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Consumers perception towards nutrition and health claims on food products and their purchasing behaviour

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Abstract

The current research was planned with the objective to explore the food products with nutrition and health claims, to assess the knowledge of consumers regarding nutrition and health claims on food products and their purchasing behavior and to find out the consumption pattern of food products having nutrition and health claims. The study was conducted in five supermarkets which were chosen from the five directions of Udaipur city. A total of 200 respondents were chosen for the study randomly from the five selected supermarkets, all of whom had a basic understanding of English and were in between the age group of 20 – 50 years. The major findings of the study revealed that most of the respondents were educated 50 per cent of them had done graduation, and were employed (98%) and (48%) were married, had nuclear family (63.5%) and had annual income in range of 5-9 lakhs (56.5%). Most of the respondents had members in the family or suffering from health problems included blood pressure (21%), diabetes (19.5%), obesity (12.5%) and cardiovascular disease (5.5%). Majority of the respondents used to purchase packaged food items weekly (41.5%) and almost all the respondents use to read the food labels out of which 30.5 per cent use to read food labels always rest of them read often, occasionally and rarely but there were no respondent who do not use the food labels. Reading practices was significantly associated with age, young adults in the age group of 20 – 35 years were more likely to use the food label ($p < 0.05$). Majority of the people found it easy to get the information about the food items from “Front of pack” (46%) major reasons of reading the food label was information purpose (91%) and for health consciousness (61%). The most common reasons for not reading food labels were “awareness about the product” (43.2%) and a lack of interest (32.4%). Majority of the respondents prefer to read the best before/expiry date (93%), brand name (92.5%), and price (85%), nutrition fact panel (65%) and health and nutrition claims (67.5%). The reading of the nutrition fact panel and health and nutrition claims was substantially related to age and education, with young adults and educated respondents were more interested in reading this information from product labels. Consumers’ knowledge regarding the role of nutrients in the body revealed that young adults (20 -35 yrs.) and educated respondents had better knowledge about the role of nutrients in the body. Majority of the respondents believe (66.5%) and inclined (66.5%) towards food products having nutrition and health claims leading to the purchase of packaged food products with nutrition claims (51.5%) and health claims (15%). The preference was more for nutrition claims than health related claims. Inclination and purchase had significant association ($p < 0.05$) with age and health problems. Major reasons for purchasing food products with nutrition and health claims were “for general health purpose” (48.8%) and “for keeping a check on intake of particular nutrient” (41.4%). Majority of the respondents reported that the presence of health and nutrition claims on food labels helps them in making healthy food choices (45.1%). Biscuits (46.62%) and breakfast cereals (43.6%) were the most consumable food products with nutrition and health claims on daily basis. Hence, as the consumers are becoming more health conscious using food label information like nutrition and health claims to make healthy food choices there is need for proper guidance and protection from frauds for them.

Keywords: Food labels, health claims, nutrition claims, consumers

Introduction

With rapid urbanization, globalization, industrialization and economic development there occurred changes in diet and lifestyle of people that have been accelerated over the past decade. This has led to a remarkable repercussion on the health and nutritional status of population, especially in developing countries like India. It has generated a need for systematic protective strategies, including steps to control risk factors like alcohol, tobacco, blood pressure, obesity, physical inactivity and diet (M. Deepa *et al.* 2011) [14]. While standards of living have been improved, availability of food has expanded and become more diversified, and approach to services has increased, there have also been serious pessimistic outcomes in

