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Nutrition labelling in restaurants: a UK-based case study

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Abstract

Purpose – The food standards agency recently encouraged catering companies in the UK to introduce calorie labelling on menus or at the point of purchase. The purpose of this paper is to report the feasibility of implementing such a scheme in a restaurant in the UK.

Design/methodology/approach – A practical case study approach was adopted whereby all foods on the menu of a London-based five star hotel restaurant were analysed nutritionally. The menu presented the amount of calories, saturated fat, polyunsaturated fat, fibre and sodium each dish contained. The issues surrounding the display of nutritional information on restaurant menus, perceived difficulties or barriers and resistance to the scheme by staff were documented qualitatively.

Findings – Time constraints, and the consequential financial costs, were identified as being barriers that need to be surmounted if the scheme is to operate successfully. The scheme was also viewed as being of low priority by the restaurant operational team.

Practical implications – The paper provides a greater understanding of the operational aspects of nutrition labelling in the catering industry.

Originality/value – This paper adds practical knowledge to the limited literature that exists in relation to nutrition labelling in restaurants in the UK and identifies barriers that need to be overcome for such schemes to be widely implemented and successful.

Keywords Nutrition, United Kingdom, Hotels, Labelling, Restaurants

Paper type Case study

Introduction

The World Health Organisation (WHO) predicts that by the year 2015, 700 million adults will be obese (World Health Organisation, 2009). In the UK the prevalence of obesity has more than doubled in the last 25 years and 24 per cent of adults and 10 per cent of children are now obese (National Health Service, 2009). Reasons why obesity has increased so dramatically in recent years are numerous and include changes in physical activity levels and the amount food eaten as well as changes in food consumption habits and behaviours. According to Savage and Johnson (2006) approximately a third of all food is consumed outside the home. Meals eaten outside the home typically contribute more calories, fat and salt than those eaten at home (Benelam, 2009) and by conjecture eating out has been attributed as being a primary contributor to the obesity epidemic (Hwang and Lorenzen, 2008).

No guidelines for nutrition labelling exist for foods served in restaurant despite being necessary on all packed foods and regulated by the Codex Alimentarius Guidelines worldwide (Arens, 1993; Ministry of Agriculture, Fisheries and Food, 1990). Despite reports that a large proportion of the public have problems understanding and evaluating nutrition information (Cheftel, 2005; Cowburn and Stockley, 2004; Gracia *et al.*, 2007) studies have proven that consumers who read food labels have lower intakes of fat, eat more fruit and vegetables and generally have a healthier diet than those who do not use food labels (Neuhouser *et al.*, 1999; Detter *et al.*, 2008; Galanko *et al.*, 2005). Furthermore, a recent study conducted in a fast food chain has shown that when nutritional information at the point of purchase is provided an average of 109 kcal less food is consumed (Angell and Silver, 2008). There is clearly a role for restaurants to enable and empower consumers to make healthy eating choices and perhaps assist in the

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battle against the obesity epidemic. Studies from the USA indicate a shift towards a preference for healthier and particularly low-fat choices (Josiam and Foster, 2009; Leontos and Palmer, 1996; Clark and Chen, 2007). However being supportive of nutrition labelling schemes does not necessarily mean that dietary information is rated highly by all consumers as a study has shown that only 57 per cent of customers rate nutrition as being important when choosing from a menu (French *et al.*, 2006). Men in particular have been reported to be less likely to be interested in nutritional information than female customers (Josiam and Foster, 2009; Lone *et al.*, 2009). Some people view eating at a restaurant as an occasional "treat", and believe that considering nutritional information would decrease their enjoyment (Fitzpatrick *et al.*, 1997). However eating in restaurants has been reported to be less of an occasional treat and more of a regularly occurrence (Benelam, 2009) and as such providing nutrition information is of increasing importance.

In 2008 the New York City Board of Health passed a mandate that required all restaurants that belonged to chain of 15 or more establishments to provide calorie information (Bassett *et al.*, 2008). Nutrition labelling has also been adopted in several other American states including California and Philadelphia. In the UK, the new strategy document for food policy "Food Matters" (Cabinet Office, 2008) recommends the introduction of nutrition labelling in a wider range of food consumption environments to enable consumers to make healthier choices when eating out. The UK Food Standards Agency (2009) has now developed a scheme to encourage calorie labelling at the point of purchase in some catering companies as a first phase of introducing voluntary nutrition labelling. Some restaurants rapidly agreed to the scheme and others are likely to follow suit (Compass Group, 2009). The scheme has been criticised by those that believe that calorie labelling is inadequate and that salt and saturated fat contents should also appear on restaurant menus (British Heart Foundation, 2009). Furthermore, it has been suggested that mandatory nutrition labelling would be beneficial as voluntary labelling would not infiltrate the wide range of restaurants selling foods with high fat, salt and sugar contents (Glayzer and Mitchell, 2008). However, others have taken a more critical stance and have suggested that such a proposed scheme would have significant associated costs particularly at a time of world-wide economic recession (British Hospitality Association, 2009). (The introduction of mandatory nutrition labelling on pre-packed foods in the USA was projected to cost about $1.4-2.3 billion over a 20-year period (Kim *et al.*, 1996)).

