

**PRODUCT PACKAGING INFORMATION AND CONSUMER PREFERENCE FOR NON-  
ALCOHOLIC BEVERAGES IN PORT HARCOURT, NIGERIA.**

**Tumba, Monday<sup>1</sup> & Azuonwu, Benneth Elekwachi<sup>2</sup>**

**<sup>1</sup>Department of Marketing, Faculty of Management Sciences, Ignatius Ajuru University  
Of Education, Rivers State, Nigeria, <sup>2</sup>Department of Marketing, Entrepreneurship and  
Procurement, Faculty of Management Sciences, Federal University Otuoke, Bayelsa  
State, Nigeria**

<sup>1</sup>Email: [mondaytumba@yahoo.com](mailto:mondaytumba@yahoo.com), 07063196080,

<sup>2</sup>Email: [azuonbenneth12@gmail.com](mailto:azuonbenneth12@gmail.com), 07036590862,

**ABSTRACT**

The general objective of this study was to determine the extent to which nutritional Information relates to consumer patronage. Other specific purposes were to determine the influence content information, health benefit information and nutritional value benefit information on product preference, Repeat Purchase and brand loyalty respectively. The survey design method was employed as it is seen as a guide used in collecting and analyzing data from the Pabod Breweries and Nigerian Bottling Company (NBC), Pot Harcourt. The population for the study consisted of 300 employees of Pabod Breweries Pic, Oginigba, and NBC Trans Amadi Industrial Layout, Port Harcourt. Of this figure, 50 were management staff. While the remaining 250 were the production and distribution workers, the management staff consists of the Directors, managers, accountants, supervisors and quality control experts. The sample size for this research consisted of 10% of the research population. Specifically, the sample size for the study will consist of 30 respondents that will be selected, randomly. The simple random sampling technique was adopted so as to obtain diverse opinions about the subject matter. The research instrument used for this study was a structured questionnaire and secondary data. The simple percentage was used to analyze the research questions while the chi-square statistical tool was used to test the hypotheses of this study. It was found that sugar content information, health benefit Information and Nutritional Value information has significant influence on product preference, Consumer's repeated purchases and Brand loyalty respectively. It was concluded that Label information plays an essential role for the consumers, dealers and retailers in the marketing programs. Label information generates large preference and by using information on the label of the products sales can be increased. Various label method are used by the marketers in order to offer customers an additional incentive to purchase their products. It was then recommended amongst others that label Information should be adopted by all Breweries in Nigeria. Its elements should be made more transparent as to bring about more confidence in the mind of investors and customers and that firms should endeavor to train or retrain staff on the knowledge of product information.

***Keywords: Sugar Content Information, Endorsement Evidence, Nutritional Value Information, Product Preference and Brand Loyalty***

**Background of the Study**

The developments of international business have exposed both producers and consumers to a wide variety of products and brand of different origins. Such a situation has increased the choice opportunities offered to consumers and equally exposed them to an ever- growing number of product information (Wansink, 2003). Therefore, when customers choose among competing good products, they are faced with products quality and performance uncertainty. The decision to buy usually starts with a set of characteristics or attributes that the consumer considers important. Consumers often use these attributes to determine which goods produced can satisfy their needs;

and as society becomes more conscious of civilization, consumers become more and more attentive, sensitive and aware of the importance of nutritional information in a bid to ascertain food attributes as well as determining what they stand to gain in the course of using the product before purchase, (Laforet, 2011). The increase in unsubstantiated and/or inappropriate product claims in the 90's help to create the gap that exists between potential purchasing decisions based on welfare of the consumers.

Vranesevic and Stancec (2003) said that, consumers access product quality according to how they value information content that accompany the product as well as the characteristic of the product they purchased. Generally, consumer consciousness regarding what they buy originates as a result of health disease related problem associated with what they eat and drink. Consequently, Trijp and Vanderlans (2007) argued that disease such as Type II diabetes, cancers, and heart diseases are caused by some drinks we take and food we eat. Indeed, within this situation of risky consumption caused by the variety of carbonated drinks and food products available to the market through business activities of several producing firms, and the attendant outcomes of such consumption, the ultimate goal of government, regulatory bodies and the consumers is to look for means by which risks associated with purchase decision over food items we buy and consume could be drastically minimized where outright eradication is not feasible. This is why producers and marketers of packaged foods and beverages intensify promotion of their products through communication or detailed exposure on their products especially consumables, by sticking bigger labels on their products' (Cheftel, 2005).