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terms of inappropriate dietary patterns, increased tobacco use and decreased physical activities and a commensurable increase in diet-related chronic diseases. (WHO) The number of instances reported at the local and worldwide level is skyrocketing as a result of nutrition-related risk factors such as increased cholesterol levels, blood pressure, obesity, and insufficient fruits and vegetables intake. Poor nutrition is a key determinant of health inequality. It is vital to create a positive climate among people in order to promote healthy dietary choices. Food labels ideally serve as aids for consumers to make well-informed and healthy choices. Food labels, as one of the most essential and direct means of communicating product information, can also be seen as potentially strong tools of nutrition communication between customers and sellers (Vemula, R.S. *et al.* 2013). Important information is presented to customers at the moment of purchase in the form of nutrition labels and claims on food packaging, and hence have a vital potential role in supporting healthy food eating practices (Mhurchu *et al.* 2007) ^[34]. Understanding of individual nutrients in general, three basic styles for conveying information can be identified, which are nutrition fact panels, front of pack label, and nutrition and health claims. Nutrition and health claims have the potential to make customers more conscious when making decisions, and they also aid in growing understanding of specific nutrient-disease relationships, which are exploited as a marketing tool by food manufacturers (Annunziata *et al.* 2019) ^[2]. Nutrition and health claims are specified in the Food Safety and Standards (Advertising and Claims) Regulation, (2018) as: - Any representation that declares, indicates, or implies that a relationship exists between a food or a constituent of that food and health, is referred to as a "health claim." "Nutrition claims" means any representation which states, suggests and implies that a food has particular nutritional properties including but not limited to the content of protein, fat and carbohydrates as well as the content of vitamin, minerals and other permitted listed nutrient. The interest of India's urban affluent customers in a variety of packaged health foods, those claiming health benefits, is growing, and they have begun purchasing anything and everything labelled healthy. The information on food labels about nutrition content and health benefits is especially significant from a health perspective. NH claims moreover have the ability to misdirect consumers in the direction of food options that may be towards their personal best interests. Research on nutrients and health claims has proven both effective and poor outcomes for those claims on consumers' preferences and buying behavior (Steinhauser, J. *et al.* 2019) ^[47]. Many nations around the world have superior laws, suggestions, and codes of exercise regarding NH claims (Leathwood, D. P. *et al.* 2007) ^[27], in India the FSSAI has notified the recommendations on advertising and claims and those can be referred to as the Food Safety and Standards (Advertising and Claims) Regulations, 2018 but Merely maintaining the laws without assessing the consumer awareness regarding healthy choices and food labeling would make the whole exercise a futile one. Dietary modification is one of the preventive strategy for the control of non-communicable diseases. People are making conscious choices regarding food products, they are using nutritional information on the food products and they are helping the consumers in making healthy choices, food products having any nutrition or health-related claims are attracting consumers and it has been proven as a marketing tool for food

manufacturers. This creates the need to know the consumers awareness regarding the food label and the nutritional and health information provided on the food products.

Objectives

- To assess the knowledge of consumers regarding nutrition and health claims on food products and their purchasing behavior.
- To find out the consumption pattern of food products having nutrition and health claims.

Methodology

The research work was conducted in the Udaipur city of Rajasthan. A total five supermarkets were chosen from the five directions of Udaipur city that is Roots, (Bedla region, North), Reliance Fresh (Hiranmagri, South), Reliance fresh (Fatehpura circle, East), Reliance Mart (Lake City Mall, West), Big Bazar (Celebration Mall, Center) were selected for the study. A total of 200 respondents were chosen for the study randomly from the five selected supermarkets, all of whom had a basic understanding of English and were in between the age group of 20 – 50 years. A pre- tested and well-structured questionnaire was prepared for the collection of data. A pre- tested and well-structured questionnaire was prepared for the collection of data which contain four sections. First section contains the general background information of the selected sample with regard to their name, age, family type, total family income (per annum), marital status, family size, educational qualification, occupation and food habits. Second section dealt with general awareness about reading the food labels practices among urban adults on packaged food products. Third section dealt with consumers' perception and purchasing behavior for the products having health and nutrition claims. Fourth section dealt with the information regarding consumption of the packaged food products having health and nutrition claims on them. For the analysis of data, the frequency, percentage, and Chi – square test were used.

Result and Discussion

The data was collected and analyzed in order to examine extensive, complete, and contextual information about all respondents and draw significant conclusions. The findings of this study, based on questionnaires completed by respondents, revealed that majority of the respondents were in the age group of 20 – 35, almost all the respondents were educated 50 per cent of them had done graduation, 12 per cent belongs to senior secondary and 3.5 percent were Ph.D. It was found that 56 per cent of the respondent were vegetarian, 28.5 per cent were non vegetarian and 15.5 per cent were Eggetarian. The study revealed that 44.5 per cent of the respondents have medium size family (4-5 members), 42.5 per cent have small size (0-4 members) and 13 per cent have big size (6-13 members) in family and 56.5 per cent of respondent's family income was in between 5 – 9 lakhs annually, followed by 33 per cent were in the category of 0.5 lakhs / annum and 10 per cent were in the category more than 9 lakhs / annum. The findings reveled that there were respondents and members in their family with certain type of health problems which included blood pressure (21%), diabetes (19.5%), obesity (12.5%) and cardiovascular disease (5.5%) while 41.5 percent respondents did not have any health problem. The findings regarding purchase of packaged food items revealed that 41.5 per cent of the consumers purchased packed food items "once

