

Awareness and use of food labelling informations among consumers in Bhubaneswar city

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Disclosure of information regarding the product on the packet is a critical aspect due largely to stringent regulatory regimes. Present study tries to assess the awareness of consumers about the information provided on food labels, by undertaking a survey among 120 consumers in Bhubaneswar city. It was found that consumers in India possess satisfactory level of awareness about different types of information on the food labels displayed on packaged food products, however, usage of such information as one of the criteria while purchasing packaged food product was relatively low. 67.5 per cent of the respondents had the habit of checking the information label on the packet, however, they read basic information like M.R.P and manufacturing and expiry dates.

Key Words : Food labelling, Consumer's knowledge, Awareness, Packaged foods

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INTRODUCTION

Food product labelling, as policy tool for ensuring provision of nutrition and health information to consumers and as product differentiation strategy by food companies, has gained importance in the recent past across the globe (Kim *et al.*, 2001; Marks, 1984). Food labels are found to be a very important public health tool that is used to promote a balanced diet, and hence enhance the public health and wellbeing. Food labels information helps the consumers in the better understanding of 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 (Nayga, 2000; AL Tamimi and Company, 2004). In addition; it is particularly useful for people who are on special diets (e.g. people suffering from diabetes or high blood lipid or obesity) to select suitable foods for their health conditions. In order for such information to get converted into knowledge, consumers should be able to comprehend this information and make informed choices

while buying different food products. With regard to food purchasing, food labels have hence probably become the most important and most influential factor during consumer decision making (Nadia Prinsloo *et al.*, 2012; Perers-Teixeira and Badrie, 2005) because most of the information that consumers require, such as branding and product ingredients, are printed on product labels (Prathiraja and Ariyawardana, 2003 and Kole *et al.*, 2009) that are prominently attached to the packaging, or form an integral part of the packaging. They use attributes such as serving size, ingredient list, health and nutrient claims, price and brands when making their food purchasing decisions (Sharma and Kumar, 2012; McLeana *et al.*, 2005 and Whitney and Rolfes, 2008). Food labels 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 (Vander Merwe *et al.*, 2010 and Dimara and Skuras, 2005).

The food processing industry is one of the largest in India. It is ranked fifth in terms of production, consumption, export and expected growth. Food processing industry is of enormous significance for India's development because it has linked up economy, industry and agriculture in India (*Sethassociates.com*). There is a large untapped opportunity

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to cater to 1000 million domestic consumers. It is estimated that 300 million upper and middle class consume processed food. With the convenience needs of dual income families, 200 million more consumers are expected to move to processed food by 2010. The market size for the processed foods is thus bound to increase from US \$102 billion currently to US \$330 billion by 2014-15 assuming a growth of 10 per cent. The share of the value added products in processed foods would almost double from US \$44 billion currently to US \$88 billion during the same period, growing at the rate of 15 per cent. (Studymode.com, 2012).

Information provided on food labels :

As per food safety and standards (packaging and labelling) Regulations 2011 in Indian every food items needs to follow rules and regulation for product labelling.

As per Indian Regulation food product must have :

- Product name and category of food.
- An ingredient list in descending order of weight.
- Logo of vegetarian and non-vegetarian food.
- Nutrition fact panel or information which includes energy, protein, carbohydrate (sugar) and fat.
- The shelf-life (use by or best before date).
- Storage conditions.
- The name and address of the manufacturer, packer and / or seller.
- The country of origin (in case of imported foods).
- The weight.
- Instructions for use.
- Health claims establish a relationship between a food and disease or medical condition.
- Nutritional claims quickly inform a consumer of nutritional value of a product for example 'low fat' or 'zero cholesterol' (Ministry of health and family welfare).

However, there are many issues and questions related to food labeling, such as how far the consumers are aware of food labels and can they comprehend the information provided on the labels. Further, how far the aware consumers take into consideration food label information while making purchase decisions.

With the rising concerns about the interrelationship between nutrition, health and life style among the population; this study has aimed to assess the consumer's knowledge about the important information on the labels and to whether those labels will assist them to take right decisions when buying pre-packaged foods.

METHODOLOGY

Objectives :

- To know the degree of checking nutrition labelling on processed foods among consumers.

- To know the nutritional information most sought on food labels among consumers.
- To know the level of awareness of the consumers regarding the importance of the food label.
- To know the reasons for not checking the nutrition labels over food products among consumers.

Research design :

The study was conducted in the city of Bhubaneswar, Odisha from 2nd November to 31st November, 2013. 120 respondents from both genders (age group from 25 – 45 years) were randomly selected as the sample for the study. Retail outlets were visited in morning, afternoon to ensure better coverage of all types of consumers. The survey tool for this study was a structured survey questionnaire method through face-to-face interview by the investigator.

