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An Empirical Study on Consumer Awareness of Nutrition Labeling on Fruit Juice

Anju[1], Preeti Sharma[2], Sachin Gupta[3], Kulvardhan[4]

[1]Assistant Professor, Delhi Technical Campus, Bahadurgarh, Haryana
[2,3]Assistant Professor, Ganga Institute of Technology and Management, Kablana, India
[4]Student, MBA, Ganga Institute of Technology and Management, Kablana, India

ABSTRACT

This study will be based on consumer awareness towards the nutrition information on fruit juice labeling, so that with its help the company can make their strategies regarding it more appropriately and also ascertain their brand equity about fruit juice products that are available in the market. By providing nutritional labeling, a product can inform a customer that it has ingredients that are superior to those offered by a rival and that it can fulfill their needs. Customers can select healthier items for themselves and their families by using the nutritional labeling feature. Under this study, the nutrition information's are used to analyze the consumer behavior whether they are aware about the nutritional information on labeling of fruit juice or not, whether they are influenced by the labeling of the product, whether they make purchase decision on labeling information, whether they relate the information about the product to health or not. A survey was used to collect data from 90 respondents in the Rohtak City of Haryana. The current study has selected a specific area based on the idea that this type of investigation will yield more useful and valuable data. The main objective of this study is to analyze consumer awareness towards fruit juice labeling. Using a self-structured questionnaire, data is gathered from the general public for this study. Frequency and percentages are two examples of statistical tools and procedures used in the analysis of the data that was gathered.

Keywords: Consumer Awareness, Nutrition Information, Labeling on fruit juice

INTRODUCTION

In the modern world, packing is both ubiquitous and necessary. Packaging, which is a material that surrounds a product to shield it from harm and includes information about the product's quality, brand, and usage instructions, is what keeps products safe? Through handling and storage until the ultimate consumer, it improves and safeguards the things that we purchase. Without packing, handling products would be a disorganized, expensive, and inefficient process, and modern consumer marketing would be nearly impossible. Well-designed packaging can create convenience and promotional value.
In today's modern market, packaging plays a pivotal role due to labeling information on product package. Packaging is the process of covering and wrapping goods into a package. The main purpose of packaging is to influence control of the location of product storage as well as closely associate with labeling. Information is communicated to the consumers about the products features, ingredients, nutrition's etc. One kind of information that marketers of prepackaged foods convey to their consumers is nutrition labeling. It includes about the products content of nutrients such as protein, vitamin, fat, energy, carbohydrate, minerals etc. through the medium of packaging.

Labeling information helps in creating the awareness and product knowledge to make correct choice of the products to the consumers. If the consumers do not have sufficient time and knowledge of healthy eating when making food choices then he/she will suffer from many diseases like cancer, diabetes, cardiovascular diseases etc. Labels convey to customers that a product has the attributes they desire and that it is superior to similar products from other brands (K, Rita 2009). Occasionally, well-designed labeling and packaging might lead a consumer to believe that the product is something they truly need. When making a purchase, many customers have concerns about the product's quality and potential adverse effects because they believe this is a novel idea. Anything that is written on a product's packaging or any other surface, whether a simple tag or a graphic design, is considered labeling. A product's label may merely list the product's brand name or it may include comprehensive information on the product's ingredients and intended purpose (Kotler, 2001). The FDA (1998) states that a product's label must at the very least disclose the product's name, ingredients, manufacturer's name and address, net weight, and other nutritional information. Customers may decide not to buy a product if the label is not properly formatted or does not make sense to them. Numerous businesses employ packaging and labeling as a tactic to draw customers in and boost sales. (Butkeviciene & associates, 2008).

REVIEW OF LITERATURE

Packaging serves as a medium for consumer communication (Butkeviciene et al., 2008). The only thing that tells a customer about a product in a store is its packaging (Gonzalez et al., 2007). Its purpose is to safeguard the product against harm when it is being transported and moved from one location to another (Wells et al, 2007). Because they are accustomed to judging products by their appearance and verifying their quality before making a purchase, consumers are sensitive and don't want packaging that harbors germs or diseases (Grundvag & Østli, 2009).