This label usually contains all nutritional information which consumers access in the course of forming purchase decisions. Wells, Farley and Armstrong (2007) noted that: ...label which is one of the forms of obtaining nutritional information is an important marketing tool which goes beyond the mere identification of a product, to try to be a warrant of its quality for a consumer. Nutritional information are information that describe use characteristics of the product such as price, taste, and nutritional value for the product, or non-use characteristics such as the environmental impact or moral/ethical element surrounding the product manufacturing process (Wells, Farley and Armstrong, 2007).

Also Kotler, (2003) held that, 'nutritional information describe who made the product, where the product was made, when it was made, what it contains, how it is to be used and how it should be used safely'. The emphasis on labeling should be on creating competitive market for quality attributes such as food safety and process attributes and providing reasonable consumer protection. Thus, consumers often use the described product attributes as contained in nutritional information to determine which product can satisfy their needs. Aaron, Mela and Evans (2004) observed that labels are one of the most important features of product packaging designed to communicate message/information (Laforet 2011). Vazquez, Bruce and Studd, (2004) added that: ...firms spend more money on packaging than on advertising, and packaging is often the most distinguished marketing effort in that, it contains a label that holds necessary information about the product attributes that consumer consider before purchase (Vazquez, Bruce and Studd, 2004). Similarly, a label assist consumers evaluate products and brands through social, economic and environmental information the producer communicate to the consumer(s). Therefore, there is the need to have a purview the nutritional information and how it relates to consumer patronage of packaged food and beverages in Port Harcourt.

### **Brief History of the Pabod Breweries**

Pabod breweries limited engaged in the manufacture, distribution, and sales of beer. The company was incorporated in 1978 and is based in Port Harcourt Nigeria at 186/187 Trans Amadi Industrial

layout in Port Harcourt Rivers State. Though it was known for producing Grand Lager Beer, Grand Malt, Grand Soda, and Bond Super Lager Beer in the early eighties, sales commercial in 1983 which Grand Lager Beer (GLB) later others products like Grand Malt (GM) Grand Soda (GS) and Bond Super Lager Beer (BSLB), a special Beer with Nigerian raw materials were added. Production partly stopped in 1994 and completely terminated in 1996. In 2007 Brewtech GMBL was awarded with the contract for the complete over haul and reactivation, which was successfully commissioned in December 2007.

### **A Brief History of the Nigerian Bottling company (NBC) Ltd.**

Coca-cola is a carbonated soft drink sold in stores, restaurants and vending, machines worldwide (The Coca-Cola Company claims that it is sold over 200 countries). It is produced by the Coca-cola Atlanta, Georgia and is often referred to simply as Coke or as Cola or pop. Originally, intended as a patent medicine when it was invented in the late 19th century by John Pemberton, Coca-Cola was bought out by businessman Asa Griggs Candler, whose marketing tactics led coke to its dominance of the world soft drinks marketing throughout the 20th century. The company produces concentrate, which is then sold to various licensed Coca-Cola bottlers throughout the world. The bottlers, who hold territorially exclusive contracts with the company, produce finished product in cans and bottles from the concentrate. In combination with filtered water and sweeteners; the bottlers then sell, distribute and merchandise coca-cola in cans and bottles to retail stores and vending machines.

### **Statement of the Problem**

Economic literature has dealt with the question of product labeling from several angles: signaling modes, label sponsoring, quality level related to label, consumer's perception of quality signals etc. Hansink and Park (2002) said the label's use and role represents an interesting point in the studies dealing with the proliferation of these quality's signals, because the consumer perceives them as an evaluation criterion of the product. Indeed, within a context of fierce competition and with more and more demanding consumers, the identity of a product has become a fundamental success factor in market this identity which is charted by the label makes the consumer's choice easier as it is an important evaluation criterion for the consumer. Nonetheless, Joop de Booer, (2003) stated that, 'the impact of the label on the purchase decision depends on the way the consumer perceived this signal of quality, on his understanding and the degree of his confidence in the label'. Therefore, an efficient labeling strategy can convince the consumer of the differences between labeled products and the others, while allowing him to memorize the label and trust it. Lando and Labiner-Wolf (2006) said that: '...many labels have failed to fulfill their roles for several reasons: either the consumers are not knowledgeable enough about the information provided on labels to make internal decisions about the content of the product or the products attributes and aspect which are covered by the label are not among the consumer's interest (Lando and Labiner-Wolf, 2006: 45).