in a week” followed by 24 per cent 2-3 days/week, 20 per cent monthly, 6.5 per cent use to purchase 4-5 days/week and 8 per cent daily. Significant relationship was found in between frequency of purchase of packaged food items with age the purchase was higher among the young adults in the age group of less than 25 years ($p < 0.05$). Results of the label reading practices revealed that 30.5 per cent of the respondents use to read the food labels “always”, followed by 30.5 per cent use food labels “often”, 26 per cent use them occasionally, 13.5 per cent use them “rarely”. It was found that 52.5 per cent of the respondents read the food labels in supermarket, followed by 38.5 per cent read the food labels at both places that is at home and in supermarket, and 3 per cent read at home. Regarding ease to read the information from food label it was found that 46 per cent of the respondents found it easy and quick to read the nutritional information from “front of pack”, 28.5 per cent read from “both side of pack” they said the information which were not available on front of pack like ingredients, instruction for use, best before or expiry date they check them back side, 19.5 per cent check “back of pack” as they found it easy to get all the information they need at back and 6% said they “don’t consider” they read it from anywhere on pack. Reasons of reading the food label by the respondents were information purpose (91%), health consciousness (61%), quality (45%) and attractiveness of package (35%), reason of not reading the food labels were awareness about the product (44.1%), lack of interest (31.6%), lack of time (20.6%) and for 3.7 per cent it was difficulty in understanding. Information read by the respondents on food labels were best before / expiry date (93%), followed by brand name (92.5%), price (85%), nutrition fact panel (65%), health and nutrition claims (67.5%) and ingredient panel (50%). Significant association was found in between nutrition fact panel reading and health and nutrition claims checking practices with age and education practice as the education level increases the nutritional fact panel and health and nutrition claims reading practices also increases and young adults (20 - 35 years) are more concerned about these two aspects ($p < 0.05$). For the results regarding consumer’s perception and purchasing behavior towards food products having nutrition and health claim first of the all the respondents were asked about the knowledge regarding role of nutrients in the body the findings revealed that 37.5 per cent of the respondents said that nutrients “help in growth and development of body”, 34 per cent said they “helps in normal functioning of the body”, 6.5 per cent said they “helps the body in fighting with diseases”, 5 per cent said that they “provides energy” and 17 per cent said they are unaware of the role of nutrients in our body. It was found that significant association was found in between consumers’ knowledge regarding role of nutrients in the body with age and education respondents of the younger age and higher education has better knowledge about the role of nutrients in the body ($p < 0.05$). Regarding the believability in the food products having nutrition and health claims it was found that 56.5 per cent of the respondents said “Yes”, that they believe in packaged food products with nutrition and health claims because with the changing dietary trends and motivation to live healthy lifestyle they found them healthier than other packaged food products and 33.5 per cent respondents denied about believability on food products with nutrition and health claims. Findings regarding the inclination towards food products revealed that 66.5 per cent of respondents inclined towards food products with nutrition and

health claims and 33.5 per cent respondents denied, data regarding the purchase of packaged food product having nutrition and health claims revealed that 51.5 per cent (103) of the respondents purchase the food products with nutrition claims, 15 per cent (30) of the respondents go with health claims and 33.5 per cent of respondents do not preferred any claim related packaged food products. The percentage for the nutrition claims preference was more than the preference for health claims. Significant association was found in between inclination and purchase of the food products having nutrition and health claims with age and health problems which infers that young adults (20 – 34 yrs.) and people with health problems, or within their family members, were more likely to inclined and purchase packaged food items labelled with nutrition and health claims ($p < 0.05$). In total 133 respondents use to purchase packaged food products with nutrition and health claims. When the respondents were asked about the preferences for the type of health and nutrition claims it has been found that the most preferred and readable health related claims for those who were purchasing food products with health claims were heart related (93.3%), followed by claims related to blood glucose (86.7%) and health claims related to immunity (86.7%) and regarding nutrition claims the most preferred and readable nutrition claims for those who were purchasing food products with nutrition claims were “Trans fat free” (92.2%), “Low Fat” (84.4%), “Low Calories” (83.3%) and “High Fiber” (77.6%). Findings regarding the reasons for the purchase of food products having nutrition and health claims revealed that 48.8 per cent of respondents buy the food products with nutrition and health claims “for general health purpose”, 41.4 per cent purchases for “keeping a check on intake of particular nutrient”, 5.3 per cent said that it “helps in fighting with disease condition” while 4.5 per cent said the products were “suggested by doctor or nutritionist”. consumers’ who were purchasing packaged food products having nutrition and health claims were asked about the benefits provided by the presence of health and nutrition claim labels on packaged food products revealed that 45.1 per cent of the respondents said that they “Helps in making healthy choices”, 26.3 per cent said it “saves their time of reading the full detailed nutrition fact panel”, 28.6 percent said that it provide “ease to read” i.e. they are easy and quick to read. About the brand preferences for the food products having nutrition and health claims findings revealed that is 60% prefer brand for the product having nutrition and health claims and 40% denied. The consumption pattern of consumers’ who were purchasing packaged food products having nutrition and health claims revealed that that majority of the respondents use to consume biscuits (46.62%) and breakfast cereals (43.6%) on daily basis.

