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### Nutritional information and restaurant operators responsiveness

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#### ABSTRACT

An increasing of chronic diseases associated with the imbalance and substantive nutrition intake on the types' food consumed away from home witnesses the awakening concerned and awareness among the restaurant customers toward nutritional information. Customers positively perceived the important of providing nutritional information in the full service restaurant menu. Nonetheless, the restaurant operators' willingness, constraints and obstacles in providing such information have not been widely explored. This study empirically investigates the Malaysian full service restaurant operators' responsiveness towards providing nutritional information in the menu. Result demonstrates that the serious concerned of the customers is not in line with operators' responsiveness particularly on certain issues. Restaurant operators are still having inadequate knowledge, understanding and awareness about nutritional information in restaurant menu compared to the processed food. Operators not seemed ready as their willingness of providing such information is subjected to the implementation of mandatory policy or legislation by the government while the unreasonable burdens costs ranging from operational to the overall reduction business financial performance are recognized as their major constraints in making nutritional information available in restaurant menu.

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#### Introduction

The imbalance or substantive nutrition intake is commonly associated with obesity which are believed contribute to chronic diseases and lessen the longevity (Gopalan, 1992, MOH, 2007). Large numbers of the world populations are reported of suffering heart diseases, hypertension, and diabetes because of the overweight (Schofield & Mullainathan, 2008) and six of the ten leading causes of death are related to nutrition components intakes (Dennison, Dennison & Frank, 1994). With these reasons, health conscious is received a greater concern among the consumers, individuals or family particularly dealing on the types of food they consumed either outside or meal prepared at home. The awareness not only given to appearance of the food products but also to the nutritional contents for packaged of food selling at the retail outlets. In other words, nutritional information is of the one crucial issue in the food service, food manufacturing and processing industry and therefore continuously received attention among the academics scholars.

Compare to three industries, the nutritional information or labelling has long been a mandatory in food manufacturing and food process industries than those in food service industry and its sub-sectors (King, 2006; Ophardt, 2003). Many countries legislation are mandating the disclosure of nutrients information of the food products as means for consumers to aware of the nutritional properties and nutrients contents in foods like, calorie, protein, carbohydrate, fat, sugar and most of them must be regulated by laboratories accredited (McVety et al, 2001). Thomas & Mills (2008) argue that in restaurant industry, food and product information on menus are normally portraying something related to quantity, quality, price, brand names, product identification, points of origin, merchandising terms, visual presentation and food preparation. Restaurants operators

put a lot of effort to display food preparation or methods of cooking like deep fried, smoked, prepared from scratch, roasted, steamed on menus to gives customers general idea and provide an estimate time on how long food will be served and would be presented. Drydale & Galipue (2008) however contends these basic information disclosures have relatively given minor impact on products perceptions and evaluations without helping customers to understands the contents of food they consumed unless nutritional information is provided (Consumer Affairs, 2008). In this present day, customers are believed to be more demanding beyond those practices and the provision of nutritional information on restaurant menu has been gaining popularity and the number of customers who are concerned on this issue are also increased (Thomas & Mills, 2008).

The importance of nutritional information in the restaurant menu begins to catch attention among the academic scholars' (Burton and Creyer, 2004; Thomas & Mills, 2006; Thomas and Mills, 2008; Basset et. al, 2007; Hwang & Lorenzen (2008). However, most of the available studies were undertaken in the developed countries with scarce looking at Malaysian restaurant contextually setting. Result of the recent study in the Malaysia context revealed there is an awaking of nutritional awareness among the Malaysian restaurant customers (Mohd Zahari, Din & Shariff, 2010). Majority of restaurant customers positively perceived the important of providing nutritional information in the full service restaurant menu. Despite this, the extent of willingness, constraints and obstacles of restaurant operators in providing the nutritional information in restaurant menu have not been widely explored. With this gap, this study empirically investigates; a). restaurant operators responsiveness towards providing nutritional information and b). the constraints and

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obstacles facing by the Malaysian full service restaurant operators towards providing or disclosures nutritional information in the menu.