Customers frequently choose food products randomly or arbitrarily due to time restrictions and a lack of information about healthy eating, which can result in nutrient shortages and obesity. Consequently, diet-related disorders are more common (Mieczkoska & Panfil-Kuncewicz, nd). According to WHO, 2011a (quoted in Aygen, 2012), "an unhealthy diet is one of the major risk factors for a range of chronic diseases, including cardiovascular diseases, cancer, diabetes, and other conditions linked to obesity."

"A label might carry a great deal of information or only the brand name," claims Kotler (2001). Consumers look for information before making a purchase, and labels, especially those pertaining to nutrition, are one place they can find it (Caswell and Pad berg, 1999). Incorporating unique elements such as color, style, and design into a label not only sets the brand apart from competitors but also enhances the probability of a purchase (Rocchi and Stefani, 2005). Before making a purchase, customers are concerned about the product's authenticity, which they define as "the fact being original" (Mc Leod, 1999).

According to Olson and Jacoby (1973), the label is an extrinsic cue—that is, a feature that is absent from the actual products. A product's label, which includes details about its components, quality, and specifications, can help establish its legitimacy. Marianna, 1997; Halewood and Hannam, 2001). According to Bettman and Park's (1980) theory, the capacity to search for knowledge determines one's ability to find it. According to a number of research, increased education correlates with higher levels of information searching (Katona and Mueller, 1955; Schultz, 1975). Next, a positive relationship between education and consumers' level of agreement on the justifications for label use is postulated. Males are less likely than females to use nutritional labels, according to a recent study on the topic (Nayga, 1996). Nutrition labeling has been mentioned as one of the major tools in helping people make better food purchase decisions and adopt healthier eating patterns (Nayga, 1996; Drichoutis et al., 2006; Grunert and Wills, 2007; Mhurchu and Gorton, 2007; Feunekes et al., 2008; Nørgaard and Brunsø, 2009, cited in Aygen, 2012). Numerous researchers have recognized various aspects of poor diet, physical inactivity, and consequences of diet-related health problems. The amount of vitamins, minerals, fat, carbs, and protein that a product contains, as well as its energy value, make up its nutritional value. With the use of this information, customers can tailor their nutritional regimen to include a balanced diet and choose food items that meet their specific needs and dietary guidelines (Mieczkoska and Panfil-Kuncewicz, nd).

Nutritional labeling is typically significant for two reasons. The first is just giving consumers information about the product to help them make dietary decisions. This should, in principle, let them apply nutritional criteria to help them make these decisions. The second is using a food's unique nutritional advantages as a marketing ploy (Sunley, 2012). Food producers are incentivized by nutritional labeling to enhance the nutrient composition of their goods. In order to reap the benefits of nutritional labeling, consumers must read the labels, comprehend the information they contain, and have faith that the information is accurate and truthful. They must then base their purchasing decision—albeit one that is subject to moderating influences from taste, price, convenience, and cost—on the information they have read.

Research Objectives

- To study the consumer awareness about nutrition information on fruit juice labeling.
- To study whether consumers do read nutrition information on fruit juice labeling.
- To study whether consumers consciously search for nutrition information on fruit juice labeling.
- To study whether consumers trust the information on nutritional labels of fruit juice.
- To study whether nutritional labeling influences consumers' purchase decisions of fruit juice.
- To study whether consumers are able to relate the effect of nutrition information on health.

RESEARCH METHODOLOGY

The current investigation was conducted in the Haryanan city of Rohtak. The primary goal of this study was to investigate consumers' knowledge of the nutrition information on fruit juice labels. Following that, samples of 90 respondents from the

general public were chosen at random. The general public was asked to complete a self-structured questionnaire in order to provide data. The analysis of data collected has been carried out by frequency and percentages to identify the consumer awareness on nutrition labeling.

Research Methodology has been divided into four parts:

- Research Design
- Sample Design
- Data Collection Method
- Data Analysis Procedure

Research Design
A research design outlines the approach and process for gathering the required data. given that exploratory research design is the foundation of the current investigation.

Sample Design
Because of financial and temporal constraints, an ideal sample should represent the entire universe. A sample should therefore never be too large to handle or too small to lose its representation. The following three elements of sample design are emphasized:

- Selecting the sample unit
- Selecting the sampling methodology
- Establishing the sample size

Sample Unit
The entire population of Rohtak City who consumes packaged fruit juice is the study's universe.

Sample Size
The term "sample size" describes the total number of components—90 respondents—that will be analyzed in this study.

