Uttar Pradesh) India. The main reason of selection of this institute was that, it was easily approachable for the researcher and maximum sample size was also available in these areas.

2.2.2. SELECTION OF SAMPLE SIZE

For the selection of sample a purposive sampling technique was used; the respondents selected for the study were post graduates. Total 60 respondents were selected out of which 30 respondents were male and 30 were female.

2.3.METHOD OF DATA COLLECTION

The descriptive data was gathered personally by using interview method. Visits were made to the selected institutes prior to data collection to ensure full confidence and co-operation from the respondent.

The interview schedule (containing close ended questions) was used to collect the information related to the study. Variables such as; frequency of purchasing of packaged food by the

respondents, level of importance assigned to various categories of information, buying behavior of respondents based on the information provided on the food labels, preference of respondents to product attributes of packaged food, etc were taken.

2.4.ANALYSIS OF DATA

The collected data were tabulated and analyzed with the help of subjective as well as relational statistics. For the purpose of analysis of the variables the study were categorized as follows;

2.4.1. DESCRIPTIVE STATISTICS

The data were presented in frequencies and percentage as per analysis of the following information.

- a) Frequency of purchasing packaged food
- b) Level of importance assigned to various categories of information on food labels by respondents
- c) Buying behavior of respondents based on the information provided on the food labels
- d) Preference of respondents to product attributes in case of packaged food even if it does not confirm to healthy food

3. RESULTS AND DISCUSSION

Table 1 showed frequency of purchasing of packaged food of the selected respondents covered in the study. All the respondents were equally divided for the research including males (50 per cent) and females (50 per cent). Maximum of male respondents (56.66 per cent) buy packaged food more than once a week, 6.66 per cent at least once a month and only 16.66 per cent once a week. There were around 20 per cent respondents who said that they purchase packaged food occasionally. Quite similar as males, 50 per cent female respondents buy packaged food more than once a week, 6.66 per cent at least once a month and rest 10 per cent once a week. There were around 33.33 per cent respondents who said that they purchase packaged food occasionally as shown in figure-1.

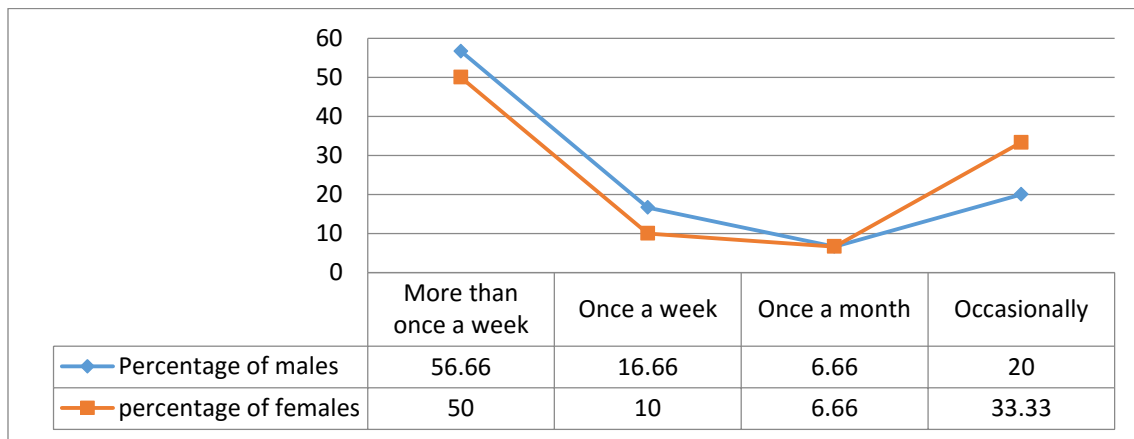


Figure 1: Frequency of purchasing packaged food by respondents

Table 1: Frequency of Purchasing of Packaged Food by the Respondents

FREQUENCY OF PURCHASING PACKAGED FOOD	Male		Female	
	F	%	F	%
More than once a week	17	56.66	15	50
Once a week	5	16.66	3	10
Once a month	2	6.66	2	6.66
Occasionally	6	20	10	33.33

On the basis of the questions asked from the respondents to assign the level of importance they attach to each of the categories of information generally displayed on the food labels.

