



**CONSUMERS' UNDERSTANDING AND INTERPRETATION OF THE
NUTRITIONAL INFORMATION ON PRODUCT PACKAGES: THE
IMPLICATIONS ON ADVERTISING (A COMPARATIVE STUDY OF
BOURNVITA AND MILO BEVERAGES)**

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ABSTRACT

This research is predicated on consumers' understanding and interpretation of the nutritional information on product packages and the implications this has on its advertising, a comparative study of Bournvita and Milo beverages. The problems that necessitated this research among others include lack of notice of the claims, misunderstanding of their meaning, the implications that the understanding and interpretation may have on product advertising and lack of using it or trust in the claims. The research methodology used for this work is descriptive research design. A total of 150 customers were considered for this study. Both primary and secondary data were used; the secondary data was sourced from books and previous work similar to this while primary data was obtained from questionnaires administered to customers of the two beverages brand. The findings revealed that when products are advertised, consumers read the labels and understand them before choosing and using the products. Nutritional claims influence consumers' choice of their products and lack of comprehension of nutritional information about products renders product advertising ineffective and eventually affects consumer purchases. In conclusion, consumers are very much aware of the concept of nutrition and nutritional labelling. However, it is recommended that nutritional information must be presented in a format that can be easily understood by the consumers. Food and beverages industry must recognize its role in informing consumers (advertising) about the nutritional profile of food products; and should provide clear and consistent nutritional information on food labels. Advertising

Practitioners Council of Nigeria (APCON) should also ensure that product packages carry all the necessary details to guarantee the effectiveness of their advertising jobs and while complying with government regulations, a number of factors, such as allowing easier access to nutritional information and the implications on advertising, should be taken into consideration when providing nutritional information on food products.

Keywords: Consumer understanding; Interpretation; Nutritional Information; Product; Package.

INTRODUCTION

Point-of-sale communications seem to be the most effective instrument to inform consumers in terms of whatever information producers wish to provide to potential buyers (McEachern & Warnaby, 2015). With an increased move towards self-service retailing, the packaging of products nowadays is designed to limit the input of sales personnel at the point-of-sale (Kuvykaite, 2016). With regard to food purchasing, product packages have hence probably become the most important and most influential factor during consumer decision making (Badrie, 2015) because most of the information that consumers require, such as branding and product ingredients, are printed on product labels that are prominently attached to the packaging, or form an integral part of the packaging. Product packages hence perform an important communicative function by providing consumers with information to select the most suitable product alternative during the pre-purchase decision-making phase (Van der Merwe, 2015).

Consumers who are more involved in a food purchasing task, for whatever reason, become more involved in the selection of suitable products and subsequently evaluate packaged food products more carefully, paying more attention to label

information to reduce uncertainty and to increase product credibility (Silayoi & Speece, 2017). Some consumers may even demand additional information, such as quality guarantees and an indication of the country of origin when purchasing food products (Dimara & Skuras, 2015). Consumers also tend to study the labels of products with a more complex nutritional composition more carefully than products with which they are more familiar and which they find easy to interpret (Graham & Jeffery, 2016). Nutritional information appears to be a really important and useful tool for enhancing consumer's ability to make informed and meaningful choices. However, nutritional information per se are unlikely to have any significant impact on eating behaviour; the potential barriers are many, including lack of notice of the claims, misunderstanding of their meaning, and lack of using it or trust in the claims. Additionally, consumers' perceptions on health benefit of particular products appear to be based mainly on their prior belief about the type of the product rather than on specific information provided by the nutritional information. It is against these problems, the researchers seek to evaluate consumers' understanding and interpretation of the nutritional information on product packages from the viewpoint of advertising, making a comparative study of Bournvita and Milo beverages.

SPECIFIC RESEARCH OBJECTIVES:

- (i) To ascertain whether consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage.
- (ii) To determine the factors that influence consumers' attitudes towards nutritional information of products.
- (iii) To know whether lack of comprehension of nutritional information about products renders product advertising

ineffective and eventually affects consumer purchases or not.

RESEARCH QUESTIONS

The research questions could be formulated as follows:

- (i) Do consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage?
- (ii) What are the factors that influence consumers' attitudes towards nutritional information of products?
- (iii) Does lack of comprehension of nutritional information about products render product advertisement ineffective and eventually affect consumer purchases?

FORMULATION OF THE HYPOTHESES

The following hypotheses would be tested in this study:

H₁: Consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage.

H₂: There are factors influencing consumers' attitudes towards nutritional information of products.

H₃: Lack of comprehension of nutritional information about products does not render product advertisement ineffective and eventually affects consumer purchases.

