



CONSUMER AWARENESS OF NUTRITIONAL LABELLED FOODS

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Abstract: Food label comprises of printed, symbolic or graphical information which is accompanied by Food. Food labelling enables consumers to make informed decision when purchasing and consuming food products. By paying attention to the information on food labels, consumers can ensure they and their families eat the correct amount of nutrients and also avoid over eating unhealthy foods and keep known allergens from themselves and their Families. Another advantage of reading food labels also prevents consumers from choosing Counterfeit products which can be dangerous to their health. India is experiencing a dietary shift, with people increasingly consuming more processed and ultra-processed foods and a burgeoning market; these factors prompt the need for Front of pack labelling. It will play a convenient role in fighting increasing obesity and many non-communicable diseases. Front of pack labelling refers to nutrition labelling systems that are presented on the front of food packages to support consumers to make healthier food choices at the point of purchase by delivering simplified and at-a-glance nutritional information. This study determined level of awareness on pre-packaged food labelling information among consumers in Patna city of Bihar, India, their perception on the importance of such information and various factors influencing in reading and using food labels. Design/methodology/approach - A semi structured questionnaire was used to collect information from consumers who were found purchasing prepackaged foods in selected modern format retail stores. The obtained data were computed to determine relationships and associations between various factors and the use of food labelling information among consumers in the area of study. Findings - Study revealed that near about half of the respondents (40%) mentioned price of food as factor motivating them to read food label before purchase of the food items, followed by brand name (30%). Health Consciousness was rated as the least important motivational factor. Only 10 percent showed their interest in nutritional value of the product. Use of technical/scientific language was mentioned by half of the respondents (50%) as the barrier in reading food labels followed by the use of small fonts (25%) and unfamiliar language by fifteen percent of the respondents. The outcomes of the study revealed that awareness of pre-packaged food labelling information was low among consumers. The findings also showed that the education level of the respondents was not significantly associated with the knowledge about nutritional food labels.

Keywords: Food label, Packaged foods, Food label knowledge, Consumer awareness.

I. INTRODUCTION

The nutritional facts label provides detailed information about foods nutrients content, such as the amount of fat, sugar, sodium and fiber it has. A food label, the information presented on food product, is one of the most important and direct means of communicating information to the consumer. The internationally accepted definition of a food label is any tag, brand, mark, pictorial or other descriptive matter, written, printed, stenciled, marked, embossed or impressed on or attached to, a container of food or food product. This information, which includes items such as ingredients, quality and nutritional value, can accompany the food or be displayed near the food to promote its sale. Consumers are increasingly concerned about their health

and general well-being with the improvement of living standards. Food labelling is a legal requirement which has to be fulfilled by food manufacturers for the consumer's better health and safety. In view of that, countries across the World are now enacted policies to enforce food manufacturers to put food label information on Packaged foods. In recent times, there have been a tremendous increase in consumption of packaged food items/products. This may be due to an increase of working mothers. With the change in Lifestyle and consumption pattern, food safety standards are becoming important from public Policy perspective. In view of that, countries across the world are now enacted policies to Enforce food manufacturers to put food label information on packaged foods. The reason being that both consumers and food manufacturers have immersed benefits from food labels. The consumer on one hand use food labels to make informed decision as to what to buy and what not to buy and the manufacturer on the other hand grows in business. In addition, there are basic information by law on what must be found on food labels such as the name of the product, name and address of the manufacturer and the expiry date of the product and the nutritional value of the product. All this information must be written in the language that consumers will understand in order for them to make informed decisions on their choice of food product for better diet and better health.

Food labels are found to be a very important public health tool that is used to promote a balanced diet. Food labels information assists consumers to better understand the nutritional value of food and enables them to compare the nutritional values of similar food products and to make healthy informed food choices based on the relevant nutrition information. As consumers are becoming more aware of the relationship between diet and disease; their demand for nutrition information increases. Consequently food label is very useful for people who are on special diets (e.g. people suffering from diabetes or high blood lipid) to select suitable foods for their health conditions. There are many important diet related -public health problems and diseases such as poor nutrition; obesity; high blood pressure; cancers, diabetes; osteoporosis and cardiovascular diseases. Assessing the consumer's nutrition knowledge level about dietary sugars, fats and cholesterol and their attitudes towards selecting healthier food is important.