Results presented in Table 2 indicate that the majority of respondents were very conscious about the importance of information on the food labels and there were very few who don't gave any importance at all to the information. It can be well understood from Table 2 that, in case of male respondents it was found that they check over expiry date was the foremost important (86.66 per cent) followed by date of manufacturing (73.33 per cent) and packaging date (60 per cent) of the product. Fifty per cent male respondents were there who gave importance to the nutritional information.

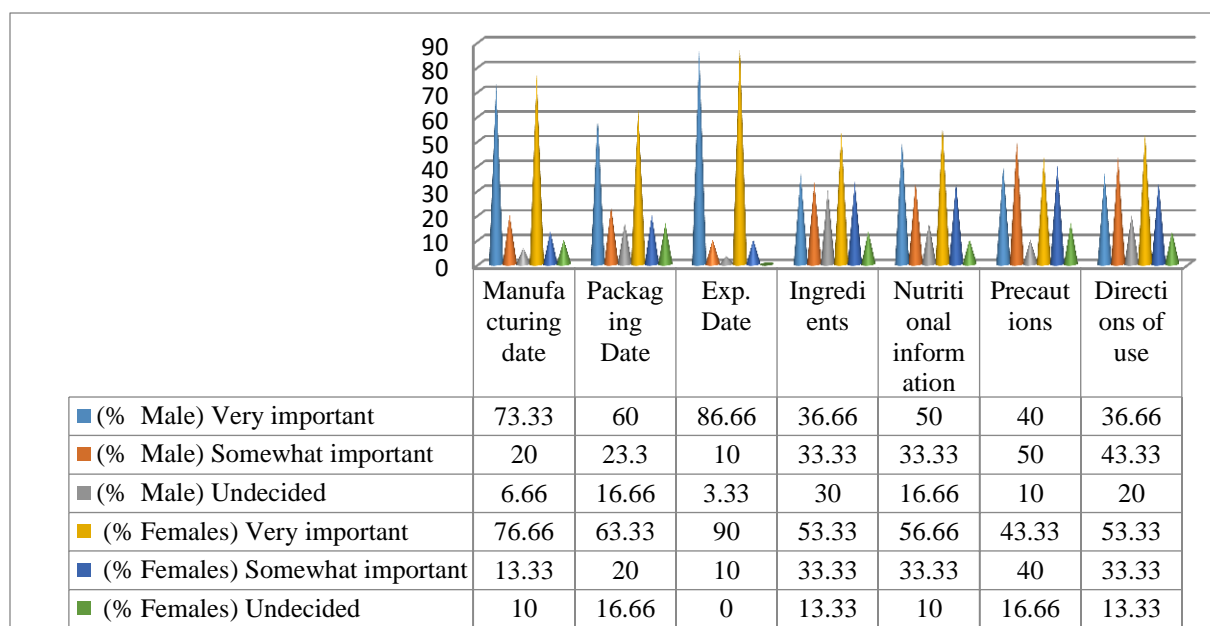


Figure 2: Level of importance assigned to various categories of information on food labels by respondents

As males, females also gave importance to expiry date of the product (90 per cent) followed by date of manufacturing (76.66 percent). Besides it the nutritional information is considered very important by 56.66 per cent of the respondents across three educational centers, then to ingredients (53.33 per cent) and direction of use (53.33 per cent). They were least bothered about rest of the things. As shown in figure-2 only 60 per cent male and 63.33 per cent female gave

attention to the packaging date and 40 per cent male and 43.33 per cent females' looks towards precautions about special food characteristics.

The results indicate that the Indian consumers surveyed in Piliphit District assign very high importance to information about manufacturing date and expiry date of the food products.

