



Perception of Customer about Significance of Nutritional Information in the Menu of Restaurants: A Study of Restaurants in Chandigarh (U.T)

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ABSTRACT

This paper examines the perception of customers about significance of nutritional information in the menu of restaurants of Chandigarh (U.T) and also to examine the influence of age on the nutritional significance of customers' in UT, Chandigarh. To address the objectives of the study 100 respondents were questioned from various restaurants in Chandigarh. The results reveal customers are inclined towards having nutritional information in the menu's and moreover it is identified that all the age groups were having a similar perception towards three items and for rest of the factors opinion of customers differed from one another. It is suggested that restaurant operators need to consider nutritional information as a significant factor while planning menu.

Keywords : age, nutrition, restaurant, influence

INTRODUCTION

In the recent years, restaurant nutrition information has attracted food service industry's attention. Majority of the customers these days are cautious about their food intake because of the day to day expanding frequency of obesity, overweight and the number of diseases (Centers for Disease Control (CDC) 2008). The concept of nutritional labeling was introduced as part of the NLEA (Nutrition Labeling and Education Act) since 1990 to disclose information related to carbohydrate, sodium, calories, sugar etc. The restaurants are excluded from mentioning the nutritional information for their menu item as the bill passed by NLEA were not applicable to the restaurant sector. United States was farsighted and had taken an initiative to pass a law for the chain restaurants to disclose the calorie information on the menu items (Center for Science in the Public Interest, 2009). According to today's eating pattern, restaurants come with the low cost menu items, large food portions and high calorie food results in high dietary intake and risk of diseases (Odegaard et al. 2012). Although, these food-lifestyle related health problems originated from United States but now they cover a large part of the globe. To overcome this particular problem, the Menu Labeling Act (MLA) was passed in 2010 as part of the Patient Protection and Affordable Care Act (Mantel, 2010). Following this many countries are mandating the disclosure of nutrients information of the food products as means for consumers to be aware of the nutritional properties where the parameters are calories, fat and sugar content, carbohydrates, this too should be backed by a licensing laboratory to second it (McVety et al. 2001). Nutrition information is helpful in creating consumer interest, confidence and making healthful choices while selecting a dish (Cowburn and Stockley, 2005; Ree et al. 2008).

In the restaurants ranging from specialty, theme or fine dining concept, they do the planning of the menu on the several parameters like clientele, seasonality, price, quantity, quality, location of the restaurant any many similar parameters (Thomas and Mills, 2008). Apart from that the origin of the dish, cooking style, main ingredients used in the dish gives

the customer an idea before making the purchase or order. These parameters have given the impact on purchase intention to a certain extent (Drydale and Galipue, 2008). However if nutritional information is printed on the menu card along-with, the dish will give the direct positive impact to understand the food which the customer is going to purchase (Consumer Affairs, 2009). These days the restaurant is concerned about the increasing customers demand day by day. The restaurants need to think above these parameters to run their operations and need to follow the best practices in preparing the menus. However nutritional information plays a pivotal role in the menu and helps to attract both, existing and new customers. Customer satisfaction plays an important role in the hospitality and food service industry. Nutritional information on the menu helps the restaurateurs by enhancing customer's confidence which leads to higher customer satisfaction (Gallicano et al., 2012). Satisfied customers spread the message through WOMA. This will in longer run serve as a communication tool to shape up the personality and uniqueness of the concept of a restaurant (Miller and Pavesic 1996). The main reason to advocate the cause of Nutrition information on the menu is to make assist consumer in making healthful choices and to protect consumers and their rights (Cowburn and Stockley, 2005; Ree et al. 2008). And as such it is not only the industry but academics too which has started to realize the importance of nutrition information on the menu (Burton and Creyer 2004; Thomas and Mills 2006; Thomas and Mills 2008; Basset et. al, 2007; Hwang & Lorenzen 2008).

REVIEW OF LITERATURE

The literature on customer perception about menu's nutritional information is scarce as volume wise not much work has been done in this area especially in Indian context. Studies from different geographical locations have been made as a basis for the present study. Harnack and French, (2008) stated that people spend most on food and dining out, out of their monthly household budgets. This is also one of the reasons why the people are worried about nutrition content of food service offerings. Providing nutritional information on restaurant's menu