Data on the level of awareness on food label information among the Consumers of Patna city and as to how the labeling information influences their buying behavior is scanty. Hence this study was carried out to

1. identify consumers' awareness on the basic pre- packaged food labelling information.
2. analyze perceptions on the importance of reading food labels.
3. ascertain the factors associated with reading pre-packaged food labels among consumers

Hypotheses

- Product attractiveness stimulates consumer interest in a product.
- Nutritional labelling creates consumer awareness of a product.

II.REVIEW OF LITERATURE

Robert et al. (2017) did their investigation survey on consumer knowledge and use of food labels and reported that the study was conducted India in and it was revealed that pre-packaged food labelling information was low among consumers. It was also observed that less than half of the total respondents frequently read the food labels. The findings also showed that the education level of the respondents was not significantly associated with the knowledge about food labels. A recent study found that only 17 per cent of the shoppers read food labels, and understanding of nutrition information was limited.

Jain et al. (2018) made an assessment consumer awareness and status of food labelling in selected supermarkets of Puducherry: An exploratory study and found that compliance of food items was 70.2 per cent in locally made food items. The nutritional information was provided in 59.5 per cent of the branded items and 34 per cent of the locally available items. Similar observation (52 per cent) was reported by a study conducted in Hyderabad in 2010. Although there is an improvement over the years, it is not so high. Robust surveys of all kind of food items for their compliance to regulations have to be made more rigorous.

Chincholkar (2018) investigated on management students awareness towards product labelling for food product and reported that the study was conducted in Mumbai and it was revealed that female students pay more attention to other type of information such as how to use, how to store etc.

Ponnudurai et al.(2019) made an assessment on usage of food information among supermarket shoppers in Shah Alam, Malaysia and reported that high per cent of shoppers are aware of the food label and they often use food label information while buying pre-packaged food products due to health awareness mainly to

prevent non communicable diseases. It can be said demographic factor are influencing the use of food label information such as gender and income.

Ikonen et al. (2020) investigated on Consumer effects of front-of-package nutrition labelling: An interdisciplinary meta-analysis and reported that a wealth of research has tried to understand the antecedents of health label usage among consumers and consumers' attitudes toward food labelling. This stream of literature often focuses on a subjective understanding of FOP label (Borgmeier and Westenhoefer 2009; Grunert and Wills 2007) - That is, whether on food labels- Which does not necessarily reflect their actual attitudes or behaviors (Levy et al.1992). The FOP labels indeed help consumers identify and compare healthier products.

Kereth et al. (2021) made their research assessment of consumer awareness on pre-packaged food labelling information towards the purchase of the pre-packaged food products and found that respondent level of education and their occupation were significantly associated with the importance of using pre-packaged food labelling information. Due to public health concern on human being, it is therefore recommended that deliberate efforts should be taken to use education activities in order to raise consumer awareness on reading and using of pre-packaged food labelling information prior to purchase.

Arfaoui et al. (2021) did their investigation on assessment of knowledge and self-reported use of nutrition facts labels, nutrients content, and health claims among Saudi adult consumer and reported that despite the high level of education in our sample, there is a clear need for more efforts to enhance the knowledge and use of the nutrition facts label and NHCs. The aims of these efforts would be to help the public make informed and individualized healthy dietary choices. The outcomes of this study highlight the need to initiate educational programs that further enhance consumers' ability to understand information included in the nutrition facts label and NHCs.

III.RESEARCH METHODOLOGY

It is the back-bone of the research problem. This chapter is devoted to the methods and procedures adopted in this investigation. This study was conducted in Patna city of Bihar State, was selected purposively due to convenience of the researcher. Random sampling procedure was adopted for the study. From Patna City 100 consumers of packed foods were selected randomly. In Independent variables, socio- economic and personal variables were included and in dependent variables consumer awareness on food labelling were included. An interview schedule was prepared and used for primary data collection from the field. While developing the schedule, relevant secondary sources of information were carefully examined and due importance was given to various independent and dependent variables. It was pre-tested on five consumers in a City, Necessary changes were incorporate and schedule was finalized and finally used in the field. The qualitative data was tabulated and quantified as per the standard procedure. .Frequencies and percentages were obtained for each aspect of the study to draw inferences as per the objectives.

IV.RESULTS AND DISCUSSION

The results of the study are discussed below.

The demographic profiles of consumers under study are discussed below.