A higher percentage of food drink firms do not know the very label format that is easily understood by the consumers, despite their drive for patronage in the market place. Even so, consumers have difficulties in interpreting and understanding the nutrition and health claim information. The specific problems of this study include poor use of product information in terms of sugar content information. National Agency for Food and Drug Administration and Control (NAFDAC) endorsement evidence, nutritional value information and health benefit information which has resulted in poor consumer patronage in terms of product acceptability by consumers.

### **Objectives of the Study**

The general objective of this study is to determine the extent to which nutritional information relates to consumer patronage. Other specific purposes include:

- 1 To determine the influence content information on product preference.

2. To determine the influence of health benefit information on Repeat Purchase.
3. To determine the effect of Nutritional Value benefit information on Brand Loyalty.

### **Research Question**

The following research questions were answered:

1. To what extent does sugar content information influence product preference?
2. To what extent does health benefit information influence Repeat Purchase?
3. To what extent does Nutritional Value information affect Brand loyalty?

### **Hypotheses**

The following research hypotheses were tested:

1. There is no significant influence sugar content information on product preference.
2. There is no significant influence of health benefit information on Repeat Purchase.
3. There is no significant effect of Nutritional Value information on Brand loyalty.

### **Significance of the Study**

Nutritional information as a means of educating actual and potential consumers undergoing the purchasing decision making process is very relevant that it cannot be pushed aside in any consumer oriented economy. Therefore, the degree of success or failure on the part of any business organization depends to a greater extent on its ability to reach out to its customers and this could be attained through the use of adequate and sufficient educational effort of firms in providing sufficient and relevant information on how relevant nutritional could yield benefit to consumers. This study will be beneficial to food and beverage industry who aim to achieving optimum returns on investment by obtaining better knowledge of consumers expectation.

Furthermore, government will benefit from this study as improvement in the organizational performance and profit through patronage, this will Increase tax payments. The study will in no small way add to existing body of knowledge, which will remain of immense benefit to other researchers on related topic. Finally, the result of this study will serve as a research base for scholars who may need part or whole of the study for their research work.

### **Review of Related Literature**

This chapter extensively reviewed literature in relation to nutritional information and consumer patronage of packaged foods. The major issues to be reviewed will include: academic review, conceptual and theoretical framework.

#### **Academic Review**

In a climate in which the prevalence of diet nutrition, and health related disease is increasing, it is important that Nutritional information provided on food labels be appropriate and understandable to the consumer and that it impact food choice behaviours. Aaron et al, (2004), the product nutritional information is an important vehicle that food information can use to communicate essential information about nutritional value, sugar content and health benefits. Laforet (2011), potentially, this represents a valuable tool to help consumers make Informed decisions about their diet and lifestyle.

Wilson and Bahna, (2005) conducted a study on "the influence of tood labels on South African consumers' purchasing behavior". The objective of the study was to explore a sample of food labels on their purchasing behavior. They use the focus group discussion techniques. The result showed that consumers read food labels to access the nutritional value, personal benefits, product quality

and that consumers are in some cases motivated by food labels to purchase a product, but may also have a lesser influence where they are untroubled by the label information. They observed that the findings will give food manufacturers an idea of what consumers are looking for in food labels and to make sure that the truth about the products is communicated.

Nabill, Jeldi, and Imed Zalem (2010) conducted a study on "the impact of label perception on the consumers' purchase intention: an application on food products. The purpose was to provide an overall view of signals of quality, and investigate the different aspect of the consumer's perception of labeled foodstuff. They used exploratory factorial analysis. The result showed that the higher the perceived risk and the product implication are, the stronger the impact of the label perception on consumers, purchase intention. They observed that, perception of labels and Its Impacts on the intention to buy vary significantly according to gender, age, and educational level of the consumer.

In the same vein, Josephine (2009) conducted a study on consumer attitudes towards nutrition information on food labels. The study objective was to provide appropriate and understandable nutrition information to the consumer and its impact on food choice behaviour. Their result indicated that consumers approved of the provision of nutrition on packaging. But they self-rated their own knowledge level as low. They recommended that regional and contextual factors which may influence consumer responses to nutrition information be considered when developing nutrition information strategies. Other previous work on product information/labels and consumer behavior in Nigeria include Onyejiuwa (2000), Oko, and Eboh, (2013) who employed Spearman's Rank. The study observed a positive and significant relationship between product information and consumer behaviour.