### Literature Review

#### Menu and Nutritional Information

No doubt menu besides others is one of the important components in restaurant establishment, infer several interpretations for both the customers and operators (Mazalan, 2000), major communication device that projects the personality and concept of a restaurant (Miller and Pavesic, 1996) and advertisement tool (Kwong, 2004). The descriptive and evocative names for food are frequently found on restaurant menus and the use of favorable descriptive names and imaginative way has been shown to increase sales by 27 percent (Wansink, Painter & Inttersum, 2001). As customers demand are fluctuate with time and situation, menu which governs a very broad area requires great attention, improvise and efforts to ensure the survival of the operation and the overall information on it is crucial not only satisfying them but increasing revenue and profit gaining (Korczyński & Ott, 2006). In other word, improper presentation of menu can lead to customer dissatisfaction, decrease earning a profit and could influence the ultimate failure of a restaurant operation. Thomas & Mills (2006) contend that many exclusive restaurants besides price include the ingredients, method of cooking and some other information in the menu to make impressive and capture restaurant customers and further argued that customers intensely perceive food as quality as long as it is nutritionally safe and satisfies their personal taste preferences.

Although it was clearly confirmed by many researchers that customers want pricing information and menus that are aesthetically pleasing, the product information, food preparation information (Drydale & Galipue, 2008) and latest nutrition information are getting close to customers heart (Zahari, Din & Sharif, 2010; Christina, Peter, Mphil, Henry, Jenny, Kelly & Brownell, 2010). Thomas & Mills (2008) states that an ever growing number of customers select healthy and offering nutritious menu selection by foodservice establishment assist to intensify the awareness of healthy food selections. They analyzed the data obtained from 276 respondents to validate the proposed model called Customer Information Expectation on Restaurant Menus (CIERM) based on the Truth-in-Menu Law and discovered that CIERM is influenced by several factors such as products information, food preparation information and nutritional information.

The available literatures addressing the importance of nutritional information in the restaurant menu centrally focused from the customer perception to intention and actual purchase behaviour (Basset et. al, 2007). Hwang & Lorenzen (2008) state that providing nutritional information on restaurant menu would aid customers in making healthier choices and customers in fact willing to pay more for healthier food. They had more positive attitudes towards the items with higher purchase intentions when the most favourable nutritional information presented on restaurant menus and having a slight negative influence and purchase intentions when unfavourable nutrition information were presented (Burton and Creyer, 2004). Yamamoto et al (2005) discovered the provision of nutritional information on the menu resulted in the selection of meals with lower calorie and fat content from two out of the three restaurant menus on average and significant number of customers changed their meal orders. In investigating customer perception towards actual

nutritional status of sandwiches, Adams & Ferrett, (1997) revealed that sandwiches which were below the standard nutrient requirement for energy were not so popular. Similar result was obtained by Cranage, Conklin & Lambert (2004) whereby the lower fat and lower calorie entrées were often chosen by the customers than the high fat and calorie content entrées when nutritional information was displayed for entrée items in restaurant menu.

In examining the use of nutritional and ingredient information to college freshmen at the point of sales in campus dining facilities, Conklin, Lambert, and Cranage (2005) found that females were more likely than males to use the nutrition information labels for food choices. Females used nutritional information to identify and select lower fat, lower calorie foods, males used the information to select foods with higher levels of protein. The University of California's Center for Weight and Health calculated, on an annual basis, nutritional information could reduce the average adult fast-food patron's yearly intake by 9,300 calories, preventing the equivalent of 2.7 pounds of weight gained per person per year and if customer see the nutrition information it could preventing around 40 million pounds of weight gain annually for the entire state of California (Center for Weight and Health, 2009). Christina. A., Roberto et al. (2010) accessing the impact of calorie labels and food intake among customer. Among the objectives were; (1) the menu with calorie label, (2) a menu without calorie label or (3) a menu with both calorie label and additional information (the recommended daily caloric intake for an average adult). Results revealed that when calorie label menu and without calorie label menu presented, customers were inclined to choose and consumed fewer calorie compared to no calorie labels presented in the menu. In addition, calorie labels presented together with additional information helps customer to make healthy food choices. They suggested to have label legislation tailoring to the restaurant menu and to evaluate menu labeling impact particularly for children in terms of food choices and consumption of meals. They provided evidence that nutritional labels on packaged food products have significant associations with nutritional knowledge, attitudes toward food products, and increased use of label information in food choices (Burton & Andrews, 1996; Burton, et al., 1999; Garretson & Burton, 2000; Marietta, Welshimer, & Anderson, 1999).