4.1 demographic profiles of consumers

N = 100

Demographic parameters	Category	Percentage
Consumer's Occupation	House Wife	40
	Service/Private Job	60
	Total	100
Age (Years)	18-25	30
	26-39	10
	40 and Above	60

	Total	100
Education Level	Up to Matric	10
	Graduate	20
	Above Graduate	70
	Total	100
Family Type	Nuclear	90
	Joint	10
	Total	100
Monthly Income (Rs.)	Up to 25,000	10
	25,000 - 50,000	20
	50,000 Above	70
	Total	100

Table 4.1 depicts Sixty percent of the consumers were in the age group of 40and above years. Education level of majority of the respondents (70%)were above graduate, followed by graduate (20%).Majority of the respondents were in service/private job (60%), were from nuclear family type (90%) with monthly income above 50,000 (70%).

4.2 frequency of reading food labels

N = 100

Response	Percentage
Yes	70
No	30
Total	100

As shows in **Table 4.2**, Majority of respondents (70%) reported to read pre-packaged food labelling information prior to purchase/consumption of such foods for one or the other reasons.

4.3 motivational factor of food labelling

N = 100

Motivation factor	Percentage
Price of the Food Product	40
Brand Name of Food Product	30
Health Consciousness	05
Advertisement/Food Promotion	15
Interest in Nutritional value	10
Total	100