OBSERVATIONS AND ASSESSMENT

Table 1 shows salient socio-demographic characteristics of the sample covered in the survey. Majority of the respondents (65.83%) were females. Sample covered two age groups: 20 to 34 years (70.83%); 35–45 years (29.16%). Considering the educational qualification, all the respondents were well educated with over two thirds (69.16%) with graduation degree, 12.5 per cent went to college and 18.33 per cent had Post graduate degrees or above, reflected a higher educational level among grocery shoppers interviewed . The level of education of the sample was reflected on their occupations, as 37.5 per cent respondents were private sector employees followed by Government employee (23.33%), students (13.33%) and homemakers (14.16%). Around three fourth (73.33%) of the respondents were married and rest (26.66%) were singles. There were 70 per cent respondents who said that they purchased packaged food very frequently (more than once a week) and 6.66 per cent respondents did so occasionally.

Degree of use of nutrition labelling on food packages:

Extent of reading food labeling before purchase of pre-packaged foods was relatively high as Table 2 shows that 42.5 per cent of the respondents 'Always' read labeling information prior purchase of pre-packaged foods (including respondents reading nutrition labels 'Often' (25%). On the other hand, this high proportion could possibly be attributed by the supermarket settings since consumers who buy from such places tend to encounter food labels because normally they pick products from shelves by themselves (Sunelle *et al.*, 2010). Respondents who 'Never' read nutrition labels were 6.66 per cent including respondents reading 'Rarely' (14.16%). While 11.66 per cent of the respondents read nutrition labels 'Occasionally' over food packages.

Table 1 : Demographic characteristics of the respondents (n=120)

| Variables | Frequency | Percentage |
|--|-----------|------------|
| Gender | | |
| Male | 41 | 34.16 |
| Female | 79 | 65.83 |
| Educational qualification | | 0 |
| Illiterate | 0 | 0 |
| High school | 0 | 12.5 |
| College | 15 | 69.16 |
| Graduation | 83 | 18.33 |
| Post Graduation and above | 22 | |
| Age group | | |
| 20 – 34 Years | 85 | 70.83 |
| 35 – 45 Years | 35 | 29.16 |
| Occupation | | |
| Students | 16 | 13.33 |
| Government employee | 28 | 23.33 |
| Self-employed | 07 | 5.83 |
| Unemployed | 02 | 1.66 |
| Private sector employee | 45 | 37.5 |
| Housewife | 17 | 14.16 |
| Others | 05 | 4.16 |
| Social status | | |
| Single | 32 | 26.66 |
| Married | 88 | 73.33 |
| Divorced | 0 | 0 |
| Widow | 0 | 0 |
| Frequency of purchasing packaged food | | |
| More than once a week | 84 | 70.0 |
| Once a week | 17 | 14.16 |
| Once a month | 11 | 9.16 |
| Occasionally | 08 | 6.66 |

Table 2 : Reading of food labelling before purchase (n=120)

| Responses of the respondents | Frequency | Percentage |
|------------------------------|-----------|------------|
| Always | 51 | 42.5 |
| Often | 30 | 25 |
| Occasionally | 14 | 11.66 |
| Rarely | 17 | 14.16 |
| Never | 08 | 6.66 |
| Total | 120 | 100 |

Information sought on food labels according to the personal preferences of consumers:

Ten items were identified as information which might relatively be available in the food label and the consumers may be looking at when buying the food packages (Table 3). The analysis showed that majority of the respondents (75.83%) mentioned manufacturing and expiry dates as their first, second or third important information they look for in the label. More or less the same motivations were reported by (Philip *et al.*, 2010), that consumers are motivated by the need to establish safety, hygiene and quality of pre-packaged foods before purchase of such foods. On the other hand, comparative low interest of the respondents in the presence of nutrition label (16.65%), standardisation mark like ISO/ AGMARK/ ISI mark (20.82%) on the product packet reflected low awareness of the sample about the presence of such information in the label. Health warning message was found to be the least important (3.32%).

Consumer’s level of awareness on the importance of the food label:

To measure the consumers level of awareness about the information on the food label, a measuring score was constructed. The previously constructed 10 information items were considered for measuring the score. If the consumer agrees with any item then 1 point was given, 0 point if the

Table 3 : Information regarding food labelling

(n=120)

| | First importance | | Second importance | | Third importance | |
|--|------------------|-------|-------------------|-------|------------------|------|
| | F | (%) | F | (%) | F | (%) |
| Expiry date and Manufacturing date | 24 | 20 | 34 | 28.33 | 33 | 27.5 |
| M.R.P | 67 | 55.83 | 50 | 41.66 | 48 | 40 |
| ISO / AGMARK | 4 | 3.33 | 10 | 8.33 | 11 | 9.16 |
| Presence of nutritional label | 7 | 5.83 | 5 | 4.16 | 8 | 6.66 |
| An ingredient list | 6 | 5 | 4 | 3.33 | 2 | 1.66 |
| Health warning | 2 | 1.66 | 1 | 0.83 | 1 | 0.83 |
| Nutritional claims | 2 | 1.66 | 3 | 2.5 | 5 | 4.16 |
| Name and address of the manufacturer, packer and / or seller | 1 | 0.83 | 3 | 2.5 | 3 | 2.5 |
| Net weight | 5 | 4.16 | 4 | 3.33 | 7 | 5.83 |
| Instructions for use | 2 | 1.66 | 6 | 5 | 2 | 1.66 |
| Total | 120 | | 120 | | 120 | |

consumer didn't see the importance of the item. Accordingly Table 4 shows that majority 51.66 per cent of the consumers have middle level of awareness while 19.16 per cent with low level of awareness. According to the score computed, only 29.16 per cent of the consumers have high level of awareness despite the fact that most of the consumers interviewed were of higher level of education (69.16% were university graduates). This indicates that a lot of effort has to be exerted by nutritionists to raise the level of awareness of the consumers about the importance of reading and using information on the food label. On the other hand, higher level of awareness was found among female (22.12%) than male consumers (17.07%).