LITERATURE REVIEW

It is vital to marketing success for organizations to maintain robust communication links with current and potential customers. This is particularly so as even good products cannot sell themselves; their existence, benefits, problem solutions and cost efficiencies must have to be brought to the knowledge of customers. Organizations wishing to communicate information must do so at every customer touch-

point using various promotional vehicles. Thus, as Kotler and Armstrong (2015) noted, a product's design, its price, its shape, colour of its package and even the store that sells it must be coordinated for greatest communication impact. Nutritional labeling is one type of problem-solution information which pre-packaged food marketers communicate to their customers. It is the profiling of a product's content of nutrients (including protein, fat, carbohydrates and vitamins) and energy value, through the instrumentality of its packaging. Past studies have shown that customers obtain information about brand that aid choice through multifarious sources that include packaging. Other sources identified are advertising, word of mouth communications, and private and public rating services.

Thus, advertising is defined as any paid form of impersonal presentation and promotion of ideas, products or services by an identified sponsor'. Advertising is impersonal because it uses such media as television, newspapers, radio and magazines etc. It reaches numerous people and the cost of reaching one prospective buyer is far less than reaching potential buyer through personal contact (Kotler and Armstrong, 2015). Marketing organizations engage in communication activities in order to inform, educate and influence their customers using various communication vehicles. Hence, product information serves to create awareness and product knowledge; simplify purchases in the market place; helps consumers to drop many brands from consideration, and equally help consumers to make informed choice and reduce incidence of cognitive dissonance.

For communication objectives to be realized, capturing the attention of the customer is paramount. Unfortunately,

competitive activities breed information overload and clutter which discount customers' attention and thus, "the power of marketing is eroding from lack of attention" (Sacharin, 2017). Attention has been referred to as the scarcest resource in today's business (Adler and Firestone 2017) warn that effective communication is hampered by failure of a communication medium to both attract and retain the attention of the customer which in turn jeopardizes the long term marketing goals. For effectiveness in communication, marketing communicators must ensure that their encoding process enmesh with the audiences' decoding process such that the message must be made of words and symbols that the audience are familiar with. This is to guarantee that the audience perfectly understands the message being communicated (Kotler and Armstrong, 2015). Harkening to this advice is vital to all marketing communicators no matter the medium of communication.

RESEARCH MODEL

When choosing products, consumers must be able to evaluate the information obtained in the search and make a decision based on that evaluation. In this study, the use of food labels is considered as an action of seeking information by consumers. This study uses the theory of reasoned action (TRA) by Ajzen and Fishbein (1975), and TPB by Ajzen (1991) for building theoretical models of consumers on the use of the information on food labels.

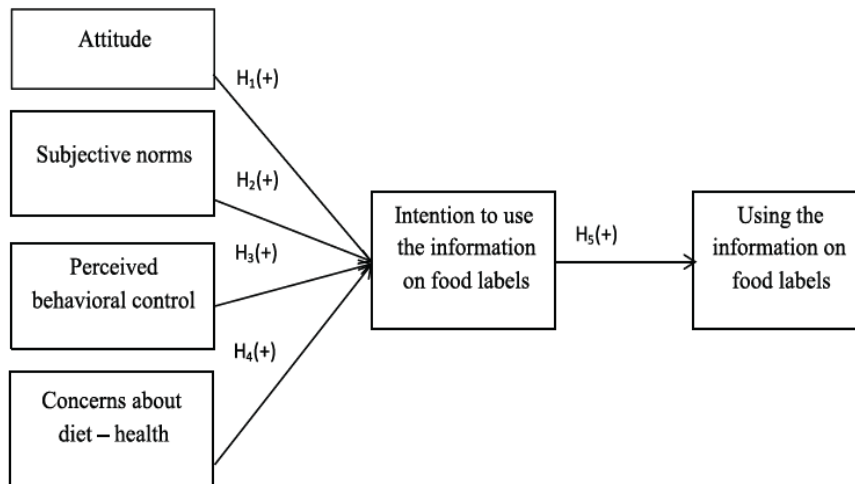


Figure 1: The Nutritional Information Framework (Ajzen and Fishbein, 1975).

OVERVIEW OF NUTRITIONAL INFORMATION ON A PRODUCT

Nutrition labeling is a description intended to inform the consumer of the nutritional properties of a food and consists of two parts namely nutrient declaration and supplementary nutrition information. Nutrient declaration means a standardized statement or listing of the nutrient content of the food and is mandatory for foods for which nutrition claims are made and voluntary for all other foods. Nutrient declaration should include energy value; amount of protein, available carbohydrate and fat; amount of any other nutrient for which a nutrition or health claim is made; the amount of any other nutrient considered relevant for maintaining a good nutritional status (World Health Organization, 2016).