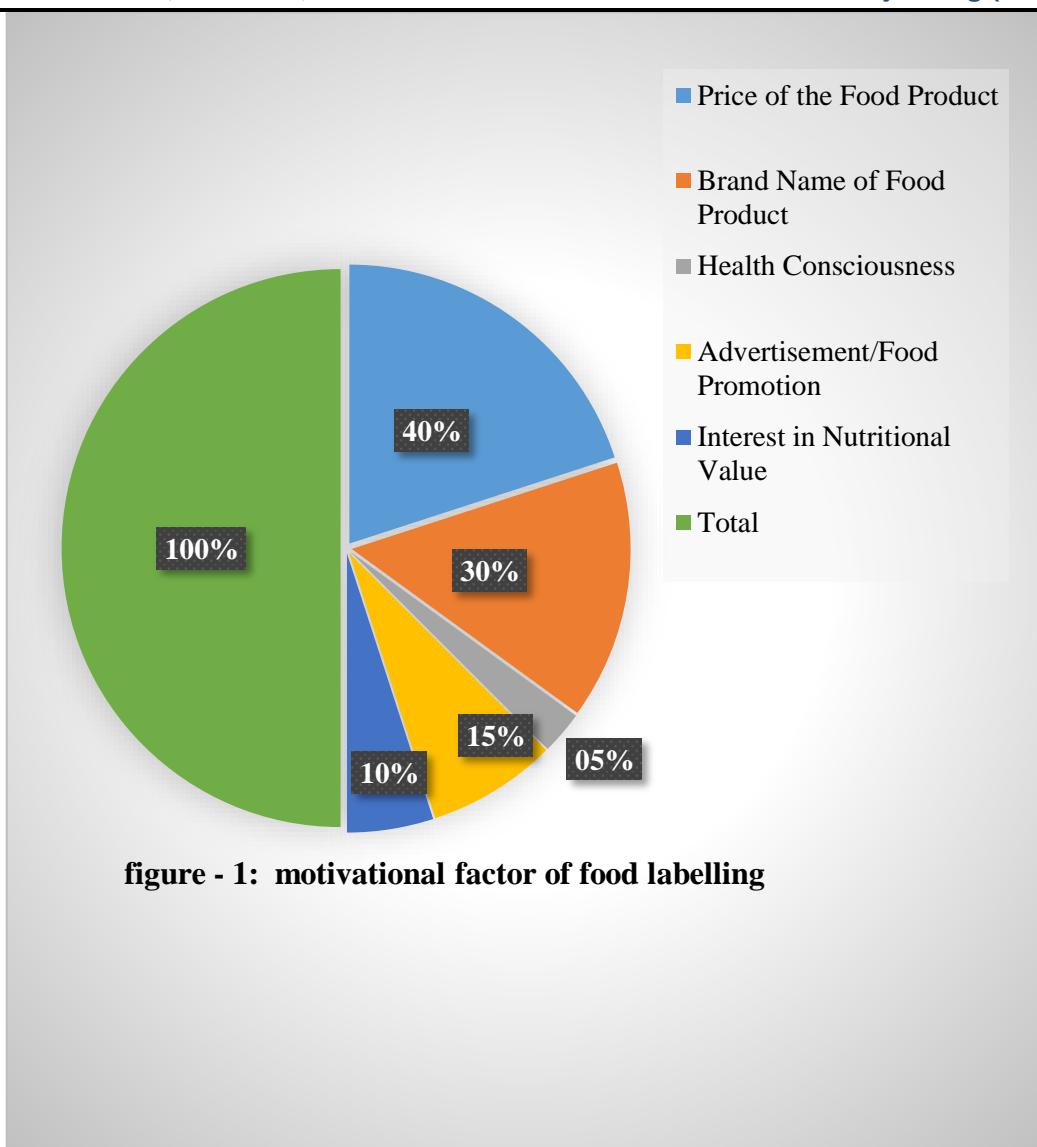


figure - 1: motivational factor of food labelling

Table 4.3 The research revealed that respondents had different motivations to read information that is contained in food labels. As indicated in Table 4.3, near about half of the respondents (40%) mentioned price of food as factor motivating them to read food label before purchase of the food items, followed by brand name(30%).Health Consciousness was rated as the least important motivation factor. Only 10 percent showed their interest in nutritional value of the product.

It is clear from the above findings that the respondents are least concerned about nutritional information given on the back of the food products. Hence, mass awareness campaign is required to create nutritional awareness among consumers.

4.4 circumstances in which respondents purchase pre-packaged foods without reading labels

N= 100

Circumstances in which respondents purchase pre-packaged foods without reading labels	Percentage
Purchase of Routine/Familiar Foods	55
When the Food is Sold at Low Price	20

When in a Hurry/Time Constraints	10
When I Trust the Seller	5
When the Language on the table is unfamiliar	10
Total	100

As shown in **Table 4.4**, more than half of the respondents, i.e. (55%) reported to purchase pre-packaged food without reading labelling information because the food was routine /familiar to them followed by food is sold at low price by twenty percent of the respondents and ten percent reported that they were in a hurry/time constraint as the main reason to purchase pre-packaged foods without reading labelling information.

4.5 perceived importance of reading food labels

Food label information	Percentage	N=100
To Ascertain Nutritional Value	10	
Health Reasons	15	
To Know Quantity of the Food by Weight/Volume	24	
To Know Special Storage Needs	05	
To Know the Expiry Date of the Product	30	
It Give Name and Address of Manufacture	02	
It Give the List of Ingredients Used	03	
To Know Shelf Life	05	
It Give Instruction on Usage	06	
Total	100	