Sample Technique
The methods of convenience sampling, also known as non-probability sampling, are applied for the current investigation. For the conclusion to be accurate, careful thought should be paid to the data collection process.

Methods of Data Collection
Three fundamental techniques are typically employed to gather primary data:

- Interview
- Observation
- Survey

Given the purpose of the study, the questionnaire approach proved to be the most successful. The questionnaire is non-disguised and structured, meaning that the questions are provided in a sequential manner.

DATA ANALYSIS & DISCUSSION

Table 1 Do you purchase packaged fruit juice?

Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	80	88.9	88.9	88.9
	No	10	11.1	11.1	100.0
	Total	90	100.0	100.0	

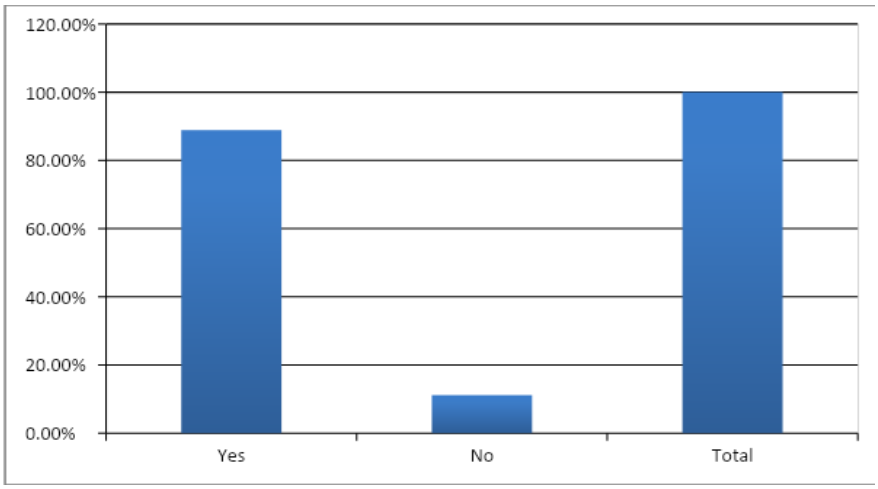

Fig: Table 1 shows the result of consumer purchase packaged fruit juice, More consumers i.e. 80 (88.9%) of the respondents purchase packaged fruit juice, while only 10 (11.1%) do not purchase.

Table 2 Awareness of nutrition information on fruit juice labeling

Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	68	75.6	75.6	75.6
	No	22	24.4	24.4	100.0
	Total	90	100.0	100.0	

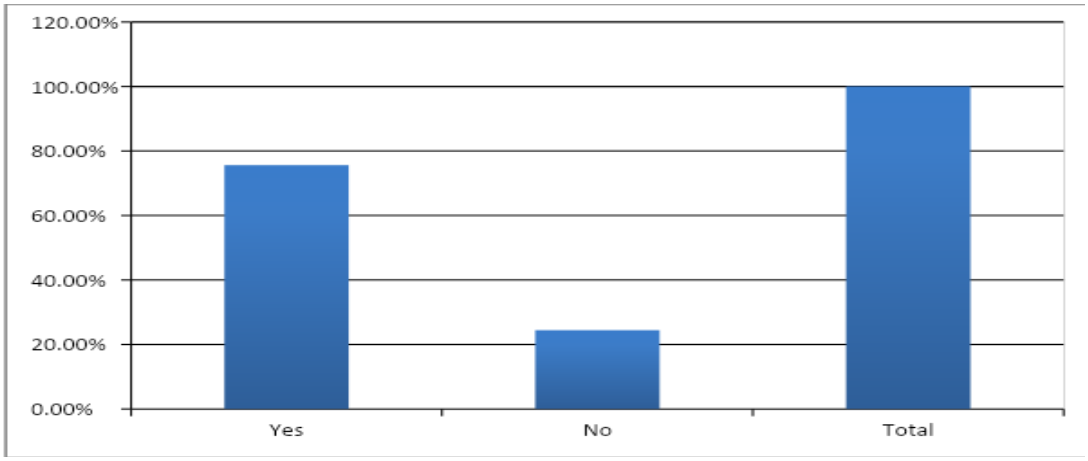

Fig: 2: Table 2 depicts on the awareness of nutritional labeling on packaged fruit juice about 68 (75.6%) of respondents are aware of this information while 22 (24.4%) of respondents are not aware.