### Methodology

#### Sampling and Instrument

In obtaining restaurant operators responsiveness towards providing nutritional information on menu, a qualitative approach through face –to –face interviews was considered the best method for the data collection process. This approach maximize theoretical fruitfulness, permit more confident conclusions (Rosenberg, 2004), allowing researchers to gain a broader and secured understanding of the investigated issue (Maxwell, 2005). The samples of population were among the independently owned full service restaurants operators. In this contact, full service restaurants are described as services that are relaxed, with capable service staff projecting friendly informality in their dealings with guests while maintaining professional efficiency and offering table service (Brown, Hepner & Deegan, 1994; Walker, 2008). The full service restaurants were chosen as they are one of the fastest growing types of restaurants in Malaysia and to have received customers that are concerned about the types of food offer in the menu (Euromonitor, 2007). Owing to the huge population of full

service restaurants and the geographical dispersion, the restaurant operators in Penang area like Georgetown, Batu Feringgi, Butterworth and Seberang Jaya were selected as a sample. In determining the number of restaurants that meet the stipulated criteria information from yellow pages was initially gathered.

With regard to qualitative instrument, standardized interviewing method was developed with a pre-determined set of open ended questions (six questions) addressing the objectives of the study under the two headings: a). responsiveness towards providing nutritional information and b). the constraints and obstacles towards providing nutritional information in the menu. In addition, demographic information relating to operators age, occupation, experience and level of education were also asked. Funneling technique which emphasize from general question to the specific one was used in the question development.

#### **Data Collection**

Based on the yellow pages, there were 40 restaurants that can be classified as full service restaurant and meeting stipulated criteria. All managers or owners of the identified restaurants were initially contacted via telephone and email in getting permission for the interview. Few problems on the agreement from the restaurant operators arisen. As it requires involvement in the interview, most of operators were claimed too busy with business matters, barely available to take part in the research and some do not entertain any solicitation other than business. Out of 40 restaurants, only 8 operators were agreed to participate. With arrangement of time, date based on the convenience and wishes of the operators, the interviews were successfully undertaken and researchers were fully satisfied with the answers provided and grateful with commitment and the cooperation given by all of them. Each interview lasted between thirty minutes and one hour on average and all sessions were the tape-recorded.

#### **Analyses and Result**

##### **Restaurants Profile**

The eight restaurants participated were among the popular ones in its locality and surrounding area. All of them have been in the operation between two to ten years with four to twenty five capacities of staffs. All establishments are offering combination of local, western and Thai food and their target markets are among the middle, high income customers and international tourists. The profile of all restaurant operators involved in the interviewed are simplified and presented in Table 1: The actual names of restaurant operators are not revealed.

##### **Knowledge on Nutritional Information**

Nutritional knowledge refers to the understanding of the operators of nutritional information (Moorman, 1993). There are evidences that nutritional knowledge plays an important role in how customers use nutritional labels (Drichoutis, Lazaridis, & Nayga, 2005; Guthrie, Fox, Cleveland, & Welsh, 1995; Levy & Fein, 1998). In line with notion, the first question is assessing the knowledge of restaurant operators on nutritional information. Hearing to the patterns, all eight operators have given almost identical answers whereby they were slightly familiar with the nutritional information on packed, canned food and those similar but not really aware of it on the full service restaurant and admitted do not give serious attention about it. They also believed that most of the full service restaurant operators in the country are still ignorance or lack of knowledge about nutritional information although knew some of the fast food restaurants start to practice it. From the information gathered,

most of the restaurants operators only get used with two popular nutrients namely fat and cholesterol which were normally highlighted and discussed among the public but unaware on the function the two nutrients in human body. Restaurants operator A for instance commented;