helps the customers to decide the nutrition intake. The tendency of eating out and consumer's trend to underestimate levels of unwanted nutrients in foods; enable consumers with the knowledge of nutritional composition of meal (Harnack and French, (2003). This helps to adopt healthful choices of menu. Apart from that it has a major public health benefit which is to reduce the customer to take undesirable nutrient (Burton et al. 2006). The studies have supported the claim that the present day customers are responsive and awakened to the concept of nutritional information on a menu (Din et al. 2012). Burton et al., (2006) analyzed that simply available nutrition information of menu items have possible public health benefits. Addition of nutrient information in menu has positive impacts on purchasing intentions and menu selection. On the other hand the study shows the collaboration among health claims and nutrition information on packaged food products. To focus on the relationship among the food constituent and disease risk health claims becomes beneficial. He also stated that while making product evaluation customers depend on nutrition information rather than nutrition claim. Moreover, Thomas and Mills, (2006) stated that in making menu selection, health claims on foods is useful. The purchase intention of customer focus on the product having a feature of health claims (Williams, 2005). In addition to that Hwang and Lorenzen, (2008) opined that customer adopt healthy menu options rather than less healthy option when restaurant provide nutrition information for healthy menu options. According to him calories, fat and macronutrients should be present in the menu. Their study proved that the fiber content in the menu is not as much important as the other nutrients. In addition to this when nutrition information is provided in the menu, customers are eager to pay more for the product. In same vein, Maestrotto et al., (2008) demonstrated that menu with nutrition information acts as a marketing tool as the health conscious consumers can get attracted by this facility. Possibly they found it to be the best service which helps in customer satisfaction and retention and it may also attract new customers. Further, Caswell and Mojuszka (1996); Darby and Karni (1973) noticed that protein, calories, fat and sodium are the credence attributes viewed by the consumers while dining as it cannot be assessed exactly by the guest even after having the food. However in most packaged food calorie and nutrients measurements can be searched attributes (Caswell and Mojuszka, 1996). Similarly, Dhar et al., 1999; Simonson and Tversky, 1992 stated that "choice" context plays a pivotal role in consumer preferences and product choice. Customers always choose the alternative product with higher utility or subjective value. The consumers will look for additional information in case guest finds the nutritional values are comparable among the available options (Balasubramanian and Cole, 2002). Furthermore, Burton and Creyer (2004), compared the non-target and target menu items in his study that purchase intention is increased for the target item in the menu when nutritional information is available. Gender too play a role as Conklin et al. (2005) have stated that females are more sensitive to use the nutrition information labels for food choices than their male counterparts. There do exist obstacle barriers too in terms of mandatory legislation, costs and inevitable complexities including operational issues like staff trainings and nutrient testing which eventually affect the overall business performance and have to be taken care of (Din et al. 2012).

Methodology

A self reported experience through a questionnaire survey was opted in this study. The populations were among customers who had experience dining at Speciality, Multi Cuisine and theme restaurants at Chandigarh. These restaurants were chosen as they are one of the fastest growing types of restaurants in Chandigarh and to have received customers that are concerned about the types of food offer in the menu. The survey questionnaire was divided into two major sections. Each section contained questions addressing the variables suit to the research objectives. Section A comprised questions using nominal scale and focused on respondent demographic profile. Sixteen items were used in section B to assess the gen-

eral perception of Chandigarh restaurant customers toward providing nutritional information in the restaurant menu. The opinion of customer was measured on 5 point Likert scale ranging from strongly agrees (5) to strongly disagree (1) for positive worded questions and for negative worded questions scale ranging from strongly disagree (5) to strongly agree (1). Descriptive statistics percentage analysis, mean, standard deviation and one-way Anova are used for analysis.

Demographic Variables		Total	Percentage
Type of Restaurants	Speciality	30	30
	Theme	28	28
	Multi Cuisine	42	42
Gender	Male	52	52
	Female	48	48
Age	Less than 20	24	24
	21-30	28	28
	31-40	28	28
	41-50	12	12
	More than 50	8	8
Income per month	Less than 20K	24	24
	20K-30K	12	12
	31K-40K	36	36
	41K-50K	20	20
	More than 50K	8	8
Frequency of visit in restaurant	One time	40	40
	Two time	24	24
	Three time	32	32
	Four time	4	4

Table-1 Demographic Profile of sample population (n=100)

Results and Discussions

48 percent (n =48) of the respondents were female compared to 52 per cent (n = 52) male. The largest represented age group was respondents who were among the 21-40 year-old age group (56%) and lowest were more than 50 years old (8%). 36 per cent of the respondents were having an income between 31,000-40,000 (n=36). the frequency of visits by customer to the restaurants is also shown that 40 per cent (n= 40) use to dine out once a month, followed by 24 per cent (n= 24) around twice a month, 32 per cent (n= 32) dine out thrice a month and 4 per cent (n=04) dine out four times in a month.