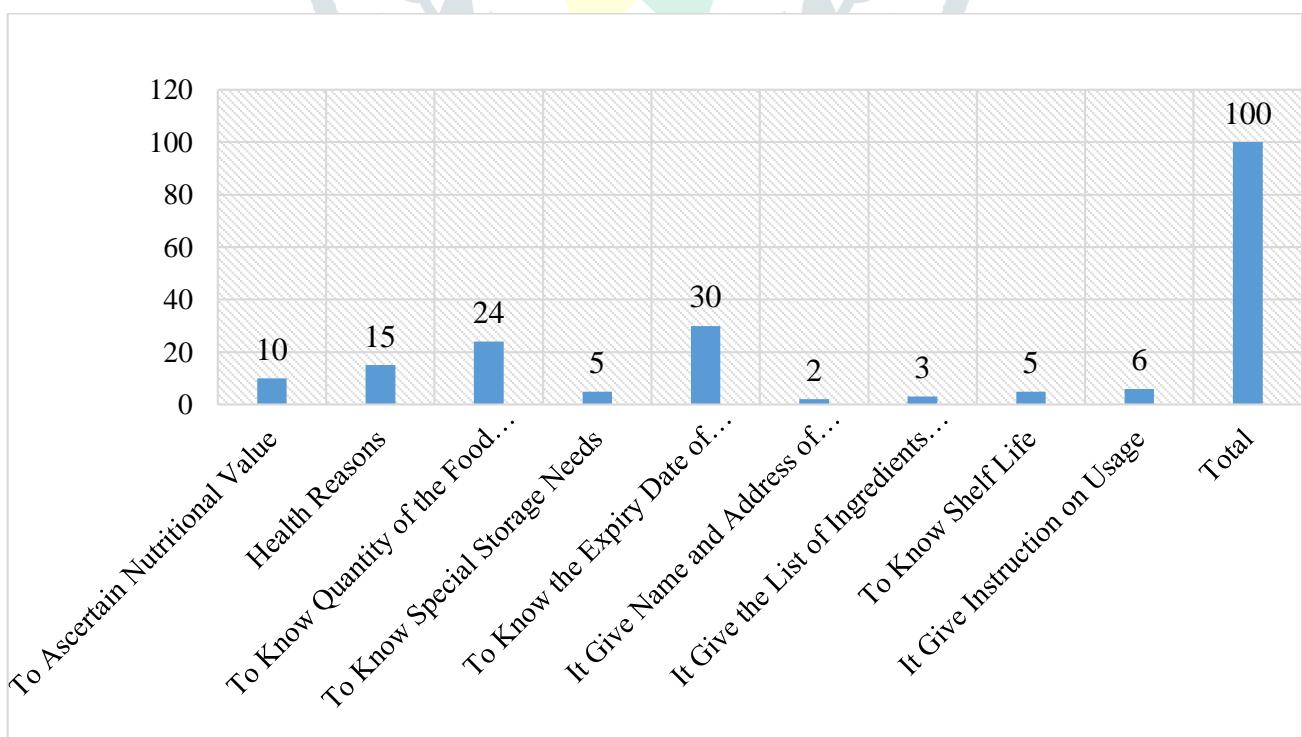


figure -2: perceived importance of reading food labels

Table 4.5 above depicts perceived importance towards reading food labelling information. To know the expiry date of the product was mentioned by thirty percent respondents (30%) followed by to know quantity of the food by weight/volume was mentioned by twenty-four percent of the respondents (24%). Again only fifteen percent perceived health reasons as importance of reading food labels before purchase of food products.

Consumers of prepackaged foods are ought to make conscious choice of foods with respect to their health status and needs. Food labelling information is very important for people who are in special diet or with food /nutrition related health problems and diseases such as obesity, diabetics, cardiovascular diseases and various types of cancers as it helps them to make informed choices of food.

4.6 difficulties encountered by respondents when reading/using food labels

N = 100

Difficulty	Percentage
Unfamiliar Language	15
Small Fonts Size	25
Use of Technical/Scientific Language	50
Incomplete Labelling	04
Hidden Information	06
Total	100