*"I am really ignorance about it and believed most restaurant operators are like me. I strongly believed so far, many restaurant operators do not put effort to know or understand about nutrient contents in the food. Yes, I can see the information been placed in the canned and packed food products but not really aware the important of it in the restaurant menu. Despite this, as time goes I am sure everybody will keep upgrading their knowledge on this matter."*

##### **Restaurant operator C expressed;**

*"As far as I know, the nutritional information is only stipulated in the packets food and canned drinks. I have never came across that restaurant like us in the country provide such information in the menu except for Mc Donald's and other fast food restaurants or may be four and five star hotel restaurants. Honestly, I am still not too familiar with all the nutrients even to the ones concerned by the public"*

##### **The Awareness on the Importance of Nutritional Information in Restaurant Menu**

The second question is looking at the importance of nutritional information from the restaurants operators' perspective. Despite lack or inadequate knowledge, operators positively perceived besides packets and canned food, nutritional information is also important and good to be included or display in the restaurant menu as source of information for restaurant customers. They believed in this sophisticated life, restaurant customers not only looking at the price, fast service but healthy quality of food consumed. This is evident although in small proportion all of them experienced with customers which asking about nutritional contents on the items offered in the menu. They also believed education advancement, overweight problem or obesity and chemical contents particularly in processed food lead to a greater concern among the customers on nutritional intake. Owner of restaurant B states;

*"Although, providing nutritional information in restaurant menu is not really popular in Malaysia but it is undeniable with educational advancement, the issue of obesity and many averted diseases, the trend is keeping changing. Therefore, I admitted that nutritional information is becoming gradually important in years to come not only in processed food but in restaurant food as well as source of information for restaurant customer in general and health conscious customer in particular"*

Operator D on the other hand do not see the importance of nutritional information in the full service restaurants menu as she claimed most of such restaurants are providing healthy food for customer. However, she admitted frequently experienced with customers who were concerned on nutritional contents. She said:

*"To me.....the nutritional information is not really important in restaurant menu, because majority of customer are looking for delicious food at low price as well as fast service offered. Yes, I admitted that my customers frequently asking about fat contents in the stake before they order but my waiting staff explained that we served lean meat. To me that is sufficient and customers were happy with that explanation without further questions"*

### Customer Demand

Looking at the above answered the demand for providing nutritional information in full service restaurant menu is quite obvious with majority of the operators in the interview frequently experienced with customers which solicit about nutritional contents on the items offered in the menu. This notion is further strengthened when operators were probed with the specific question "is there any customers demand on nutritional information?" Majority of the operators revealed besides requesting about nutrition contents, customers often seeks opinion of the service staffs to suggest a low cholesterol, salt, sugar and fat content food in the menu items. Worth mentioning, the most common concerned by customer as disclosed by the operators is the used of monosodium glutamate (MSG) as added seasoning. Quoting from Operators E;

*"I would say the demand is there. Restaurant customers in this era are too advanced. They are knowledgeable, practice a better lifestyle and more health conscious particularly on eating out food. Therefore, not surprising that they are having high expectations on what we served them including nutritional information. Some of them asked for less spicy food, less oil, less salt, no butter and the obvious one no MSG seasoning in their meal"*

This contention is in line with other researchers' findings (Thomas and Mills, 2008; Walker, 2008) which revealed that nutritional information on restaurant menu has been gaining popularity as customers are getting more knowledgeable, practice a good eating, better lifestyle and greater health conscious. Operators G disclosed;

*"The customers today are demanding to have healthy food. They even asked us to suggest food with low in calorie, cholesterol, fat, sugar and salt. I guess, there is an awakening on nutritional awareness among Malaysian restaurant customers. Although, presently customers are believed not having such experience in the full service restaurant but in years to come operators may have no choice and providing nutritional information or its availability will directly influence customers dining decision"*

### The Willingness of Restaurant Operators

The willingness of the operators in providing such information was posed in the interviewed. Mixed opinions were given by the restaurant operators in response to this question. Looking from the demand and future business survival, majority of the operators were willing to provide nutritional information in their restaurant menu. It is interesting to note that operator's willingness on provision of nutritional information however is subjected to the enforcement of regulation the by the authority or government. It would be very slim for them to offer menu labeling unless it becomes a mandatory requirement. Restaurant operator F expressed;