RESEARCH POPULATION

The estimated population used for this study is One Hundred and Fifty (150). Customers for Bournvita Beverages are 89 populations, Customers for Milo Beverages are 61 populations.

SAMPLE SIZE

The sampling technique used for this study is judgmental sampling. Therefore, the sample size to be used for this study is Sixty (60) respondents.

INSTRUMENTS USED IN DATA COLLECTION

The major instrument used for this study is questionnaire which covers the study under investigation.

METHOD OF DATA ANALYSIS

The data collected for this study was analyzed, cleaned, sorted and coded using Statistical Package for Social Sciences (SPSS).

TECHNIQUES USED FOR DATA ANALYSIS AND TEST OF HYPOTHESIS

The technique used for data analysis is **coefficient of correlation**. A correlation coefficient is a numerical measure of some type of correlation, meaning a statistical relationship between two variables. Hypotheses were tested using Chi-square.

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

Consumer read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage

Table 1

Description	Number of Respondents	Percentage (%)
Strongly Agreed	17	28%
Agreed	27	45%
Undecided	1	2%
Strongly Disagreed	3	5%
Disagreed	12	20%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 1, 17(28%) of the respondents strongly agreed that consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage, 27(45%) of the respondents which have the highest number of respondents agreed, 1(2%) of the respondents could make any decision on this, 3(5%) of the respondents strongly disagreed while 12(20%) of the respondents disagreed.

There are factors that influence consumers' attitudes towards nutritional information for a product.

Table 2

Description	Number of Respondents	Percentage (%)
Strongly Agreed	19	32%
Agreed	28	46%
Undecided	12	20%
Strongly Disagreed	0	0%
Disagreed	1	2%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 2, 19(32%) of the respondents strongly agreed that there are the factors that influence consumers' attitudes towards nutritional information for a product, 28(46%) of the respondents which have the highest number of respondents agreed, 12(20%) of the respondents could make any decision on this, 0(0%) of the respondents strongly disagreed while 1(2%) of the respondents disagreed.

Nutritional claims influence consumers' choice of their products

Table 3

Description	Number of Respondents	Percentage (%)
Strongly Agreed	23	38%
Agreed	20	33%
Undecided	12	20%
Strongly Disagreed	3	5%
Disagreed	2	4%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 3, 23(38%) of the respondents strongly agreed that nutritional claims influence consumers' choice of their product, 20(33%) of the respondents agreed, 12(20%) of the respondents could make any decision on this, 3(5%) of the respondents strongly disagreed while 2(4%) of the respondents disagreed.

Lack of comprehension of nutritional information about products renders product advertisement ineffective and eventually affects consumer purchases.

Table 4

Description	Number of Respondents	Percentage (%)
Strongly Agreed	14	23%
Agreed	16	27%
Undecided	18	30%
Strongly Disagreed	7	12%
Disagreed	5	8%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 4, 14(23%) of the respondents strongly agreed that Lack of comprehension of information about

products affect consumer purchases, 16(27%) of the respondents agreed, 18(30%) of the respondents could make any decision on this, 7(12%) of the respondents strongly disagreed while 5(8%) of the respondents disagreed.

It is very necessary to read the nutritional information on the packs of food products before purchase

Table 5

Description	Number of Respondents	Percentage (%)
Strongly Agreed	33	55%
Agreed	16	27%
Undecided	4	6%
Strongly Disagreed	6	10%
Disagreed	1	2%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 5, 33(55%) of the respondents strongly agreed that reading of nutritional information on the packs of food products before purchase is very necessary, 16(27%) of the respondents agreed, 4(6%) of the respondents could make any decision on this, 6(10%) of the respondents strongly disagreed while 1(2%) of the respondents disagreed.

Product packages provide consumers with information to help select the most suitable product during purchase decision

Table 6

Description	Number of Respondents	Percentage (%)
Strongly Agreed	21	35%
Agreed	25	42%
Undecided	12	20%
Strongly Disagreed	2	3%

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Disagreed	0	0%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 6, 21(35%) of the respondents strongly agreed that product packages provide consumers with information to help them select the most suitable product during purchase decision, 25(42%) of the respondents agreed, 12(20%) of the respondents could make any decision on this, 2(3%) of the respondents strongly disagreed while none of the respondents disagreed.