Weaver and Finke (2003); Peters-Textelra, and Badrie, (2007) in their separate studies argued that, food industries throughout the world have been creating packaged food Items Intended to make consumers food choice more convenient and less time consuming. Weaver & Finke (2003) further stated that, in many cases, the food can be cheaper because it is mass produced.

Although, Wilson & Bahna (2005) said that, many natural and unnatural additives and preservatives are routinely added to either extend the shelf life or to make the colour, texture and flavor more appealing. Unfortunately, it is considerably less nourishing than the "real" fresh food that nature provides. Most packaged food contains excessive amount of salt and sugar, and a long list of preservative, artificial flavors and coloring, which if consumed regularly in even moderate amounts, is ultimately detrimental to consumers overall health (Weaver & Finke, 2003; Lifu, 2012).

Although sugar makes packaging food and soft drinks tasty, it comes at a high cost, health-wise (Wansink, 2003). Refined sugar has absolutely no nutritional value whatsoever; it is loaded with empty calories. Aside that, if consumers continue to consume sugary products, the after effect is that, it sends their metabolism into high alert (Wilson and Bahans, 2005). While each of the consumers has a different metabolism rate, Metabolism is intended to be a slow process, to allow energy to be delivered at a regular rate so that the consumer always has some energy in reserve. Whitney and Rolfes (2002) said that, natural foods such as fruits, vegetables, beans and garri have built in natural sugars which take much longer to break down than refined sugar.

Nayga (2006), are of the view that, with refined sugar, consumer get a sugar fix, which gives the consumer a quick burst of energy, followed by an even faster sugar withdrawal. If the consumer repeats this scenario over and over again, his body will no longer be able to produce enough insulin, thereby creating room for diabetes. Unfortunately, the processes that the packaged food goes through frequently results in about half the natural flavours and many nutritional benefit being lost,

so, in order to disguise this fact, food companies are forced to add salt and sugar to make consumer think that the food still has some flavour.

Despite noble attempts by some of the conscientious food companies, the nutritional value of packaged and processed foods is still considerably less than that found in natural food. Trijp and Van der Lans (2007) said that this reduced nutritional value from packaged foods is of course not good for consumer's health. Eating more of it would not make up for consumers nutritional needs rather, it only results in one gaining weight. This is why consumers evidence to show that fruit drinks they consume are highly spiced with sugar. And the only means of verifying this is through information contained in the label of the fruit drink product, (Teisl, Bockstenel and Levy, 2001; Scott, 2008).

### **Nutritional Value Information/Health Benefit Information**

Another important issue related to use of nutrition information is whether reading nutritional information with all the advantages and disadvantages of the different formats, affect purchasing behaviour or do other factors (e.g. taste) dominate the decision process, Vazquez, Bruce and Studd (2003) reports that, in the 1999 Diet and Health survey, one-third of consumers said, they change their decision to buy a product because of the information on the nutritional labels. The same authors reported that they change their purchasing behaviour due to nutritional labels.

Similarly, Grunert and Wills (2007), Zhang and Wang, (2010) found that, nutrient information affect food choice. The most common reason cited for use of information was the avoidance of negative nutrients. On his point, Wansink (2003) found that nutritional information affect brand choice. In other studies, results suggest that labeling of food product with respect to their nutritional characteristics along with information campaign to educate consumers; can significantly affect consumer behaviour (Wimmer and Stiles, 2001; Inman, Winer and Ferraro, 2009; Vani, Babu and Panchanatham, 2010).

Overall, it appears that nutritional information use affects purchasing behaviour because it influences valuations and perception of the product. LaFrance, (2004) reported that, in the 1990 FMI (Food Marketing Institute) Trends Survey, 73% of the samples said that health claims influence their purchase decision, even though only 8% considered health claims very believable. Health claims in front of the packages also create more favourable judgments about the product. Dhar, Chavas and Gould, (2003) said because these claims also lead to truncate Information search when a product features a health or content claim, respondent view the product as healthier and more likely to purchase it irrespective of their information search behaviour.

Health benefit information is intended to be a market based means to internalize costs and to increase public participation as well as raise awareness of health environmental problems (Ulrich, Campana, and Malkewitz, 2010).

Duplessis and Rousseau (2007) used two of the most general goals provided by health/environmental information on label such as:

- (e Providing consumer with information
- b) Reducing the health/environmental impact of products and consumption.

