# Awareness of Pakistani Consumers towards Nutritional Labeling on Product Packaging in Terms of Buying Behavior

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# Abstract

Nutritional Labeling communicates to consumer that the product holds those attributes that can fill the required need and contains components that that are better as compared to the ones provided by the competitor. Nutritional labeling provides the customers with the opportunity to choose healthier food for themselves and their families. A sample size of 250 was selected and questionnaire were distributed to find the preference of Pakistani customers towards labeling from which 207 filled questionnaire were returned and along with that 40 interviews were conducted by the researcher. The participants despite of the high education level and presence of children in family do not consider nutritional labeling. The results also revealed that most the Pakistani people consider expiry date and manufacturing date only because a positive image is already developed in their minds due to strong brand names.

**Key Words:** Nutritional Labeling, Packaging, Pakistani Consumer's Awareness, Education Level, Pre-Packaged food.

# 1. Introduction

# **1.1. Background of the Study**

Today with rapid development, marketing strategies are also growing. One of the marketing strategies used by the marketeers is attractive product packaging and labeling to increase their product sales. This strategy is very popular now days and involves a number of factors working behind it. Packaging helps the marketeers to glamorize their product so that they can get instant response from consumers. Visual representation is the most tactic strategy as everyone is comfortable with what they see as compared to other responses.

An old proverb: "We are what we eat" signifies that people are not only attracted towards packaging but are also conscious about the product quality and hence nutritional labeling comes into play. Labeling communicates to consumer that the product holds those attributes that can fill the required need and fulfills the best as compared to the other brands of the same product category. (K,Rita 2009). Nutritional labeling provides the customers with the opportunity to choose healthier food for themselves and their families. Due to the increasing number of health hazards, every age group person wants to know what is healthy for him. Mothers are over protective about their child health and growth, similarly labels provide old age people with the option to consume necessary nutrient requirements for their body.

### 1.2. Aim of the Study

To boost the product image, packaging and labeling works in parallel. Hence this research aims at finding the awareness of Pakistani consumers towards nutritional labeling on product packaging in terms of buying behavior.

There is a rising trend in Pakistan where people are concerned about their health, the importance of nutrition and its relationship towards their life style. This study is aimed to access the consumer's awareness regarding the information on the Nutritional labels on Product packaging and to identify whether these labels will help consumers to take right decisions when choosing a pre-packaged product.

# 1.3. Research Objectives

- To find whether Nutritional labeling is noticed by the Pakistani consumers while grocery.
- To find the level of awareness of Pakistani consumers towards Nutritional labeling in terms of buying behavior.
- To find whether people having children in family of nutritional labeling on Pakistani consumers.
- To find the Nutritional components preferred by Pakistani consumers on Product packaging.

# 2. Literature Review

### 2.1. Packaging

Results clearly indicates that there is a strong association of packaging as more than 70% consumers stated that they believe on packaging to facilitate their decision-making process at the POP (point of Purchase).(Wells et al., 2007). The results show that the graphics on packaging of the label can highly influence purchase intentions and attribute beliefs due to their attraction. This suggests that graphical information could be misleading and affect the consumer's buying behavior. (Bone, 2001). Consumers buy products by mistake believing them to be a different product due to its similar packing. People likes to purchase buying a product that is in similar packaging to a well-reputed brand than another product at the same price, which is in more distinct packaging. (Edwards, 2009). One of the issues, which seems to be disregarded in determining the value added through packaging seems controversial in many sectors. On the other hand, some sectors like cosmetics, packaging design and materials can be easily become a crucial part of the value of product. (Topoyan et al., 2008)

Most important Package design attribute that counts in terms of healthiness expectations is the package's shape and visibility of the product through the Package. The visual dimension of food packaging matters because it transfers undercover messages; healthiness is one of them. (Sioutis,2011). A color used on packaging greatly impacts the perception of the consumer. Shoppers judge the product attributes by the color on its packaging. (Delabyet al., 1999). Packaging has a direct impact on the children's preferences Also, due to the attractive packaging specially the presence of cartoon heroes on packaging increase their interested in purchase of unhealthy foods. The children try to influence their parent's decisions during shopping. (Ogba et al., 2009). Packaging has a positive impact on consumer buying behavior. However brand image is mediating variable in the relationship of consumer buying behavior and packaging.(Sialet al., 2011). Packaging among the 4ps of Marketing is a very powerful tool, its impact reaches deep in consumers mind as compared to advertising. Even at the point of purchase it is packaging that influences the buying decision and dominates a product over its competitors. Packaging creates a positive perception on the consumers and can even result in brand switching in case of children. (Louw et al., 2007).