Table 3 Reading of nutritional information on the labels of packaged fruit juice before purchase

Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	78	86.7	86.7	86.7
	No	12	13.3	13.3	100.0
	Total	90	100.0	100.0	

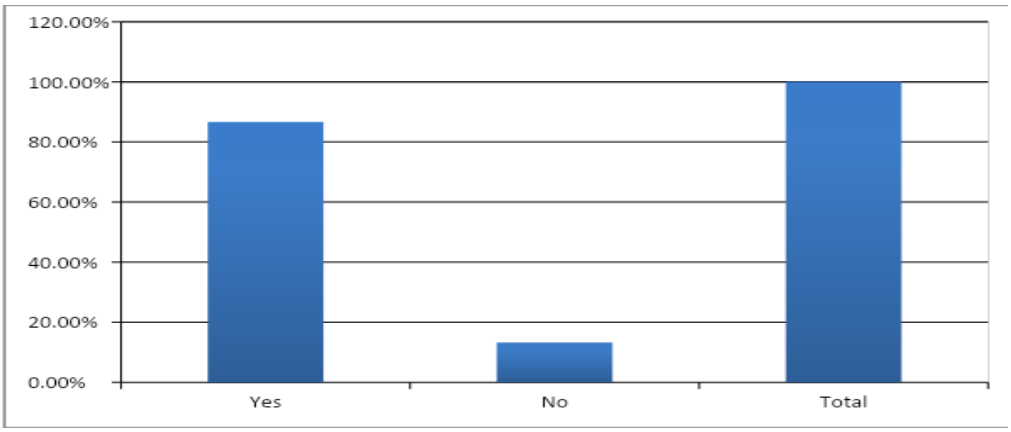

Fig: 3: Table 3 depicts that, consumers read nutritional label information prior to purchase, the result shows that about 78 (86.7%) claim they read; 12 (13.3%) do not read.

Table 4 Consumers trust on the nutrition information on packaged fruit juice					
Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Yes	58	64.4	64.4	64.4
	No	32	35.6	35.6	100.0
	Total	90	100.0	100.0	

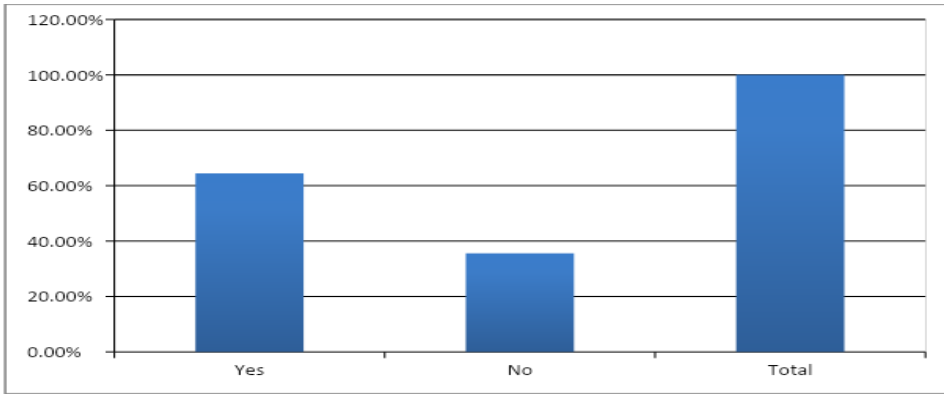

Fig: 4: Table 4 shows, the result of Consumers trust on nutrition information of packaged fruit juice, 58(64.4%) respondents reported in the affirmative that they trust on the nutrition information on fruit juice labels and 32(35.6%) do not trust on the nutrition information on fruit juice labels.