Table 2: Level of Importance Assigned to Various Categories of Information on Food Label of Packaged Food

S.no	CATEGORY	VERY IMPORTANT				SOMEWHAT IMPORTANT				UNDECIDED			
		MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
		F	%	F	%	F	%	F	%	F	%	F	%
1	Manufacturing date	22	73.33	23	76.66	6	20	4	13.33	2	6.66	3	10
2	Packaging Date	18	60	19	63.33	7	23.3	6	20	5	16.66	5	16.66
3	Exp. Date	26	86.66	27	90	3	10	3	10	1	3.33	0	0
4	Ingredients	11	36.66	16	53.33	10	33.33	10	33.33	9	30	4	13.33
5	Nutritional information	15	50	17	56.66	10	33.33	10	33.33	5	16.66	3	10
6	Precautions	12	40	13	43.33	15	50	12	40	3	10	5	16.66
7	Directions of use	11	36.66	16	53.33	13	43.33	10	33.33	6	20	4	13.33

However, as compared to these aspects of food labels, information on food ingredients and direction of use has lower priority among these consumers. Literature on consumer buying behavior showed that consumers' actual behavior was consistent with their attitude or concerns. For example, in a national survey in the US, 50% of the surveyed respondents said that they preferred to buy organically grown fresh fruit and vegetables, yet only 25% admitted that they actually bought them on regular basis.

Table 3: Buying Behavior of Respondents Based on the Information Provided on the Food Labels

S.NO	CONTENT	MALES						FEMALES					
		Sometimes		Mostly		Always		Sometimes		Mostly		Always	
		F	%	F	%	F	%	F	%	F	%	F	%
1.	Manufacturing date	2	6.66	6	20	22	73.33	5	16.66	2	6.66	23	76.66
2.	Packaging Date	3	10	18	60	9	30	3	10	16	53.33	11	36.66
3.	Exp. Date	1	3.33	2	6.66	27	90	5	16.66	17	56.66	8	26.66
4.	Ingredients	4	13.33	11	36.66	15	50	3	10	12	40	15	50
5.	Nutritional information	5	16.66	10	33.33	15	50	5	16.66	19	63.33	6	20
6.	Precautions	7	23.33	13	43.33	10	33.33	6	20	15	50	9	30
7.	Directions of use	10	33.33	10	33.33	10	33.33	10	33.33	11	36.66	9	30

In order to examine consistency between respondents’ attitude and behavior, we asked the respondents about their buying behavior with respect to packaged food. The objective was to see how much attention the respondents actually pay to various categories of information while purchasing packaged food.

The results presented in Table-3 showed that the respondents perceived different kinds of information (available on the food label) as important, in spite of that they don’t see or use that information while purchasing. Though, on the whole, majority of the respondents do a check over such information before buying food products. Majority of the male respondents i.e. 90 per cent always check the expiry date of the food item they purchase while 73.33 per cent always check manufacturing date only. About rest of things they were found least bothered.