Lando and Labiner-Wolf (2006) observed that, as an information policy, formation on product environmental labels can influence consumers purchasing decisions by providing;

- i. Simple health/environmental information that a consumer might not otherwise seek.
- ii. Experts' opinions are incommensurable, such as water pollution and air emissions during manufacturing.
- iii. Clarity on environmental superiority, particularly with third party certifying claims.

### **Theoretical Framework**

Bear (2003) defined preference as how individuals choose or prefer a product among competing products. He opined that, product choice and preference patterns are based on consumer's perceptions, image, and attitude formed from experiences, information and need. Furthermore, preference behaviour involves a decision process related to what consumer buy, how they buy and what they buy (Kotler, 2003). This decision process is often initiated by preference motives, which determines why consumers buy a particular product amongst competing ones (LaFrance, 2004). On this basis, we define patronage as the regular purchasing of goods and services by a potential buyer from a particular seller as a way of demonstrating an intention to keep the product/service above those on competition. As stated by Laforet (2011), the preference decision process involves three basic components: product attributes, consumer's characteristic and choice context. Preference for context product attributes differ by consumer and these preferences are reflected in product choice. Some of these attributes are product price and health related information, conveyed company's reputation, purchasing convenience, merchandize quality, services offered (Dicks, 2007, Nayga, 2006).

Consumer characteristic influence patronage behaviour at each stage in the decision process and choice involves how the consumer decides which particular product should be bought. Interestingly, Lando and Labiner-Wolf (2006) stated that, patronage behaviour is influenced by product characteristic (e.g. quality, packaging, taste, nutrition, price and situational behaviour and attitudinal factors (e.g. special diet status, diet health awareness, buyers' income, working status). Also, environmental psychologies discuss patronage in terms of approach and avoidance behaviour. Approach behaviour is described as a willingness or desire to stay, explore, work or affiliate. In contrast, avoidance behaviour is represented by opposite behaviour, a desire not to stay, explore, work and affiliate (Bae, Nam, and Kim, 2011). Product manufacture must provide information about product quality, benefits endorsement etc., to succeed in a competitive market.

Duplessis and Rousseau (2007) said marketing and environmental stimuli enter consumer consciousness and a set of psychological process combined with certain consumer's characteristics to result in decision process and purchase decisions. Topoyan and Bulut, (2008) opined that the marketing task is to understand what happens in consumer's consciousness between the arrival of the outside stimuli and the ultimate purchase decisions. Four key psychological processes: motive, perception, learning and memory. Fundamentally, influence consumer responses. Consumers are often times in need. Some needs are biogenic; they arise from physiological states of tension such as hunger, thirst or discomfort. Other needs are psychogenic; they arise from psychological state of tension, such as the need for recognition, esteem or belonging. A need becomes a motive when it is aroused to a sufficient level of intensity to drive us to act.

Sigmund Freud, Abraham Maslow and Fredrick Herzberg theories of motivation carry quite different implication for consumer analysis. Sigmund's theory He assumed that the psychological forces shaping people's behaviour are largely unconscious and that a person cannot fully understand his or her own motivation. When a person examines specific brands, she will react not only to their stated capabilities, but also to other, less conscious cues such as shape, size, weight, material, colour and brand name. In line with this, Maslow's arranged human needs in a hierarchy, from most

to least processing physiological needs, safety needs, social needs, esteem needs and self actualization. People will try to satisfy most needs first.

### **Frederick Herzberg's two factor theory**

Herzberg distinguished between two broad categories of factors that affect people working on their jobs: the first category, hygiene factors, is the characteristics of the work place: Company policies, working conditions, pay, co-workers, supervision etc. These factors can make people unhappy if they are poorly managed. If they are well-managed, and viewed as positive by employees, the employee will no longer be dissatisfied. However, no matter how good these factors are, they will not make people truly satisfied or motivated to do a good job. According to Herzberg, the key to true job satisfaction and motivation to perform lies in the second category: the motivators. The motivators design the job itself, that is, what people do at work. Motivators are the nature of the work itself, the actual job responsibilities, opportunity for personal growth and recognition, and the feeling of achievement the job provides. When these factors are present, jobs are presumed to be both satisfying and motivating for most workers.

From the marketing view point, Herzberg developed a two factor theory that distinguishes dissatisfiers (factors that causes dissatisfaction) from satisfaction (factors that causes satisfaction). The presence of dissatisfiers is not enough to motivate a purchase; satisfiers must be present to motivate a purchase (Bateman and Snell, 1996).