### 2.2. Nutritional Labeling

The Guideline Daily Amount is viewed by the consumers during shopping and it positively affects their buying behavior. Consumer's preference towards a brand is directly affected by self-control and temptation. (Hassan et al., 2010). People with healthier eating habits prefer to see nutritional labeling. Moreover nutritional labeling is not affected by price and is preferred by people following a special diet plan or with problems like sugar, heart diseases. (Magistris et al., 2010). Nutritional labeling enables the consumers to have a view at the components of the products which enables them to have a healthier diet choice in which they can improve their intake of the require nutrition information. They are perceived as a highly trustworthy source of information and many consumers use their guidance in order to make purchase decisions. (Campos et al., 2011). The results show that there are consumers who considers nutritional labeling on the products during their shopping experiences and are happy to pay even a premium on the products having nutritional labeling on them. (Loureiro et al., 2006). Nutrition labeling information decreases the use of products containing harmful components and improves the consumption of the products containing healthy components. (Drichoutis et al., 2006).

Customers do consider nutritional labeling when making a purchasing decision. Especially the people in the ages 36-50, individuals who are sick or with a special diet recommended having at least tertiary education. Moreover households with less than four members were willing to pay more for the nutritional labels. (Prathiraja et al., 2003).

The UAE's consumers give importance to the Nutritional labeling only in case of the first time purchase. The results obtained shows that most of the people prefers to check the expiry date of the product which is the first priority and secondly manufacturing date in on priority. (Washi, 2012). The findings show that particular category of information is seen by consumers during their purchase decisions. Differences across different socio-economic groups are also significant in many cases. The results have very strong implications for regulatory authorities as well as the food companies. (Kumar, 2001)

Consumers take the help of the mentioned health claims on foods and also believe them to be true. However consumers prefer small words rather than long and complex claims and believe them to be approved by the government. At many times consumer's percept to be healthier if it has a health claim, this creates a halo effect because of which they do not want to get more relevant information. (Williams, 2005). Credibility of claims highly matters only in the case when there is high consumer involvement in the product i.e. sugar patients otherwise it is just for the sake of information gathering. (Aschemann et al., 2008). Purpose of nutritional labeling is to educate consumers to shift to healthier food choices, and pressurize the competitors to add more nutritional value in their competition on nutritional quality, nutrition labeling represents a helpful tool making consumers make informed decisions about their diet and lifestyle. (Daud et al., 2011). The marketers while designing product packaging and labeling must keep in mind the four norms i.e. truthfulness, sincerity, comprehensibility and legitimacy because it is the right of the consumer. Moreover following this pattern will help building long-term relationship between the product and the consumers.(Underwood et al., 1998). The factors the most importantly affects the buying decision and preferences off most consumers includes brand name, price and its expiry only. (Aprile et al., 2006).

It is seen from the current labeling being done that consumers perceive themselves knowledgeable regarding nutritional labeling. Mostly the focus is on calories, fiber contents, Guideline daily amount, nutritional value and the serving size, price as compared to competitors and the band names while purchasing food items. (McLean, 2001; Whitney &Rolfes, 2005).

# 3. Theoretical Framework

The studies shows positive evidence between the relationship of Presence of children in family and education level on observing Nutritional label. Hence on the basis of this literature review we have developed the following theoretical model and research hypothesis.



Figure 1: Research Framework

Research Hypothesis

H1a: Presence of children in family creates the awareness of observing nutritional labels.

H1<sub>0</sub>: Presence of children in family do not create awareness of observing nutritional labels

H2a: Education level creates awareness of observing nutritional labels.

H2<sub>0</sub>: Education level do not create awareness of observing nutritional labeling.

# 4. Methodology

A research questionnaire was designed to find the priority of consumers towards Nutritional labeling in Pakistan. A sample size of 250 was selected using the sample size calculator.

The convenience sampling was used and the data was collected from different shopping malls and universities of Islamabad and Rawalpindi. In the questionnaire we asked the consumers about their buying behavior we focused on their behavior on purchasing Milk and Juices. As the study was about consumer buying behavior so the respondents were general public. 250 questionnaires were distributed from which 207 people responded which shows the response rate of 82.8%.

The questionnaire was adopted from Washi (2012), a research study conducted in UAE. The questionnaire is divided into 3 parts. The first part consists of demographic information that includes gender, education level, occupation, social status, and presence of children in the family.

The second part consists of two questions that were designed to check whether customers consider nutritional labeling while grocery or not. In the third part of the questionnaire, customers were asked to prioritize their top preferences of elements of Nutritional labeling which they intend to look at product packaging at the time of shopping experience. The options enlisted includes manufacturing date, expiry date, content of packaging, size of packaging, presence of nutrition and health claims etc.

Along with the questionnaire, 40 respondents were also interviewed in different shopping malls of Islamabad and Rawalpindi during their shopping experience. The purpose was to further clarify the results obtained from the questionnaire.