Demographic Representation

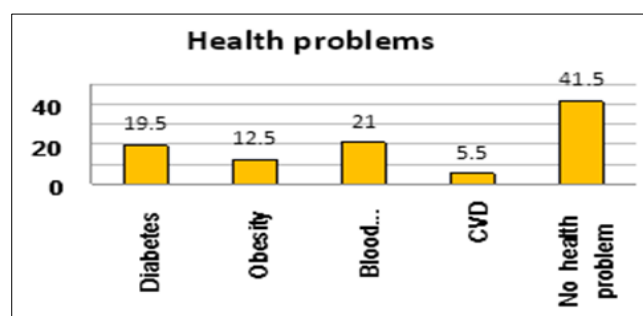


Fig 1: Health problems

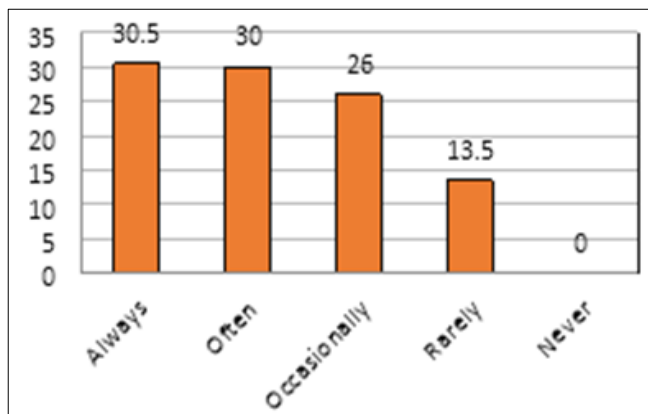


Fig 2: Frequency of using food label by the respondents while buying packaged food products