*"Looking at the increase of customers demand, Yes, I have no objection and willing to make it available in the menu and .....I think other restaurant operators would agreed with the idea as long it benefits both parties, we the operators and customers. Nevertheless, a lot things first need to be considered before we can do that as it involved lot of resources and not all nutrients or nutritional information can be displayed. Only those important ones would sufficient"*

### Restaurant operator G states

*"To me, the introduction of mandatory nutritional labeling by the government first need to be developed, adopted and imposed. This the most important issue. You know..... If no*

*mandatory and enforcing regulation who will bothers to do. I mean, voluntary does not work"*

### The Most Common Nutrients

Result of many studies revealed that the common highlighted nutrients in food retail products were calories, protein, fat, dietary fiber, carbohydrates and few others and from customers perspective studies finding indicates that customers generally have high expectations on the availability of at least four common nutrients namely carbohydrates, cholesterol, salt and sugar. To see whether the same opinion appeared, the most important nutrients to be included in the menu were asked during the interviewed session. Similar to customers, majority of full service restaurants operators' ascribed fat, carbohydrates, cholesterol, salt and sugar contents are the minimum nutrients to be displayed in the restaurant menu. Commented on this, restaurant operator A said;

*"Like I previously said, customers are generally concerned with fat, and cholesterol content in the meat, cream and those similar. Salt and sugar were concerned for the hypertension and diabetic customers. Therefore, these are the important nutrients need to be considered compared to the others"*

Customers evidently play an important role in the food purchase decision process in the restaurant. Customers with certain disease or health conscious oftenly placed a greater concerned on nutrients intake and influenced their ability to understand a nutrition label. In addition, the educational level and awareness positively related to their healthy eating out food consumption. Therefore, it is argue that the types of nutrients to be included should be in line with the customers need. This is the other information gathered in the interviewed. Operator H expressed;

*"Lot of nutrients contents in the food. From my experienced and others as well..... customers are normally asking the most common or the basic ones. To me something frequently highlighted in the media or concerned by customers should be included. I mean nutrients like fat calorie, cholesterol and sugar are the most relevant"*

### The Constraint of Making Nutritional Information Available

Many researchers concluded consumers were willing to select more healthy foods when nutritional information is provided and the provision of healthful nutritional information increased attitude toward nutrition, overall food attitude and purchase intention. Despite proliferation of studies on the consumers' positive attitude toward the provision nutritional information, there are still limited investigation on the willingness, constraints and obstacles on providing the nutritional information from restaurant operators' perspectives. With this, the last question probed in this study was "what would be the constraints to make nutritional information available in your restaurant's menu". As envisaged and previously mentioned, although expressing their willingness, majority of operators explicitly realizing the constraints and obstacles on their part in providing nutritional information in restaurant menu. The constraints are mainly associated with financial barriers or cost like changing the menu, conducting laboratory nutrients test and initial cost of hiring nutritionist as an advisor. Operator H for instance expressed;

*"Not as easy as saying. Lot of costs definitely incurred on our part. Before implementing, we have to look in-depth on many factors.... We need to change the menu with elaborate ones. Each nutrient to be displayed requires laboratory testing or analyses, advisor need to be appointed as well as other*

*requirements. All of these will directly creating unreasonable cost burden to the restaurant operators”*

On top of that greater concerned were also given to the overall business profit. Restaurant owners who participated in the interview contended that offering nutritional menu labeling would be difficult without strong support from government authority particularly the health department. They strongly believed that most restaurant operators would unable to materialize the mission without the advice or subsidizing cost from the government especially in the initial stage of the implementation. The significant impact in terms of spending for staff training was also voiced by the operators. Operators F uttered;

*“You know, the bottom line of any business besides satisfying customers is making most profit out of it. Operators will not do anything that might decrease their business profit or decreasing customer purchasing power. Business must be spurred after so much money spending. Therefore, it would be a financial barrier to offer nutritional menu labeling without support from the government department”*