Table 5 Consumers' trust in the authenticity of nutrition information on labels of packaged fruit juice					
Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	2	2.2	3.2	3.2
	Somewhat disagree	2	2.2	3.2	6.5
	Strongly agree	22	24.4	35.5	41.9
	Somewhat agree	36	40.0	58.1	100.0
	Total	62	68.9	100.0	
Missing	System	28	31.1		
Total		90	100.0		

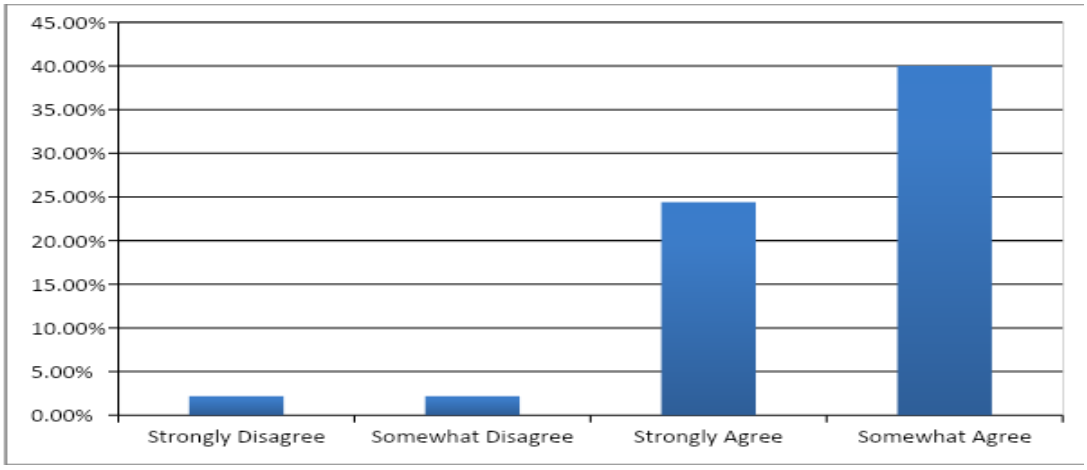

Fig: 5: Table 5 depicts that consumers trust on authenticity of nutrition information on packaged fruit juice, 58 (64.4%) respondents reported in the affirmative that they trust that the nutrition information on fruit juice labels are authentic. 4 (4.4%) do not trust the authenticity of the nutrition information on fruit juice labels; 28(31.1%) was a case of missing data.

Table 6 Conscious search for nutrition information on packaged fruit juice

Response Variables		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never	10	11.1	11.1	11.1
	Always	26	28.9	28.9	40.0
	Rarely	26	28.9	28.9	68.9
	Often	28	31.1	31.1	100.0
	Total	90	100.0	100.0	

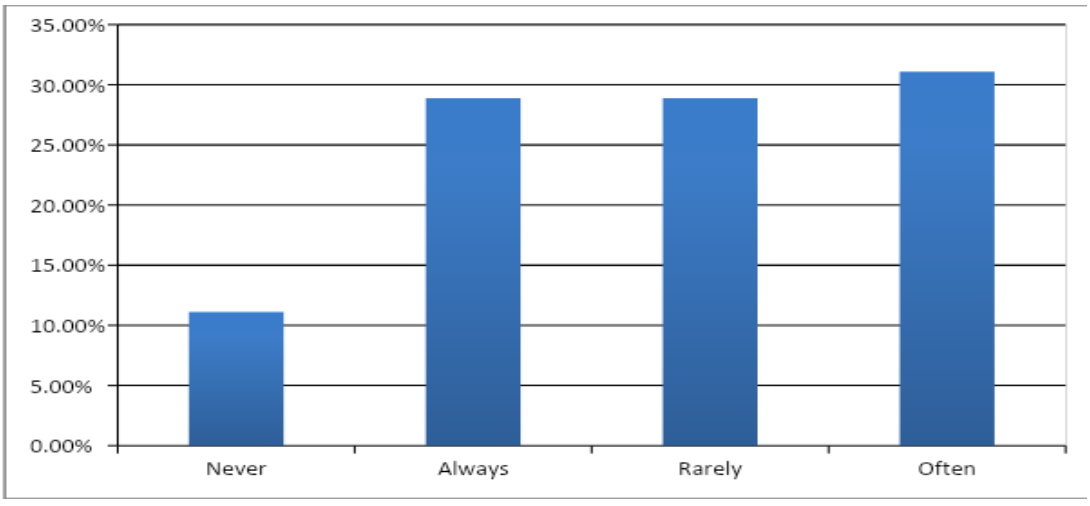

Fig: 6: Table 6 depicts the respondents' conscious search for nutrition information, 26(28.9%) reported that they always consciously search for nutrition information prior to purchase of packaged fruit juice. 26 (28.9%) of the respondents said that they rarely read these information's while 28(31.1%) of the respondents read often the nutrition information and 10(11.1%) reported that they do not engage in such behavior i.e. they never consciously search for nutrition information before making choice of packaged fruit juice.