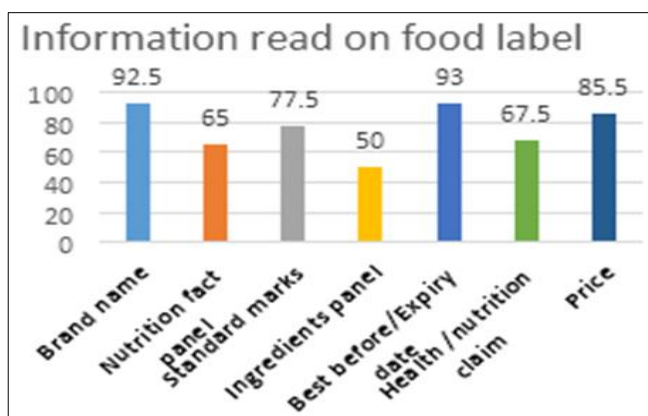


Fig 3: Information read by the respondents on food labels

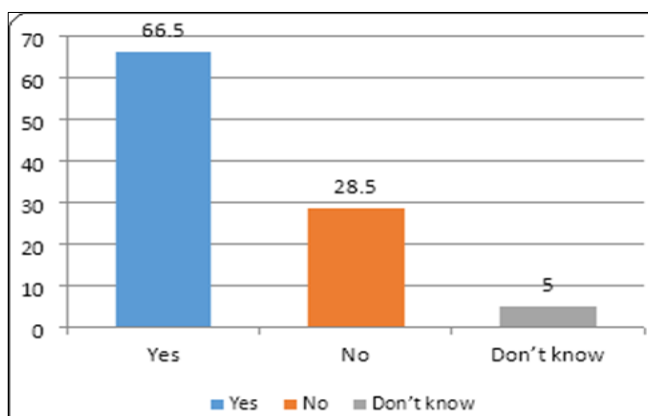


Fig 4: Believability in the food products having nutrition and health claims

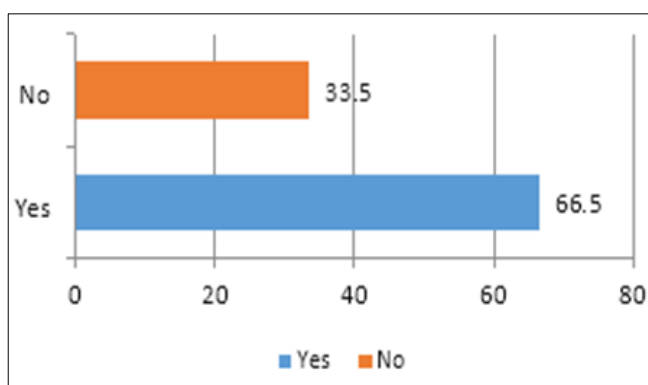


Fig 5: Inclination towards food products having nutrition and health claims

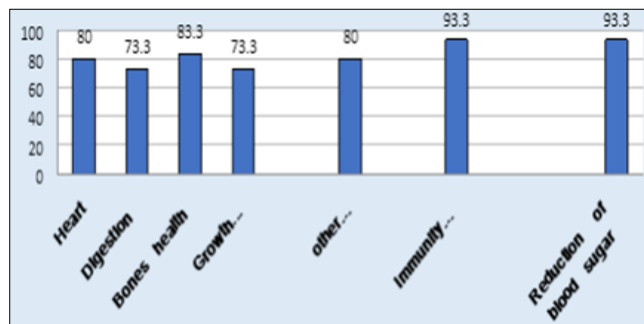


Fig 6: Consumers' preferences towards health claims on food products

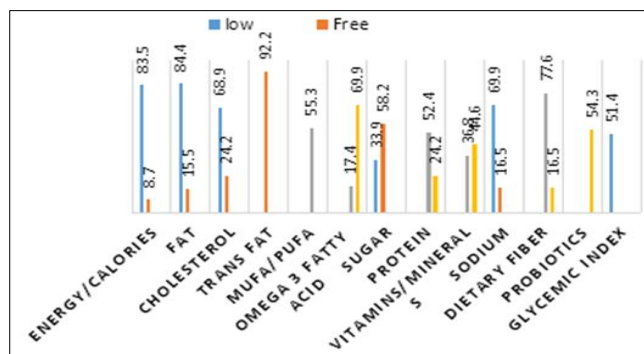


Fig 7: Consumers' preference towards nutrition claims on food products

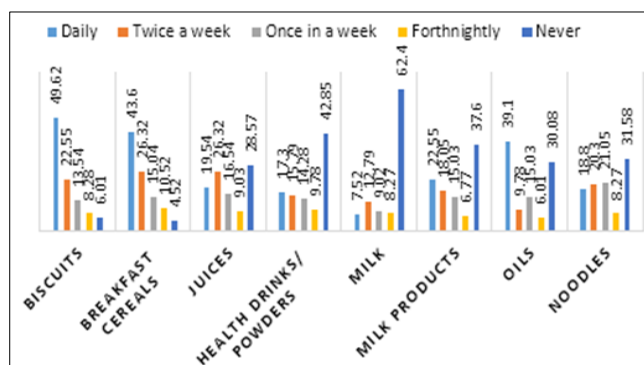


Fig 8: Frequency of consumption of packaged food products having nutrition and health claims

Summary and Conclusion

According to the findings of this investigation, it has been concluded that almost all the respondents use to read the food label out of which 30.5 per cent always use to read food labels rest of them read often, occasionally and rarely but there were no respondent who do not use the food labels. Respondents were concerned with information and health consciousness which grab their attention towards best before / expiry date, brand name and price, health and nutrition claims, nutrition fact panel, least considerable aspect was ingredient panel. Young people, middle-aged, and educated respondents more interested in reading the nutrition information from product labels. Consumers found it easy to get the nutrition related information from "Front of pack". As health consciousness was found to be one of the major reason of reading food labels majority of the respondents believe in food products with nutrition and health claims, they were more inclined towards food products with nutrition and health claims because with the changing dietary trends and motivation to live healthy lifestyle they found them healthier than other

packaged food products. Out of 200 respondents 133(66.5%) use to purchase packaged food products with nutrition and health claims. Majority of respondents prefer nutrition claim (51.5%) than health claims (15%). Young adults, and respondents who were suffering or respondents having members in the family with health problems were more likely to inclined and purchase packaged food products with nutrition and health claims. Presence of nutrition and health claims helped the respondents in making healthy food choices and such packaged food products were brought for general health purpose of eating healthy. Biscuits and breakfast cereals found to be the most consumable packaged food products with nutrition and health claims. As the people are now becoming more concern about living health lifestyle. They started making eating right a part of their daily life. Consumers are using food labels to guide them making healthy food choices and are more likely to inclined and purchase food products with nutrition and health claims. Food manufactures are targeting this aspect of health consciousness and launching packaged food products with nutrition and health claims to attract the consumers. Regulation have been made by the government for including nutrition and health claims on packaging of the food products still there's need of strict action for the protection of consumers as well there is a need to make consumers aware about food labels and how they can make healthy food choices using food labels.

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