Perception of customer towards significance of nutritional information on menu

The review of literature reveals that a larger segment of consumers are of a view that nutritional information on menu is significant for the overall satisfaction and consumption of food and beverage at restaurants (Hensley, 2000; Wikipedia, 2005; Knutson & Patton, 1993; Meredith et al., 2002). Descriptive analysis was used to analyse the perception of customers to towards nutritional information on menus of restaurants in Chandigarh. The calculated mean and standard deviation (SD) of various factors responsible for influencing the customers to select a particular food outlet lies between 4.80-2.30 as can be seen in Table-2. It is observed that majority of customers perceived that It is right of customer to get nutritional information for the food even for non packed food has the highest mean (4.80) with 0.40 SD. As it can help them in determine the nutrition intake (M= 4.50). Majority of the customers look for nutritional information in the restaurant menu (M= 4.28). And these strong point of view is best explained through their agreement to the item "I prefer to go in a restaurant where nutritional information is given in the menu (M= 3.9) and I am very health conscious and do not consume those items which do not fit in my diet chart (M= 4.3). This

is evident when they were in agreement to all these items. With these notions it was not this is evident when they were in agreement to all these items. With these notions it was not astonishing that customers will always be looking for nutritional information of menu items in restaurants in future ($M=4.36$) and would not purchase or consume food only from those restaurants where nutritional information is given in the menu ($M=3.70$). In addition nutritional information should not be misleading ($M=4.6$). Majority of customer believe that Laws should be strictly imposed in all restaurants for providing right nutritional information in the menu ($M=4.32$). Everyone should be conscious for their health and should consume nutrition accordingly ($M=4.40$) hence highlights importance of nutritional information on menu. Despite these, customers totally agree that restaurants do not give right nutritional information in the menu because these restaurants do not provide health food to their guests ($M=4.40$) and is also due to high cost involved in this process ($M=3.24$). But customers are disagree that Restaurants in Chandigarh have enough choice of health food in their menu ($M=2.30$).

These findings indicate that customers expect from restaurant menus should carry necessary nutritional information. As today's customer is health conscious and knowledge, they keep their ears and eyes open while dinning out. People are opting healthy food habits to stay fit. But results indicate that in Chandigarh restaurants people get less and limited options of healthy food in menu. These findings are in line with other researchers' findings (Thomas and Mills, 2008) that nutritional information on restaurant menu has been gaining popularity in world today as customers believe in healthy and better life style and more health conscious particularly on eating out food.

Table-2 Descriptive Statistics of Factors for Significance of Nutritional Information in Menu of Restaurants.

Variables	Mean	SD
I always look for nutritional information in the menu	4.2800	1.02573
I prefer to go in a restaurant where nutritional information is given in the menu	3.9600	1.18850
In my view nutritional information should not be misleading.	4.6000	.66667
I purchase or consume food only from those restaurants where nutritional information is given in the menu	3.7000	1.27525
I am very health conscious and do not consume those items which do not fit in my diet chart.	4.3600	.89352
Most of speciality restaurants in Chandigarh provide right nutritional information in their menu.	3.2000	1.54397
In future also, I would like to see nutritional information in the menu	4.3600	.89352
Do you think restaurants that are not providing nutritional information in menu is due to high cost involved in this process?	3.2400	1.29584
Do you think restaurants do not give right nutritional information in the menu because these restaurants do not provide health food to their guests?	4.4000	.80403
I believe nutritional information given in the menu help me determining the nutrition intake in a day.	4.5000	.50252
Laws should be strictly imposed in all restaurants for providing right nutritional information in the menu.	4.3200	.78983

It is right of customer to get nutritional information for the food even for non packed food.	4.8000	.40202
Nutritional information in menu is least important for me for selecting a restaurant for dine	2.1200	1.13066
I always ignore nutritive information in menu while dinning out.	2.6000	1.20605
I believe everyone should be conscious for their health and should consume nutrition accordingly	4.4000	.80403
Restaurants in Chandigarh have enough choice of health food in their menu	2.3000	1.19342

Factors influencing the significance of nutritional information in the menu of restaurant according to age of customers

Many researchers have quoted that the various factors responsible for influencing menu selection restaurants differ according to the age of the people visiting restaurants. So it becomes significant to understand the customer perception regarding factors influencing the selection of the restaurant between age groups till nutritional information is considered. As analysed from Table-3 for most of the factors different age group customers have different point of view for selection of restaurants. Only for three factors i.e "nutritional information should not be misleading", "Most of speciality restaurants in Chandigarh provide right nutritional information in their menu" and "Restaurants in Chandigarh have enough choice of health food in their menu" for these three factors the p value ($p>0.05$) is not significant. For rest of the factors results are significant ($p<0.001$) or ($p<0.01$).

The respondents who were in the age group of less than 20 had lower mean scores ($P<0.01$) than the other age groups for maximum items such as "I always look for nutritional information in the menu", "I prefer to go in a restaurant where nutritional information is given in the menu", "I purchase or consume food only from those restaurants where nutritional information is given in the menu", "I am very health conscious and do not consume those items which do not fit in my diet chart.", "Nutritional information in menu is least important for me for selecting a restaurant for dine". These points might suggest these teenagers do not give any importance to nutritional information in the menu of any restaurants. They do not search for these type of information while dinning out.