Table 7 From which source consumers get the nutrition information of fruit juice					
	Response Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Internet	10	11.1	11.1	11.1
	Friends & Relatives	20	22.2	22.2	33.3
	Advertisement	30	33.3	33.3	66.7
	Product labeling	30	33.3	33.3	100.0
	Total	90	100.0	100.0	

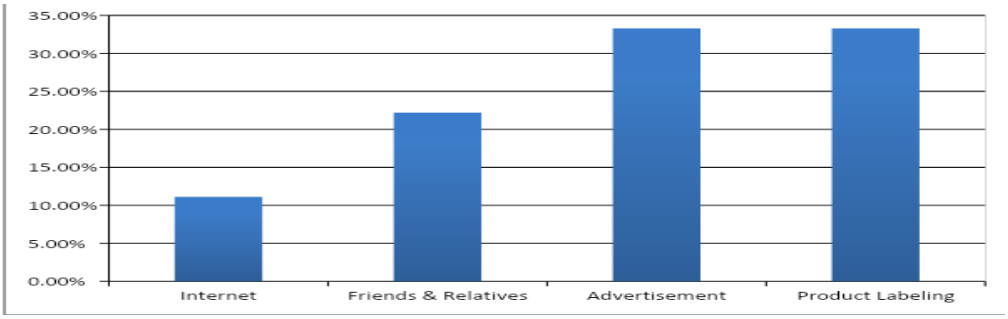

Fig: 7: The table 7 shows that 30(33.3%) of the respondents get the nutritional information from advertisement and product labeling while 20(222%) of the respondents get nutritional information from friends & relatives. Only 10(11.1%) of the respondents get nutritional information from internet.

Table 8 Consumers purchase decision based on nutrition information disclosed on fruit juice labeling					
Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Never	6	6.7	6.7	6.7
	Rarely	20	22.2	22.2	28.9
	Often	28	31.1	31.1	60.0
	Always	36	40.0	40.0	100.0
	Total	90	100.0	100.0	

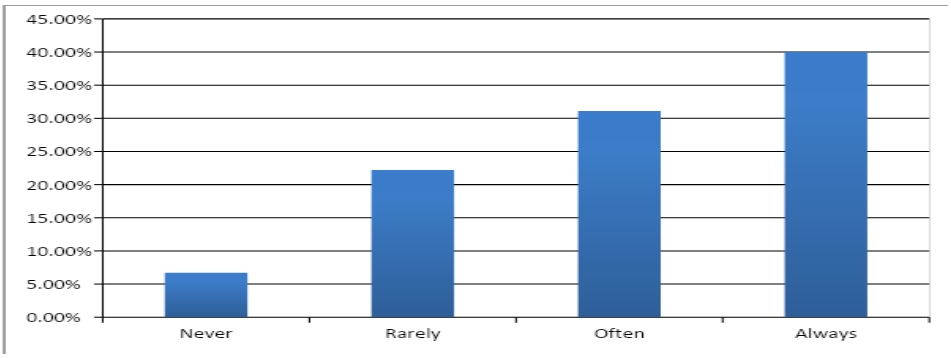

Fig: 8: Table 8 shows the result of consumer purchase decision based on nutrition information, 36(40.0%) of the respondents always purchase packaged fruit juice based on the nutrition information, 28(31.1%) often make purchase decision based on nutrition information, 20(22.2%) rarely purchase packaged fruit juice based on nutrition labeling while only 6(6.70%) never make purchase decision based on nutrition information on labeling.

Table 9 The influence of Nutritional label on purchase choice of package fruit juice					
Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	No	40	44.4	44.4	44.4
	Yes	50	55.6	55.6	100.0
	Total	90	100.0	100.0	