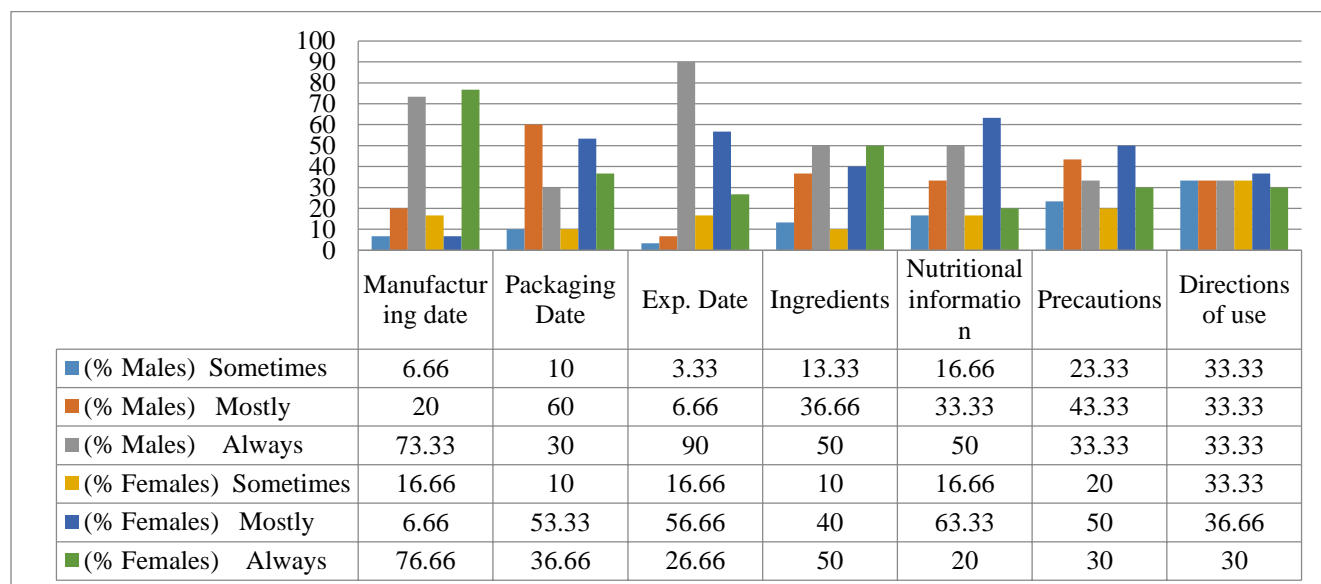


Figure 3: Buying behavior of respondents based on the information provided on the food labels

In case of female respondents we found that most of the females i.e. 76.66 per cent who always check date of manufacturing and 63.33 per cent females mostly considered nutritional information on food labels while 56.66 per cent mostly check expiry date and 50 per cent always check ingredients of the food product. Quite similar as males, females gave least attention to direction of use and precautions related to food products.

Certain food products, based on the food label information, may not meet buyers’ criteria of a healthy food. In order to measure the importance attached to aspects other than food label information while making purchases, the respondents were asked whether they purchased the packaged food even if it did not meet their criteria of a healthy food.

Table 4: Preference of Respondents to Product Attributes in Case of Packaged Food even if it does not confirm to Healthy Food

S. NO	PREFERENCES	MALES (N=30)						FEMALES (N=30)					
		Most		Often		Least		Most		Often		Least	
		F	%	F	%	F	%	F	%	F	%	F	%
1.	Brand	23	76.66	5	16.66	2	6.66	28	93.33	2	6.66	0	0
2.	M.R.P	22	73.33	5	16.66	3	10	21	70	6	20	3	10
3.	Taste	11	36.66	10	33.33	9	30	16	53.33	10	33.33	4	13.33

As it is evident from the results presented in Table 4 that, in case of male respondents it was found that the brand of the food product plays the most important role as 76.66 per cent respondents admitting that this was the most important attribute because of which they still buy the packaged food product even if it cannot be categorized as a healthy food product. M.R.P (73.33 per cent) and taste (36.66 per cent) of the food products were other attributes in order of importance assigned by the respondents.

