

Awareness of consumers about nutritional labelling

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ABSTRACT

A study was conducted in Shivamogga district of Karnataka state which included 200 respondents from four different professions viz lawyers, businessmen, teachers and housewives, 50 in each group, to obtain relevant information such as buying behaviour of consumers, consumers' awareness about nutrition information and health claims disclosed on the food label. Higher number of teachers (90%) was more concerned about MRP of the product followed by housewives (88%), lawyers and businessman (84% each). All consumers checked the date of manufacturing and expiry of the product. A higher number of lawyers (90%), housewives (96%) and businessmen (92%) acquired information through internet whereas a higher number of teachers (96%) acquired information through newspapers. High number of teachers, businessmen, housewives and lawyers were reading nutrient information viz sugar, total calories/energy and fat. More businessmen read cholesterol information on food label. Protein, vitamins and minerals, fibre and sodium content on food label was read by higher number of teachers. Majority of housewives (92%) was utilising nutrition information on all circumstances followed by teachers (84%), businessmen (76%) and lawyers (50%). All housewives saw nutrition information while buying a new product. More than 80 per cent of teachers, lawyers and housewives read nutrition information when buying a new version of existing product. However only 67 per cent of businessmen did so.

Keywords: Food label; buying behaviour; consumers' awareness; nutrition

INTRODUCTION

Food label could be a cost effective method of communicating nutrition information to consumers because the information appears at the point of sale for most packaged foods (Campos et al 2011). According to food safety and regularity authority of India the nutrition information is necessary on food label along with name, expiry date, manufacturing date and ingredients. Food label information assists consumers to better understand the nutritional value of food and enables them to compare nutritional value of similar products to make healthy food choices based on the relevant nutrition information. An effective food label plays a multidimensional role like providing nutritional information (Mackison et al 2010), control food related allergies (Voordouw et al 2009) and expiry date provides food safety (Sanlier and Karakus 2010). Food label use could be a moderator of the association between nutrition knowledge and dietary behaviours.

METHODOLOGY

A cross sectional study was conducted in Shivamogga district of Karnataka state that included 200 respondents from four different professions viz lawyers, businessmen, teachers and housewives, 50 in each group, selected by purposive random sampling technique. All the respondents were interviewed through structured-questionnaire personally to obtain relevant information such as buying behaviour of consumers, consumers' awareness about nutrition information and health claims disclosed on food label. The collected data were consolidated, tabulated and analysed statistically.

RESULTS and DISCUSSION

Data on awareness of consumers about food label is given in Table1. It is evident that a higher number of teachers (90%) were more concerned about MRP

of the product followed by housewives (88%), lawyers and businessmen (84% each). It is good to know that all consumers were checking the date of manufacturing and expiry of a product. Majority of housewives also looked into list of ingredients on the label. Majority of businessmen (90%) looked into weight of the product followed by housewives (88%), lawyers and teachers (84% each). It was interesting to note that more than 90 per cent of the consumers also looked into brand of the product. More number of consumers was more concerned about the date of manufacturing and expiry. The results were statistically non-significant among consumers except for date of manufacturing and expiry. Priyadarshini (2014) and Kaur et al (2016) also reported similar results.

TV, radio, newspaper, magazine, internet, family/friends etc were the sources for the consumers for acquiring nutrition information (Table 2). A higher number of lawyers (90%), housewives (96%) and businessmen (92%) acquired information through internet. However a higher number of teachers acquired information through newspaper (96%). Up to 20 per cent of the consumers acquired information through radio. Only 40-64 per cent of the consumers acquired information through magazine. However 70-84 per cent of the consumers gained nutrition information through family/friends. The results were statistically non-significant among consumers.

Data on commonly read nutrient information on food labels are given in Table 3. Higher number of teachers read nutrient information on food labels followed by businessmen, housewives and lawyers. There were no significant differences among consumers in reading nutrient information. Majority of teachers, businessmen, housewives and lawyers read nutrient information viz sugar, total calories/energy and fat. A higher number of businessmen read cholesterol information on food label. Protein, vitamins, minerals, fibre and sodium content on food label was read by higher number of teachers. However only 40-64 per cent of consumers were reading sodium information on food label. The results were non-significant among consumers. Vemula et al (2013) and Saha et al (2013) reported that consumers were more concerned about sugar, fat, cholesterol and salt and also read nutrient information written on food label.

Data on use of nutrition information by the consumers is given in Table 4. It is interesting to note that 92 per cent of the housewives were utilising

nutrition information in all circumstances followed by teachers (84%), businessmen (76%) and lawyers (50%). All housewives used to see nutrition information while buying a new product. More than 80 per cent of the teachers, lawyers and housewives read nutrition information when buying a new version of existing product. However only 67 per cent of businessmen did so. Results are statistically significant for consumers while seeing nutrition information in all circumstances and while buying a new product.

Information about awareness of selected consumers regarding health claims on various food products is given in Table 5. Higher number of businessmen (92%) had awareness on food label regarding health claims such as suitable for people with diabetes mellitus, product is good for people with heart problems, guarantee that the product is not harmful to health, guarantee of quality and suitable for people with specific allergies. Up to 50 per cent of the consumers opined that health claims disclosed on various food products were purely for advertising purpose. Majority (96%) of the teachers were keen in noticing information that the product was good for people with heart problems and guarantee on food label that the product was not harmful to health. Results were statistically significant for health claims such as suitable for people with diabetes mellitus and cholesterol, product is recommended as a part of balanced diet and guarantee that the product was not harmful to health.

Fullmer et al (1991) conducted a study on consumers' knowledge, understanding and attitudes towards health claims on food labels and found that the consumers with higher education levels had a better understanding of diet disease-related messages and exhibited more positive attitude toward health messages on food labels.