### 5. Data Analysis and Interpretation:

The data was collected from both genders i.e. 43.5% Males and 56.5% females. Where .5% was uneducated, 1% with primary education, 2.4% intermediate students, 76.3% were Bachelor while 19.8% were post-graduates. Majority of the participants were students i.e. 84.5%, 2.4% were Government employees, 3.9% were Businessmen, 8.2% were professionals and 1% were house wives.

The number of singles was 90.8%, married people were 8.7%. The people having children in family were 39.1% and people without children in family were 60.9%. Prepackaged products were bought by 87.9% people. 27.5% people said that they do not look on labels at all while 72.5% said that they considered nutritional labeling during their shopping experience.

### Hypothesis Test

Pearson correlation was used to test the hypothesis and SPSS version 20 has been used to calculate the tables.

### Hypothesis 1:

H1a: Presence of children in family creates the awareness of observing nutritional labels.

H1<sub>0</sub>: Presence of children in family do not create awareness of observing nutritional labels

Table 1: Correlations				
		Do you read the info on the package before you buy it		
Children in Family	Pearson Correlation	.029		
	Sig. (2-tailed)	.679		
	Ν	207		

### Table 1: Correlations

Table 1clearly shows that the correlation (r) of presence of children in family is 0.029 and the P value is 0.679 that is greater than 0.05, hence we accept the Null Hypothesis and conclude that Presence of children in family do not create awareness of observing nutritional labels.

### Hypothesis 2

H2a: Education level creates awareness of observing nutritional labels.

H2<sub>0</sub>: Education level do not create awareness of observing nutritional labeling.

		Do you read the info on the package before you buy it
Education Level	Pearson Correlation	126
	Sig. (2-tailed)	.071
	N	207

### **Table: 2 Correlations**

Table 2 clearly shows that the correlation (r) of presence of Education level is -.126 and the P value is 0.071 that is greater than 0.05, hence we accept the Null Hypothesis and conclude that Education level in family do not create awareness of observing nutritional labels.

In the 3rd part of the questionnaire the respondents were asked to prioritize what they prefer to see on the Nutritional labeling. The results from  $3^{rd}$  part that was related to prioritizing the preferences showed that the top priority of the people was to view the expiry and the manufacturing date only while a very small percentage of people gave priority to health claims and nutritional value.

The results of the interviews revealed that people usually check manufacturing and expiry dates only but they do view the nutritional labeling, specifically the nutritional value, health claims and components used in the product on the first time purchase only or at the time when a new product is introduced in the market.

### 6. Discussions

This research was conducted to see whether Pakistani people in general, view Nutritional labeling while shopping, whether the Nutritional labeling is considered in making decision for choosing the food products and what are the elements of Nutritional labeling that majority of the people focuses on. This thing turns out to be very useful as it enables customers to make the right decision to purchase the packaged food product for having a healthier choice of food products.

Production and expiry dates are also given mandatory importance as it can give an idea to the customer on which date a product was manufactured and up till when it should be consumed. This will ensure healthy eating and reduce the risk of diseases. As low calorie and low cholesterol diet should be the part of daily life these factors are also taken into account while food packaging.

Consumers also pay attention to the country of manufacture and this indicates the concern about buying the food from specific source. It may be because of the food additives some manufacturers may use. With the cooperation of both people and manufacturing organizations the quality of packaged food can be made better and healthier.

### 7. Conclusions and Recommendations

The study assessed that most of the people in Pakistan do consider Nutritional labeling only when a new product is launched or in case of the first time purchase of a known brand. This action is not repeated in case of repetitive purchase. The elements that are always considered include the expiry date and the manufacturing date only.

Another dilemma is that people in Pakistan thinks that they are knowledgeable about the Nutritional labeling. While when interviewed it was observed that people considered date of expiry and manufacturing as nutritional labeling. Consumers are unaware about the GDA, Nutrition facts and other many aspects like amounts of components used. Companies should understand this communication gap between the product knowledge and their consumers. They should educate people regarding the Nutritional labeling so that people can get benefitted by having a healthy food life style.

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Demographics	Category	No. of respondents in	Percentage
		each category	
Gender			
	Male	90	43.5
	Female	117	56.5
Education			
Level	uneducated	1	.5
	Primary education	2	1.0
	intermediate	5	2.4
	Bachelors	158	76.3
	Post graduate	41	19.8
Occupation			
_	student	175	84.5
	govt. employee	5	2.4
	business	8	3.9
	professional	17	8.2
	housewife	2	1.0
Social Status			
	single	188	90.8
	Married	18	8.7
	divorced	1	0.5
Presence of	NOS		
children in	yes	81	39.1
Family	no	126	60.9

Appendix (A) Descriptive Statistics of Demographics