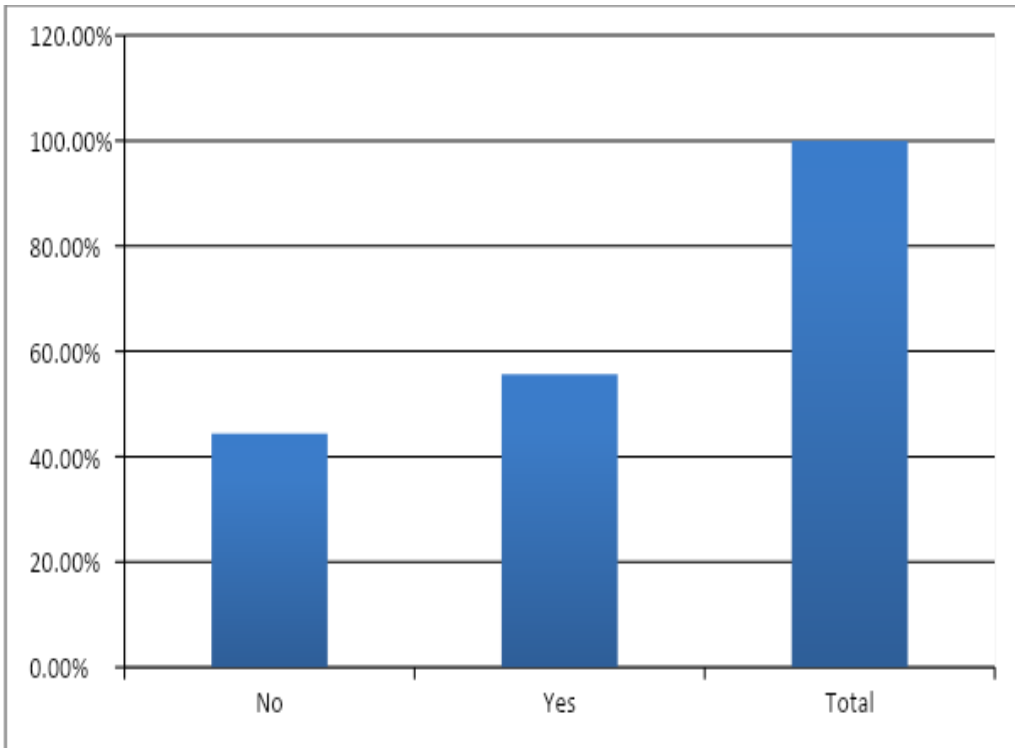

Fig: 9: Table 9 shows the influence of nutritional information on purchase choice, 50(55.6%) said that nutrition information on labels influence their purchase decisions while 40(44.4%) reported that nutrition information on packaged fruit juice do not influence their buying decisions.

Table 10 Consumers ability to relate the effect of nutrition information to health					
Response	Variables	Frequency	Percent	Valid Percent	Cumulative Percent
	Never	6	6.7	6.7	6.7
	Rarely	18	20.0	20.0	26.7
	Always	32	35.6	35.6	62.2
	Often	34	37.8	37.8	100.0
	Total	90	100.0	100.0	

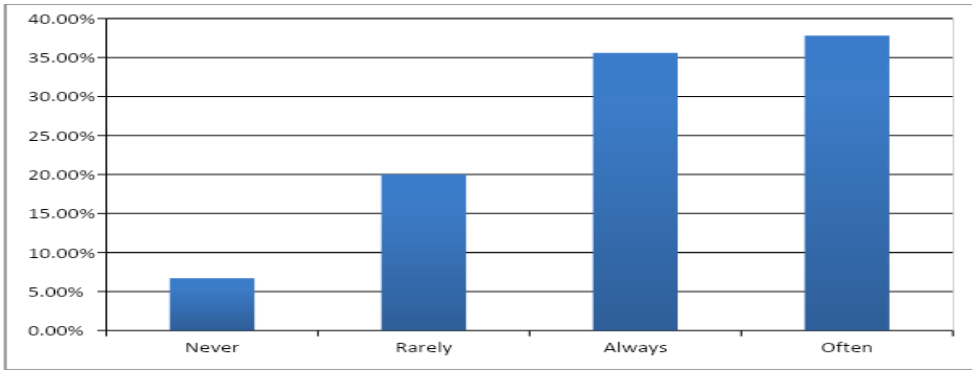

Fig: 10: Table 10 depicts the consumers' ability to relate the effect of nutrition information to health, 66 (73.4%) of the respondents always and often that they are able to relate the effect of nutrition information on their health; 18 (20.0%) are rarely able to relate the effect of nutrition information on health while 6 (6.7%) has never relate the effect of nutrition information on health.