#### **Discussion and Implication**

The initial study looking at customers’ perspective demonstrates there is an awaking concerned on nutritional awareness among Malaysian restaurant customers. Restaurant customers were generally having high expectations on providing nutritional information in the full service restaurant menu as they claimed were knowledgeable, having ability to comprehend nutritional information on the menu and confident in using nutritional information. The overall serious concerned of the customers however not in line with operators’ responsiveness particularly on certain issues as revealed in this study. Although small numbers of full service restaurant operators participated in the interviewed, most of them are still having inadequate knowledge, understanding and awareness about nutritional information in restaurant menu compared to the processed food. Inadequate knowledge of the operators on this information most likely owing to the “could not care less attitude”, feeling complacent as none of full service restaurants in the country provide such information. This could also lie on the operators’ ability of overcoming the simple inquiries from the customers. Despite this, the increasing customers demand and inquiries on nutritional information on certain popular nutrient contents like cholesterol, salt, sugar and fat and the used of added seasoning in restaurant menu items is observable. Such phenomenon explicitly witnessed the willingness of full service restaurant operators in providing nutritional information especially those common ones or frequently acquired by the restaurant customers. Nonetheless, operators’ willingness is subjected to the development, adoption and the implementation of mandatory policy or legislation across the country by the government authority.

Another interesting finding is related to constraints and barriers in making nutritional information available in the restaurant menu by the operators. On top of mandatory legislation, costs and inevitable complexities ranging from operational issues (menu, laboratory nutrient testing and staffs training) to the overall business financial performance are recognized as the main setbacks or obstacles for the operators. Substantial amount of money is believed need to be spent and invest on the stipulated elements and these unreasonable burdens along with other hidden costs directly affect and restrict the

intention of restaurant operator of providing nutritional labeling in their restaurant menu.

The above discussion highlights ranges of interesting and important points which provide significant practical implication. Looking at the overall scenario, not harsh to say that Malaysia is still far behind than United States of America and other developed countries with regards to the implementation or providing nutritional information/ labeling by the restaurant operators. Operator explicitly will not provide such information based on voluntary basis and therefore many factors need to be considered or adopts before the nutritional information or labeling in restaurant menu can be implemented. In this sense, knowledge, understanding and awareness of the operators on nutritional information together with government authority role and mass media need first to be heightened and acquired. With regard to operators, in this information technology era they should continuously be upgraded their knowledge not only on the management, operational aspects but on nutritional matters as well. Because understanding on basic nutritional function, cause and effect of the nutrients to human body would churn the limelight, awareness and creating intention among the restaurant operators.

At this stage full service restaurants operators in Malaysia are not seemed ready to provide the nutritional labeling. This situation is strongly believed will be changed in line with global scenario. Restaurant operators in this country are expected to receive tremendous pressure from the customers in years to come and this might lead to the imposing of mandatory legislations by the government in providing nutritional information in the menu. The full service restaurant operators therefore should start to equip themselves with nutritional knowledge as they most likely to be one of the targeting types of restaurants after the international chained of fast food restaurants. Studies in developed countries proven that mandating menu-labeling legislation is an important tool in the promoting the healthier food served and customers healthy eating practices. To strengthen these notions, further investigation on the necessity in providing the nutritional information from Malaysian government authority particularly health department need to be undertaken.

As a conclusion, it is hoped that the recommendations and information flow from this study will facilitate restaurant operators with valuable information on the future customer concern because managing customers’ needs is becoming an important and critical area as the world economy progressively turns to a service orientation.

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**Table 1: Demographic and establishment's profile**

Restaurant	Gender	Age	Year in operation	No. of employees	Type of food/menu offer	Types of customer/market segment
A	Female	Early 40	More than 4 years	6	Local and western	Middle and high income
B	Male	Late 30	4 years	20	Local and western	Family and middle income
C	Female	Late 30	2 years	5	Local and Thai food	Students, middle and high income
D	Female	Late 30	More than 6 years	12	Local and western	Middle and high income
E	Female	Early 50	4 years	15	Local and western	International tourists, middle and high income
F	Male	40	10 years	25	Local and western	Middle and high income
G	Female	Early 40	8 years	20	Local and western	Middle and high income
H	Male	Late 30	2 years	4	Western	International tourists, middle and high income