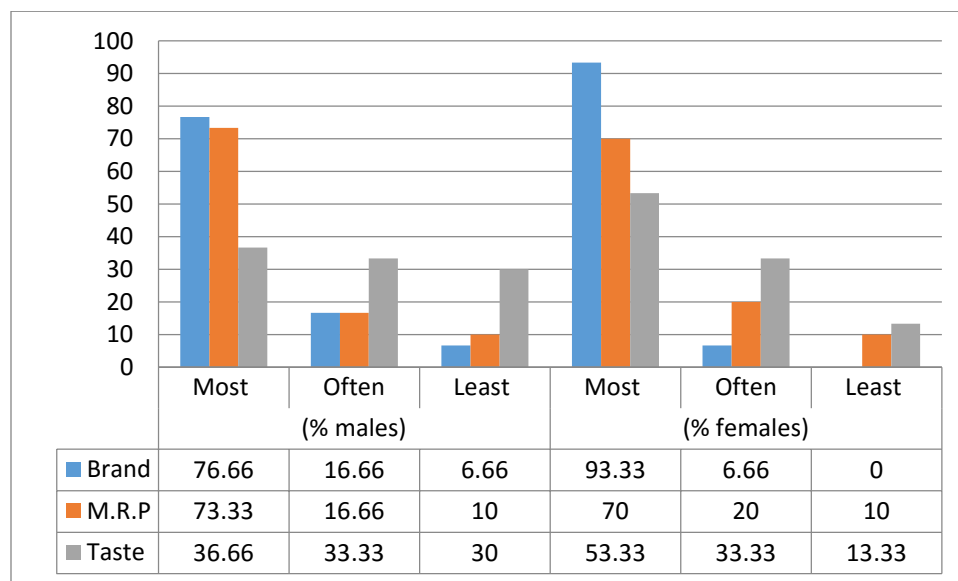


Figure 4: Preference of respondents to product attributes in case of packaged food even if it does not confirm to healthy food

It can be well compared from Figure-4 that, female gave priority to the brand of the product (93.33 per cent) than to M.R.P of the product (70 per cent) and taste (53.33 per cent) of the food product was the least important criteria in order of importance assigned by the female respondents. The results indicate that if consumers were very loyal to the brand and really like the taste of a packaged food product, they buy it in spite of its inferior healthy content.

4. CONCLUSIONS

Consumer demand for detailed information regarding content and nutrition of packaged food products is likely to increase due to healthy eating and awareness regarding packaged food in developing countries. Based on a formal interview survey among 60 respondents (30 males and 30 females) spread across Pilibhit District in Uttar Pradesh (India). The study tried to understand the existing level of consumer awareness regarding information on food labels and the usage of such information during purchase decisions about packaged food products. The results indicate satisfactory level of awareness about different types of information on the food labels displayed on packaged food products, however, usage of such information as one of the criteria while purchase packaged food product is relatively low among both male and female respondents. The results indicate that Indian consumers (males and females) assign very high importance to information about expiry date and manufacturing date of the food products. However, as compared to these aspects of food labels, information about direction of use and precautions has lower priority among these consumers. They also have very strong preference for brand and the M.R.P of the product. This preference makes them purchase a packaged food item even though it may not meet their criteria of healthy food or may contain some harmful ingredients.

It becomes very essential for government to keep a thorough check on food companies as to what they put in packaged food and explore into the market for some might knowing or unknowingly use harmful ingredients and still get away with it because of a strong brand name. Also, since all harmful ingredients are not banned or their use prohibited but they can be used with certain riders (for example, foods containing MSG have warnings of not using them for infants) it becomes all the more important as to how regulations are framed to check these and how strictly they are enforced. Hence, it is the responsibility of the government agencies and researchers to spread awareness amongst consumers regarding the importance of different kind of information given on packaged food. At the same time packaged food companies with established brand names in the market, need to be very conscious of their responsibility when introducing new products in the market. They need to live up to the trust of their consumers who, for the sake of brand and taste, are willing to sacrifice a few health quotients.

The results give a clear indication that label information is generally gender insensitive though its use assumes significance with the education of the consumers. Most lifestyle products such as breakfast cereals etc. that would mostly be used by people that have relatively higher levels of education would pay more attention to various kinds of label information. The awareness regarding label information is dependent on the consumer's level of education. Hence, it becomes the task of researchers to sensitize the consumers to availability and importance of such information. Just enforcing rules on the food packaging companies is not sufficient until the buyer is not reading them let alone interpreting them.

To conclude, the outcomes of the study reveal level of awareness about food labels and their usability among consumers of packaged food products. These outcomes are helpful for food companies and researchers for improving awareness among consumers and ensuring that their usability is improved. The outcomes also help the food companies in deciding which type of information on the food labels matters the most to the aware consumers in making rational food

choices, also important for researchers for further research and helpful for creating awareness amongst consumers.

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