A motivated person is ready to act. The way he or she acts is influenced by her view of the situation. Perception is the process by which we select, organize and interpret information inputs to create a meaningful picture of the world. Perception depends not only on the physical stimuli, but also on the stimuli relationship to the surrounding field and on conclusion within each of us. In marketing, it is said that, perceptions are more important than the reality, as it is perception that will affect consumers' actual behaviour and preference.

### **Consumer Patronage**

Researches in this area of interest mostly focused on the dimensions of nutritional information and consumer patronage such as: nutritional value, sugar content, health benefit information and Health Agency endorsement evidence in a bid to determine correlation if any, between these variables. Scholars have made some contributions in this regard through various studies conducted in the past. It is on the platform of those previous researches that the researcher embarks on further research in order to add to existing body of knowledge.

**Independent Variables:** The following indices are used to measure the nutritional information on carbonated drinks' labels:

**Sugar content information:** This refers to the extent to which consumer base their product purchase decision on the quantity of sugar contained in the packaged fruit drinks available for sale.

**Endorsement Evidence:** This refers to how consumers rely on the evidence of endorsement by health agency (e.g. NAFDAC) to ascertain that the packaged fruit drinks are fit for consumption.

**Nutritional Values Information:** This concerns consumers outlook for nutritional benefits they stand to enjoy if they consume a specific packaged fruit drink. This stand as one of the principal expectation from consumers before purchase decision is made.

**Health Benefit Information:** This refers to the extent consumers focus attention to health benefit promises contained in the product information before purchase decision is made. This is because, health is associated with life and environmental factors which promote healthy living.

**Dependent Variables: Consumer Preference**

**Product Acceptability by consumers:** This refers to the extent to which consumers depend on what they would benefit from packaged fruit drink in terms of nutritional benefit, NAFDAC endorsement evidence, sugar content level and health benefit information contained in the labels before deciding whether or not to accept a given product among the packaged fruit drinks as a favorite coca cola brand. The dependent and independent variables are shown in the conceptual framework.

**RESEARCH METHODOLOGY**

This chapter described the research design, population of the study, sampling techniques, method of data collection, validation of research tools as well as method used for data analysis.

**Research Design**

The term design implies a plan, guide, frame work, scheme or blue print. Research design can therefore be defined as a scheme or a blue print for data collection, prior to the actual study. It also deals with the specific structure and strategy for investigating the relationships among the variable of study; thus a frame work that specifies the nature of investigation. In other words, research design refers to the plan, structure and strategy the researcher intend to use in order to obtain reliable answers to the research questions posed and hypotheses formulated for the study. In this study, the survey design method was employed as it is seen as a guide used in collecting and analyzing data from the Pabod Breweries, Port Harcourt. By this method of design, research work carried out by the researcher could be controlled.

**Research Population**

The Population of this study comprised the entire staff of Pabod Breweries Pic and NBC In order to achieve the purpose of this study, the population for the study consisted of 300 employees of Pabod Breweries Pic, Trans Amadi Industrial Layout, Port Harcourt. Of this figure, 50 were management staff. While the remaining 250 were the production and distribution workers, the management staff consists of the Directors, managers, accountants, supervisors and quality control experts.

**Research Sample and Sampling Technique**

The sample size for this research consisted of 10% of the research population. Specifically, the sample size for the study will consist of 30 respondents that will be selected, randomly. The simple random sampling technique was adopted so as to obtain diverse opinions about the subject matter. The respondents were randomly selected in order to avoid any skewness in the data that will be generated.

**Instrumentation**

The research Instrument used for this study was a structured questionnaire. All questions formulated in it related to the research questions of this study and these questions were centered to the selected scope of this study. Other research instrument that was additionally used was the personal interview method.

**Validity of Instrument**

Validity of the questionnaire used for this study was made possible by my supervisor who corrected the questions in it. Other two supervisors also assisted me to examine the questionnaire of the study to ensure that it measure what it was meant to measure.

**Reliability of Instrument**

The degree of reliability of the questionnaire was based on the test-re-test method. This involves administering the questionnaire twice to the sampled population which was not part of the sample size. Data obtained from them was used to calculate the reliability. This study applied Cronbac alpha and the figure arrived at was 0.87. This means that the questionnaire could elicit the same information always from the same set of respondents.