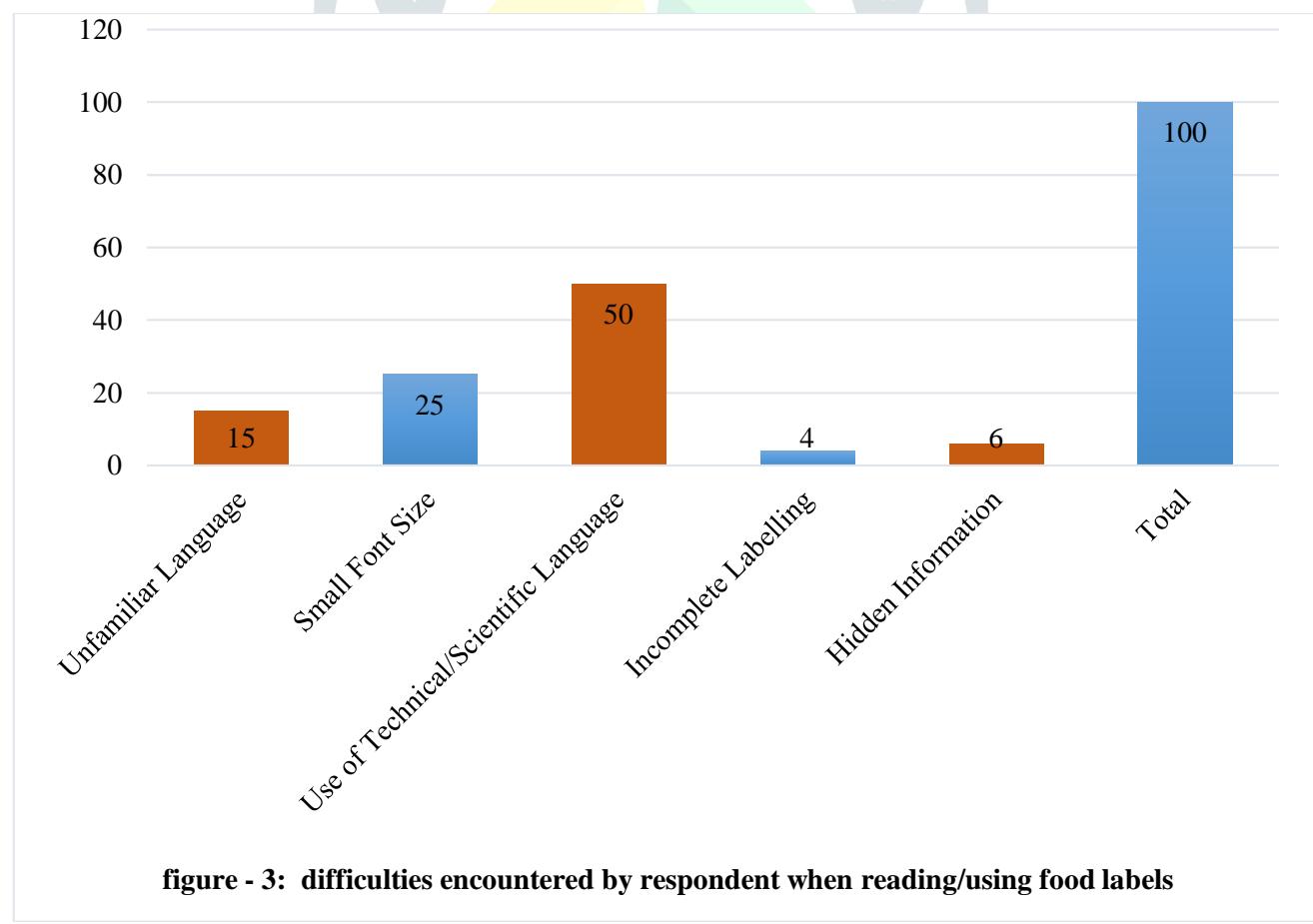


figure - 3: difficulties encountered by respondent when reading/using food labels

As shown in **Table 4.6**, major difficulties/barriers towards reading food labelling information were reported by the respondents. Use of technical/scientific language was mentioned by half of the respondents (50%) as the barrier in reading food labels followed by the use of small fonts (25%) and unfamiliar language by fifteen percent of the respondents.

Hence, this study revealed that pre-packaged food labelling information was low among consumers. It was also observed that less than half of the total respondents frequently read the food labels. The findings also showed that the education level of the respondents was not significantly associated with the knowledge about nutritional food labels.

V. SUMMARY AND CONCLUSION

Liberalization of trade, globalization and development in food science and technology has resulted in an increase in trade and consumption of pre-packaged foods. Reading food labelling information is important to assist in making informed choices of food.

The food label is one of the most important and direct means of communicating product information between buyers and sellers. Food labels are to provide consumers with information about the environmental, technical and socioeconomics conditions under which the products were produced, as well as the health and safety aspects of food products. The information about nutritional labelling and health benefits of the food is one of the important factors that influence decision making. The modern package label has taken the responsibility for educating the consumer about the product by multitasking such as, attracting, promoting and motivating at the point of purchase through the information on the label. The labels were closely observed for nutrients contents declaration on calories, fat, protein dietary fiber, vitamins and mineral content either as percentage daily value or recommended dietary intake (RDI), or per 100gms or 100 ml serving size. Considering the significant role of consumers' awareness about food labels in making healthy food choices this study has aimed to assess consumer knowledge, attitudes and practices on food labels in the Patna City of Bihar. Findings – Study revealed that 70 per cent of the participants reported to read labeling information prior purchase of pre-packaged foods. 40% mentioned price of food as factor motivating them to read food label before purchase of the food items. Health Consciousness was rated as the least important motivational factor. This study revealed that pre-packaged food labelling information was low among consumers. It was also observed that less than half of the total respondents frequently read the food labels. The findings also showed that the education level of the respondents was not significantly associated with the knowledge about nutritional food labels.

RECOMMENDATIONS

Deliberate efforts may be needed to improve food labelling, provide education to consumers to raise their awareness on importance of reading and use of food labelling information to make an informed choice of the food. Consumers need to be familiar with the terminology and language on the current nutrition panel, and the need for basic nutrition education and user-friendly label formats. A lot of work is needed to raise the level of awareness of the consumers about the nutritional aspects of the food labeling in order to assist them in bridging the gap between current dietary practices and dietary recommendations which will be useful to make healthier food choices. Health programs and awareness campaign in Food Market centers are also required to educate consumers regarding food labeling and its benefits on preventing lifestyle-related diseases.

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