CONCLUSION

Higher number of teachers were more concerned about MRP of a product followed by housewives, lawyers and businessmen. All consumers checked the date of manufacturing and expiry of a product. TV, radio, newspaper, magazine, internet, family/friends etc were the sources for acquiring nutrition information for the consumers. Internet was the most common source for acquiring nutrition information. Higher number of teachers read nutrient information on food label followed by businessmen, housewives and lawyers. Results were significant for

Table 1. Awareness of consumers about food labels

| Component | Consumers (n=200) | | | | Chi-square value |
|----------------------------------|-------------------|------------|-------------|----------|------------------|
| | Lawyers | Housewives | Businessmen | Teachers | |
| MRP | 42 (84) | 44 (88) | 42 (84) | 45 (90) | 1.16 |
| Date of manufacturing and expiry | 50 (100) | 50 (100) | 50 (100) | 50 (100) | 16.5* |
| List of ingredients | 44 (88) | 46 (92) | 42 (84) | 42 (84) | 1.95 |
| Weight of product | 42 (84) | 44 (88) | 45 (90) | 42 (84) | 1.16 |
| Brand | 48 (96) | 49 (98) | 45 (90) | 47 (94) | 3.37 |

*Significant at 5% LoS, Figures in parentheses indicate percentages

Table 2. Source of acquiring nutrition information by the consumers written on food labels

| Source | Consumers (n= 200) | | | | Chi-square value |
|----------------|--------------------|------------|-------------|----------|------------------|
| | Lawyers | Housewives | Businessmen | Teachers | |
| TV | 41 (82) | 48 (96) | 40 (80) | 40 (80) | 6.83 |
| Radio | 05 (10) | 10 (20) | 02 (04) | 04 (08) | 7.40 |
| Newspaper | 44 (88) | 46 (92) | 46 (92) | 48 (96) | 2.17 |
| Magazine | 25 (50) | 32 (64) | 20 (40) | 25 (50) | 5.84 |
| Internet | 45 (90) | 48 (96) | 46 (92) | 40 (80) | 7.40 |
| Family/friends | 35 (70) | 42 (84) | 36 (72) | 42 (84) | 4.90 |

Figures in parentheses indicate percentages

Table 3. Commonly used nutrient information given on food labels by the consumers

| Nutrient information | Consumers (n= 200) | | | | Chi-square value |
|-----------------------|--------------------|------------|-------------|----------|------------------|
| | Lawyers | Housewives | Businessmen | Teachers | |
| Total calories/energy | 45 (90) | 48 (96) | 46 (92) | 46 (92) | 1.37 |
| Carbohydrates | 25 (50) | 30 (60) | 35 (70) | 32 (64) | 4.46 |
| Protein | 36 (72) | 38 (76) | 32 (64) | 42 (84) | 5.40 |
| Fat | 45 (90) | 45 (90) | 46 (92) | 48 (96) | 1.63 |
| Sugar | 46 (92) | 48 (96) | 48 (96) | 46 (92) | 1.42 |
| Vitamins/minerals | 32 (64) | 34 (68) | 35 (70) | 42 (84) | 5.57 |
| Cholesterol | 44 (88) | 42 (84) | 46 (92) | 42 (84) | 1.94 |
| Fibre | 32 (64) | 30 (60) | 34 (68) | 35 (70) | 1.30 |
| Sodium | 20 (40) | 25 (50) | 26 (52) | 32 (64) | 5.82 |

Figures in parentheses indicate percentages

Table 4. Use of nutrition information by the consumers

| Component | Consumers (n= 200) | | | | Chi-square value |
|--|--------------------|------------|-------------|----------|------------------|
| | Lawyers | Housewives | Businessmen | Teachers | |
| All circumstances | 25 (50) | 46 (92) | 38 (76) | 42 (84) | 26.9* |
| While buying a new product | 42 (84) | 50 (100) | 42 (84) | 46 (92) | 9.78* |
| While buying a new version of existing product | 42 (84) | 46 (82) | 38 (67) | 42 (84) | 4.76 |

*Significant at 5% LoS, Figures in parentheses indicate percentages

Table 5. Awareness of consumers regarding health claims disclosed on various food products

| Health claim | Consumers (n= 200) | | | | Chi-square value |
|--|--------------------|------------|-------------|----------|------------------|
| | Lawyers | Housewives | Businessmen | Teachers | |
| Suitable for people with diabetes mellitus and cholesterol | 35(70) | 42(84) | 46(92) | 45(90) | 11.01* |
| Product is intended to improve health | 36(72) | 38(76) | 32(64) | 41(82) | 4.39 |
| Product is good for people with heart problem | 42(84) | 45(90) | 46(92) | 48(96) | 4.36 |
| Product is recommended as part of balanced diet | 29(58) | 35(70) | 36(72) | 42(84) | 8.26 |
| Guarantee that the product is not harmful to health | 35(70) | 45(90) | 46(92) | 48(96) | 17.86 |
| Guarantee of quality | 45(90) | 42(84) | 46(92) | 40(80) | 3.90 |
| Suitable for people with specific allergies | 46(92) | 45(90) | 46(92) | 42(84) | 2.29 |
| Purely for advertising purpose | 20(40) | 25(50) | 23(46) | 24(48) | 1.13 |

*Significant at 5% LoS, Figures in parentheses indicate percentage values

consumers when seeing nutrition information in all circumstances and when buying a new product. Higher number of businessmen had awareness about food label regarding health claims such as suitable for people with diabetes mellitus, product was good for people with heart problem and guarantee of quality and suitable for people with specific allergies.

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