**Method of Data Analysis**

The researcher used the chi-square statistical tool to test the hypotheses of this study. The researcher considered the use of chi-square as appropriate in this study.

The formula is:

$$X^2 = \sum (Fo-Fe)^2 / Fe$$

Where:

- X<sup>2</sup> = chi-square     Σ = sum of score;
- Fo = observed frequency
- Fe = expected frequency

**DATA PRESENTATION, ANALYSIS AND RESULT PRESENTATION**

This data presentation, analysis and result presentation were discussed in this chapter. To aid accuracy, only correctly filled and returned questionnaires were used and the correctly filled questionnaires were 25 out of 30 sent out.

**Data Presentation, Analysis and Result Interpretation**

Presentations of the data collected were on chart forms. Simple percentage mathematical method was then applied on each data presented 50 as to aid its analysis and then, the result interpretation was followed. All presentation carried out here was based on each research questions formulated.

**Research Question One**

To what extent does sugar content information influence product preference?

**Table 4.1.A: Shows the response rate to questionnaire item 1-5**

Opinion	Observed Frequencies	Percentage
Great Extent (GE)	16	64
High extent (HE)	5	20
Medium extent (ME)	2	8
Small extent (SE)	2	8
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Research Data 2019

From the table above 64% said to a great extent, 20% said to a high extent whereas 8% each said to a medium and small extent.

### Research Question Two

To what extent does health benefit Information influence Repeat Purchase?

Table 4.1. B: Shows the response rate to questionnaire item 6-10

Opinion	Observed Frequencies	Percentage
Great Extent (GE)	14	56
High extent (HE)	5	20
Medium extent (ME)	4	16
Small extent (SE)	2	8
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Research Data 2019

Table 4.1 above shows that 56% answered to a great extent, 20% said high extent, 16% said to a high extent while 8% said small extent.

### Research Question Three

To what extent does Nutritional Value information affect Brand loyalty?

Table 4.1.C: Shows the response rate to questionnaire item 11-15

Opinion	Observed Frequencies	Percentage
Great Extent (GE)	15	60
High extent (HE)	6	24
Medium extent (ME)	2	8
Small extent (SE)	2	8
<b>Total</b>	<b>25</b>	<b>100</b>

Source: Research Data 2019

From the table above 60% answered to a great extent, 24% said to a high extent 8% said to a medium extent and 8% said small extent.

### Test of Research Hypotheses

The formulated hypotheses of this study were tested based on the data gathered from the corresponding research questions to it. Chi-square statistical tool was employed to test the hypothesis of this study. The decision rule is to accept alternative hypothesis if the calculated  $\chi^2$  is greater than the critical value of  $\chi^2$ .

#### Test of Hypothesis One

$H_{01}$ : There is no significant influence of sugar content information on product preference.

#### Table 4.2A: Evaluation of Data by Chi-square Method of Analysis.

S/N	Fo	Fe	(Fo-Fe)	(Fo-Fe) <sup>2</sup> /Fe
1	15	5	400	80
2	6	5	1	0.2
3	2	5	9	1.8
4	25	5	9	1.8
<b>Total</b>				<b>X<sup>2</sup> = 85.4</b>

Source: Research Data 2019  
Decision rule for Hypothesis One

Since the calculated chi-square of 85.4 is greater than the critical value of 7.815 then we accept the alternative hypothesis and reject the null hypothesis. The researcher therefore concludes that sugar content information has significant influence on product preference

### Test of Hypothesis Two

H<sub>02</sub>: There is no significant influence of health benefit information on Repeat Purchase.

**Table 4.2.B: Evaluation of Data by Chi-square Method of Analysis.**

S/N	Fo	Fe	(Fo-Fe) <sup>2</sup>	(Fo-Fe) <sup>2</sup> /Fe
1	13	5	64	12.8
2	6	5	1	0.2
3	4	5	1	0.2
4	2	5	9	1.8
<b>Total</b>				<b>X<sup>2</sup> = 15</b>

Source: Research Data 2019

### Decision Rule for Hypothesis Two

Since the calculated chi-square of 15 is greater than the critical value of 7.815, we reject the null hypothesis and accept the alternative hypothesis. The researcher therefore, concluded that health benefit information has significant influence on Consumer's repeated purchases.

### Hypothesis Three

H<sub>03</sub>: There is no significant effect of Nutritional Value Information on Brand loyalty.