Other age groups have approximately had similar opinion regarding significance of nutritional information on menu. people customers from the age group of 21 to 30 and 31 to 40 have higher mean score ($P<0.001$) and are strongly agree that they always look for nutritional information in the menu of restaurants and believe that it will help them in determine the nutrition intake. These age group people are health conscious and do not consume those items which do not fit in my diet chart. In future also this age group people would like to see nutritional information in the menu. They strongly feel that it right of customer to get nutritional information for the food even for non packed food.

Customers from age group 31-40 and more than 50 are also agreed that nutritional information given in menu is important for them and they would also like to see nutritional information on menu in future. Though the customers from the age group of more than 50 have lower mean score for item "I purchase or consume food only from those restaurants where nutritional information is given in the menu" as compared to age group 21 to 30 and 31 to 40. It can be inferred that might be aged people are not rigid for selection of restaurants due to their age. Though they also strongly believe that it is the right of customer to get nutritional information for the food even for non packed food.

It is identified that all the age groups were having a similar

perception towards three items and for rest of the factors opinion of customers differed from one another. Younger age group have much difference in their point of view towards significance of nutritional information in restaurant menu. Teenagers do not give importance for nutritional intake while dinning out. But other age group considers it important factor while dinning out.

Table-3 Analysis of variance of nutritional information significance factors by age

Factor	Age					F
	Less than 20	21-30	31-40	41-50	More than 50	
Variable	Mean					
I always look for nutritional information in the menu	2.5833	5.0000	3.7857	5.0000	4.5000	6.904***
I prefer to go in a restaurant where nutritional information is given in the menu	2.7500	5.0000	3.7143	4.5000	4.0000	11.479***
In my view nutritional information should not be misleading.	4.2500	5.0000	4.2143	5.0000	5.0000	5.694
I purchase or consume food only from those restaurants where nutritional information is given in the menu	2.2500	4.8571	3.7143	4.0000	3.5000	14.032***
I am very health conscious and do not consume those items which do not fit in my diet chart.	2.6667	5.0000	4.0000	5.0000	4.5000	7.536***
Most of speciality restaurants in Chandigarh provide right nutritional information in their menu.	2.6667	2.5000	2.2857	2.5000	2.5000	9.648
In future also, I would like to see nutritional information in the menu	3.6667	5.0000	4.0000	5.0000	4.5000	7.536***
Do you think restaurants who are not providing nutritional information in menu is due to high cost involved in this process.	3.2500	4.1429	3.3571	3.0000	3.0000	4.551**
Do you think restaurants do not give right nutritional information in the menu because these restaurants do not provide health food to their guests.	3.6667	5.0000	4.1429	5.0000	4.5000	9.462***

I believe nutritional information given in the menu help me determining the nutrition intake in a day.	4.0000	5.0000	4.5714	4.5000	4.0000	17.283***
Laws should be strictly imposed in all restaurants for providing right nutritional information in the menu.	3.6667	5.0000	4.1429	4.6667	4.0000	8.361***
It is right of customer to get nutritional information for the food even for non packed food.	4.6667	5.0000	4.5714	5.0000	5.0000	3.516**
Nutritional information in menu is least important for me for selecting a restaurant for dine	3.5000	1.6429	2.7143	2.0000	1.7500	7.088***
I always ignore nutritive information in menu while dinning out.	3.6667	1.1429	2.0714	2.5000	2.0000	4.088**
I believe everyone should be conscious for their health and should consume nutrition accordingly	3.6667	5.0000	4.1429	5.0000	4.5000	9.462***
Restaurants in Chandigarh have enough choice of health food in their menu	1.6667	1.2857	2.0174	2.000	2.000	2.799

Note: F is significant if $p < 0.05$ (* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$)

CONCLUSION

The purpose of this study was to determine if there were differences in influential factors between customers of different ages. The study illustrated that all the age groups were having a similar perception towards three items and for rest of the factors opinion of customers differed from one another. Younger age groups have much difference in their point of view towards significance of nutritional information in restaurant menu. Teenagers do not give importance for nutritional intake while dinning out. But other age group considers it important factor while dinning out. Repeat customers are the key to successful restaurants. It is not guaranteed that a satisfied customer will return to a restaurant, but it is almost certain that an unhappy customer will not return (Soriano, 2002). The operators must determine the improvements in the dining factors to encourage customers to revisit. Moreover it is recommended that proper market segmentation and proper menu planning may increase the sales and customer satisfaction. Restaurant managers should ascertain the factor of considering nutritional information on the menu for creating return business and seek ways for improvements.

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