Circumstances in which respondents purchase pre-packaged foods without reading labels:

Results showed various circumstances in which respondents purchased pre-packaged foods without reading labels. As shown in Table 5, more than a quarter 44 (36.66%) of respondents reported to purchase packaged food without reading labelling information because the food was routine/familiar to them. Others 38 (31.66%) purchased pre-packaged foods without reading labelling information because the seller is familiar to them whom they trust. Few respondents 10 (8.33%) reported to purchase pre-packaged foods without reading labels because the foods were sold at low price. More or less the same was reported by The Foundation Food Label

Consumer Research Project (2006) in America and in South Africa by Sunelle *et al.* (2010), that pre-packaged food consumers were less likely to examine food labelling information if they don't have enough time, when purchasing routine pre-packaged foods and discounted foods.

Difficulties encountered by respondents when reading/using food labels:

Participants of this study reported a number of difficulties encountered in the course of reading food labelling information. These included use of unfamiliar language, small font sizes, use of scientific/technical language, missed and/or hidden information. Similar findings were reported in South Africa by Sunelle *et al.* (2010), in the UK Philip *et al.* (2010), Mahgoub *et al.* (2007) in Lesotho and Grunert *et al.* (2010) in the UK. Donna *et al.* (2001) also revealed the same problem, that use of technical/scientific language on food labels situate barrier to consumers in reading and understanding labelling information when deciding to purchase pre-packaged foods in Australia and New Zealand. Majority respondents (40.83%) revealed that use of various technical/ scientific terms on the packets was the main problem for them in understanding the food labels. While the printing of the labels in small fonts caused difficulties for 35 per cent of the respondents.

Conclusion :

Today's trends for healthy eating habits and ready-to-

Table 4 : Consumer's level of awareness

| Level of awareness | Male | | Female | | Total | |
|--------------------|------|-------|--------|-------|-------|-------|
| | F | (%) | F | (%) | F | (%) |
| High | 7 | 17.07 | 28 | 22.12 | 35 | 29.16 |
| Middle | 23 | 56.09 | 39 | 49.36 | 62 | 51.66 |
| Low | 11 | 26.82 | 12 | 15.18 | 23 | 19.16 |
| Total | 41 | | 79 | | 120 | |

Table 5 : Reasons for purchasing without reaching labels

| Reasons | Frequency | Percentage |
|------------------------------------|-----------|------------|
| When the food is sold at low price | 10 | 8.33 |
| When in a hurry/time constraints | 16 | 13.33 |
| Purchase of routine/familiar foods | 44 | 36.66 |
| On streets or journey | 12 | 10 |
| When they trust the seller | 38 | 31.66 |

Table 6 : Difficulties faced by consumers in reading food labels

| Difficulty | Frequency | Percentage |
|--------------------------------------|-----------|------------|
| Unfamiliar language | 6 | 5 |
| Small fonts | 42 | 35 |
| Use of technical/scientific language | 49 | 40.83 |
| Incomplete labelling | 14 | 11.66 |
| Hidden information | 9 | 7.5 |

eat products have increased consumer demand for more detailed and accessible information, primarily on food packaging and labels. Although product attributes such as quality and price are extremely important to consumers and producers, packaging and labelling play a fundamental role on consumer's intention to purchase. The results of the study indicated satisfactory level of awareness among the respondents about different types of information on the food labels displayed on packaged food products. Though it concluded that customer does look for information before buying any product but majorly price and expire date. More consumer awareness need to be spread regarding checking other type of information such as ingredients of products, health warnings, nutritional claims etc., this will not just help consumers but also companies to differentiate their products from competitor. However due to its relatively small sample these findings cannot be generalized to the rest of similar population in the city. Occupation, education level and age of respondents were found to be significantly associated with awareness and use of pre-packaged food labelling information.

Most lifestyle products such as breakfast cereals, readymade dressings etc. that would mostly be used by people who have relatively higher levels of income and education would pay more attention to various kinds of label information. Here also, the results gave a clear indication that label information is generally gender and age insensitive though its use assumes significance with the income levels, education and occupation of the consumers.

Some suggestions for developing guidelines by marketers and Government regarding better understanding of nutritional labels are :

- Government should develop a suitable policy for imparting education regarding importance of nutrition starting at school education level.
- Consumers should be made aware of relation between healthy diet and its implication on health and disease.
- The nutritional label should be made consumer friendly.
- The claimed nutritional content in the products must be delivered.
- Nutritional labels should be made easily readable and understandable.

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