**Table 4.2C: Evaluation of Data by Chi-square Method of Analysis.**

S/N	Fo	Fe	(Fo-Fe) <sup>2</sup>	(Fo-Fe) <sup>2</sup> /Fe
1	15	5	400	80
2	6	5	1	0.2
3	2	5	9	1.8
4	2	5	9	1.8
<b>Total</b>	<b>25</b>			<b>X<sup>2</sup> = 85.4</b>

Source: Research Data 2019

### Decision rule for Hypothesis Three

Since the calculated chi-square of 85.4 is greater than the critical value of 7.815 then we accept the alternative hypothesis and reject the null hypothesis. The researcher therefore concluded that Nutritional Value information has significant effect on Brand loyalty.

### Summary of Findings

The chi-square decision stated that if the calculated chi-square is greater than the critical value we accept the alternative hypothesis and reject the null hypothesis, therefore, since the calculated chi-square value 85.4 was greater than critical value of 7.815 in hypothesis one, the researcher therefore, accepted the alternative and rejected the null hypothesis. The researcher therefore concluded that sugar content formation significantly influences the product preference. In view of

the rest of hypothesis two the calculated chi-square value of 15 was greater than the critical value of 7.815; the researcher therefore accepted the alternative hypothesis and rejected the null hypothesis. The researcher then concluded that health benefit information significantly influences repeat purchase in the organization.

## **DISCUSSION OF FINDINGS AND RECOMMENDATION**

### **Introduction**

This is the final stage of the research work. The chapter treats the summary of research findings, conclusions, recommendations and suggestions for further research.

### **Discussion of Findings**

This research work empirically evaluated label information and consumer purchase decision of soft drinks in Port Harcourt and it revealed that there exists a positive influence of: (1) content information on product preference; (2) health benefit information on Repeat Purchase and (3) Nutritional Value benefit information on Brand Loyalty.

These findings is consistent with some recent studies like Peters-Teixeira, and Badrie, (2007) Weaver and Finke (2003); Wilson and Bahna, (2005); Trijp and Van der Lans (2007) in their separate that, food industries throughout the world have been creating packaged food items intended to make consumers food choice more convenient and less time consuming as a good marketing mix tool, ease brand discrepancy; and enhance product loyalty. Thus they (the variables) plays a major role in prediction of future sales growth.

Despite some challenges confronting sales promotion, its continued existence and development have important implications for economic growth as it plays a major role in inducing sales growth in the business world by channeling preferential behaviour and inducement to where it is needed. This research has been able to prove the above assertions and thus states that sales Nutritional Value Information/Health Benefit Information contributes positively to the economic development of manufacturing firms in Nigeria.

## **CONCLUSIONS**

Label information plays an essential role for the consumers, dealers and retailers in the marketing programs. Label information generates large preference and by using information on the label of the products sales can be increased. Various label method are used by the marketers in order to offer customers an additional incentive to purchase their products. This research supported by the research from Ndubuisi (2006) who stated that label information are not only effective in attaining short-term patronage and preference as they are also more cost-effective compared to other included marketing communications tools such as advertising. The overall conclusion of this research was that label information was positively influences customers attitude towards various products of Pabod breweries. The study confirmed that consumers buying behaviour can be motivated through various kinds of elements found in the product label, Including promotion techniques such as sugar content information, health benefit information, Nutritional Value information and authorization. Thus, Label information is the engine of business turnover through appropriate consumer purchase preference.

## **RECOMMENDATIONS**

Given the importance or the role played by sales promotion in enhancing consumer's purchase preference, this study recommended that:

- 1) Label Information should be adopted by all Breweries in Nigeria. Its elements should be made more transparent as to bring about more confidence in the mind of investors and customers.
- 2) Firms should endeavor to train or retrain staff on the knowledge of product information.
- 3) There is need to design and implement comprehensive measures or policies that will strengthen and broaden product information. Doing so will reduce costs and increase financial profits, Patronage, and confidence of the consumers on the product.

### **Limitations of the Study**

The limitation of this research study was based on the finding that:

- I. The financial requirement for an extensive carrying out of this project is quite enormous. The researchers limited finance, thus streamline his study base.
- II. The time needed to execute this project is much more than what was available. As such time posed its own limitation in the researcher in carrying out this study.

### **Area for Further Research**

The following areas are recommended for further study:

- i. Health Information and brand image
- ii. Label Color and Sales performance.
- iii. Label Packaging and organizational effectiveness

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