CONCLUSION

Today's consumers are more demanding when it comes to more comprehensive and easily accessible information, especially regarding nutrition information on labels, as a result of changing lifestyles, healthier eating habits, the availability of "ready-to-eat" products, and the growing significance of health and nutrition. The intention of consumers to purchase is significantly influenced by nutritional labels. Since they serve as the initial point of interaction between the customer and the product, these elements are crucial. Results indicate that while only 13.3% of research participants do not read nutrition labels, 75.6% of consumers are considerably aware of the information provided on bottled fruit juice labels. Customers are able to connect the nutritional information to their health and have faith that the data on labels is accurate. As a result, customers actively look for nutrition facts, which have a big impact on their choice to buy packaged fruit juice.

Since nutritional labeling is now a worldwide standard and the study's findings indicate that it may be a strong source of competitive advantage, marketers can benefit from this research by making it required on their products. More awareness campaigns need to be launched by marketers to further enlighten customers about the need of reading product labels and nutrition information before making a purchase. For businesses to succeed in marketing, strong communication channels with both present and future clients are essential. When disseminating information, organizations must use a variety of promotional vehicles at each client touch point. This study indicates that more investigation is required to fully comprehend the problems that will promote the readability of nutritional information disclosed on labels.

REFERENCES

[1]. Aygen, .F.G (2012), "Turkish Consumers' Understanding and Use of Nutrition Labels on Packaged Food Products", International Journal of Business and Social Science, Vol. 3 No. 6, pp. 171–183.
[2]. Baltas, G. (2001), "Nutrition labeling: issues and policies." European Journal of Marketing 35(5/6): 708-21.
[3]. Ben. E.A. Oghojafor, Patrick K.A. Ladipo, Kennedy Ogbonna Nwagwu, (2012), "An empirical determination of consumers' reaction to nutritional labeling of prepackaged food products in Lagos, Nigeria." International Journal of Development and Sustainability, Pages 171-185.
[4]. Bettman, J. R., & Park, C. W. (1980), Effects of prior knowledge and experience and phase of the choice process on consumer decision processes: A protocol analysis, Journal of Consumer Research, 7(3), 234–248.
[5]. Butkevičienơ V. et al., (2008), Engineering Economics, ISSN 1392-2785, No 1 (56).
[6]. Caswell, J.A. and D.I. Padberg. (1999), "Toward a More Comprehensive Theory of Food Labels", American Journal of Agricultural Economics, 74:460-468.
[7]. Halewood, C. and Hannam, K. (2001), "Viking Heritage Tourism: Authenticity and Commodification", Annals of Tourism Research, 28, 565-580. http://dx.doi.org/10.1016/S0160-7383(00)00076-1
[8]. Kotler P. et al., (2001), Principles of Marketing, 2nd edition, Corporate Communications: An International Journal (Emerald Group Publishing Limited)-Vol. 6, Issue: 3, pp 164-165.
[9]. Nayga, Rodolfo M., 1996, "Determinants of Consumers' Use of Nutritional Information on Food Packages," Journal of Agricultural and Applied Economics, Cambridge University Press, vol. 28(2), pages 303-312.

[10]. Rita Kuvykaite, A.D., (2009), "Impact of package elements on consumer purchase decision", Journal of econonmics and management, pp: 441-458.
[11]. Rocchi, Benedetto & Romano, Donato & Stefani, Gianluca, 2005, "Distributive impacts of alternative agricultural policies: A SAM-based analysis for Italy," Cahiers d'Economie et de Sociologie Rurales (CESR), Institut National de la Recherche Agronomique (INRA), vol. 77.
[12]. Schultz, T.W. (1975), "The Value of the Ability to Deal with Disequilibria", Journal of Economic Literature, 13, 827-846.
[13]. Sogn-Grundvag, G., & Østli, J. (2009), "Consumer evaluation of unbranded and unlabelled food products: the case of bacalhau", European Journal of Marketing, 43 (1/2), 213-228.
[14]. Teisl, M.F., N.E. Bockstael, A. Levy, 2001. "Measuring the Welfare Effects of Nutrition Information on Functional Foods. PhD Dissertation: The Ohio State University.
[15]. Wells, L. E., Farley, H., & Armstrong, G. A. (2007), "The importance of packaging design for own-label food brands", International Journal of Retail & Distribution Management, 35 (9), 677-690.