The inclusion of nutrition information on food items could be an important positioning strategy which can increase advertisement effectiveness for a company

Table 7

Description	Number of Respondents	Percentage (%)
Strongly Agreed	19	32%
Agreed	26	43%
Undecided	14	23%
Strongly Disagreed	0	0%
Disagreed	1	2%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 7, 19(32%) of the respondents strongly agreed that the inclusion of nutrition information on food items may be an important positioning strategy which can increase advertisement effectiveness for a company, 26(43%) of the respondents agreed, 14(23%) of the respondents could make any decision on this, while none of the respondents strongly disagreed and 1(2%) of the respondents disagreed.

Consumers with health challenges that necessitate dietary restrictions are also more likely to consider nutrition labels while shopping

Table 8

Description	Number of Respondents	Percentage (%)
Strongly Agreed	34	57%
Agreed	24	40%
Undecided	0	0%
Strongly Disagreed	0	0%
Disagreed	2	3%
Total	60	100%

Source: Questionnaire Administered (2020).

Interpretation:

From the above table 8, 34(57%) of the respondents which constitute the highest strongly agreed that consumers with a health challenges that necessitate dietary restrictions are also more likely to consider nutrition labels while shopping, 24(40%) of the respondents agreed, while none of the respondents choose undecided and strongly agreed and 2(3%) of the respondents disagreed.

TEST OF THE HYPOTHESES

Hypothesis 1:

H₁: Consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage.

H₀: Consumers do not read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage.

In testing for hypothesis 1, the response to question 1 (table 1) was used and the test result shown below:

Coefficients^a

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Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.011	.018		-.215	.465
1 Consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage.	.211	.000	1.000	643.013	.000

a. Dependent Variable: Respondents

The significant level of 0.465, while P value = 0.05. From the result of the test of hypothesis, we reject the null hypothesis and accept the alternative hypothesis and therefore conclude that consumers read product labels for nutritional information and understand them in terms of product advertising, choice, purchase and usage. This is because the significant level is less than <0.05 .

Hypothesis 2

H₂: There are factors influencing consumers' attitudes towards nutritional information of products.

H₀: There are no factors influencing consumers' attitudes towards nutritional information of products.

In testing for hypothesis 2, the response to question 2 (table 2) was used and the test result shown below:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.041	.152		.221	.521
There are the factors influencing consumers' attitudes towards nutritional information of products.	.202	.012	1.000	124.124	.000

a. Dependent Variable: Respondents

The significant level of 0.521, while P value = 0.05. From the result of the test of hypothesis, we reject the null hypothesis and accept the alternative hypothesis and therefore conclude that there are factors influencing consumers' attitudes towards nutritional information of products. This is because the significant level is less than <0.05.

Hypothesis 3

H₃: Lack of comprehension of nutritional information about products does not render product advertisement ineffective and eventually affects consumer purchases.

H₀: Lack of comprehension of nutritional information about products renders product advertising ineffective and eventually affects consumer purchases.

In testing for hypothesis 3, the response to question 4 (table 4) was used and the test result shown below:

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.021	.145		.221	.533
1 Lack of comprehension of nutritional Information about products does not render product advertising ineffective and eventually affects consumer purchases.	.199	.018	1.000	176.171	.000

a. Dependent Variable: Respondents

The significant level of 0.533, while P value = 0.05. From the result of the test of hypothesis, we reject the null hypothesis and accept the alternative hypothesis and therefore conclude that lack of comprehension of nutritional information about

products renders product advertisement ineffective and eventually affects consumer purchases. This is because the significant level is less than <0.05 .

CONCLUSION

The primary functions of food labeling regulation is to protect the end consumers by offering them the privilege of knowing what they are buying, in light of the challenges of choice posed by ever increasing variety of products coupled with sophisticated and complex collection of packaging and labeling information. However, in Nigeria, there has always been a growing concern about the lack of consciousness of product labels reading among consumers. This study revealed respondents' view on labels reading habit, components look for in reading labels and its effect on consumer needs choice behaviour. However, consumers are very much aware of the concept of nutrition and nutritional labelling.

RECOMMENDATIONS

Based upon the study's results and findings, it is hereby recommended that:

Co-operation between the food industry and government is essential for the successful implementation of a nutrition education programme. The food industry must recognize its role in informing consumers about the nutritional profile of food products; and should provide clear and consistent nutrition information on food labels.

While complying with government regulations, a number of proactive actions like public education campaigns should be instituted to drive consumers to read labels more frequently,

thereby providing a better understanding on the usage and disposability of the products.

Consumer Protection Council and other relevant agencies should also continue to enforce compliance by producers in inserting nutritional information on labels. Advertising Practitioners Council of Nigeria (APCON) should also ensure that product packages carry all the necessary details to guarantee the effectiveness of their advertising jobs because these label details will always compliment product advertisements. Consumers should be allowed easier access to nutritional information of product bands and the implications on advertising success should be taken into consideration.

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