Many global operating catering companies have already implemented point of purchase nutrition information in several states in the USA (McColl, 2008), and thus it might be assumed they have the experience, knowledge and financial capacity to comply with such a scheme in the UK. However, this may not be easily transferable to local and smaller caterers; as such this may increase economic pressures and their competitiveness, possibly decreasing variety within the market.

There are no actual suggestions as to the best format for nutritional labelling of menus; however, several studies have identified what information should be presented. Hwang and Lorenzen (2008) reported that information on the calories and macronutrient content to be essential and Thomas and Mills (2006) confirm that calorie and fat intakes are preferred information on menus, whereas Mackison *et al.* (2009) state consumers would prefer to see information on salt/sodium content. Nutrition labelling certainly does take up more space on the actual menu and some establishments have circumnavigated this by providing information on a website only or providing the information on a separate leaflet. However if nutrition labelling is to be effective then it is really essential that the information is at the point of purchase (Wootan *et al.*, 2006). In New York City all calorie information must be displayed where

prices are shown and should be a format that is as prominent as the price or the name of the food being displayed (Benelam, 2009).

It has become evident that nutritional labelling has been perceived as and is an important tool to fight obesity. However the practical implications of implementing voluntary nutritional labelling are less clear and many obstacles and barriers to the scheme exist. Therefore the aim of this research is to investigate the process involved in the implementation of a menu with nutritional labelling, in order to assess the feasibility of such a scheme, using a UK hotel restaurant as a case study.

Methods

According to criteria laid out by Silverman (2005), this study could be described as an "instrumental case study" since only one case study was examined to provide insight into an issue; in this case the introduction of food labelling in restaurants in the UK. The case study took place opportunistically in the main restaurant of a large five star hotel (160 suites) in London that is part of an international hospitality chain. According to hotel records the majority of guests were business clientele, predominantly male, middle-aged and from socio-economic groups I and II.

A menu was designed for the restaurant that presented nutritional information for all food items. An example of this menu can be seen in Figure 1. The menu clearly displayed

Figure 1.
Sample menu

the calories, saturated and poly-unsaturated fat, fibre and sodium content per serving of each dish. Ethical approval and permission was granted from the researchers university and the hotel management, respectively. Where interviews were conducted the interviewee gave written informed consent. All data were kept confidential.

Menu planning commenced from October 2008 and consisted of three starters, three main courses and three desserts. The restaurant food could be described as being international fine dining with traditional British influences, all products being locally sourced where possible. It was intended that there would be six changing weekly menus starting at the beginning of the new year.

The creation of six weekly menus took two weeks and depended on cooperation of the head chef, restaurant manager, operations manager and the nutritionist. Upon menu agreement, the costs of each menu item were calculated, recipes were written and food hazard assessments completed. This took 2.5 weeks. Calculation of the nutritional content of the menu was performed using Diet5 for Windows (Univation, Aberdeen). The nutritional analysis of one of the six weekly menus took on average half a day. Recipes and pricing were adapted if calorie, fat, salt or sugar content appeared to be too high, which was the case for 50 per cent of the items on the menu. Designing the actual hard copy of the menu took more time than would usually be the case, as ways for presenting the nutrient information needed to be discussed and agreed. Training was provided for all employees to emphasise customer limitations and the necessity for precise recipe usage by all chefs. In addition sales figures, as a percentage of all food sales, were also recorded.

Data were collected qualitatively prior to, during and following the implementation of the nutritionally labelled menu. A qualitative approach was chosen to enable the observation, discussion and description of activities and perceptions as they occurred in a real situation. Although often a measure of naturally occurring events qualitative methods can also be used in intervention type studies (Draper, 2004) where this approach allows a degree of flexibility and open-ended questions to be asked. The data in this study were obtained from observations and interviews conducted with restaurant staff including the nutritionist, the restaurant manager, the head chef and waiters. The observations were made by the lead author and were fundamental to understanding how the restaurant operated on a daily basis, and also as preliminary work to help develop a framework for the interviews. Interviews were conducted before and after the introduction of the nutritionally labelled menu, at the hotel in an unoccupied room away from the main kitchen area. The interviews were semi-structured with open ended questions and included questions with a general approach such as "Do you think nutrition labelling has a future in hotel restaurants?", and more targeted questions such as "what problems (barriers) did you come across when creating the menu with nutrition information?". All interviews were conducted by the lead author. Transcripts from the interviews were coded and used to identify key themes. The resulting analysis extrapolated and identified three main themes that related to consumer interests, increased costs in terms of time scales and financial budgets and restrictions relating to the planning, presentation and flexibility of the menu.

Results and discussion

Prior to the introduction of the nutritionally labelled menu there was some resistance by staff to the nutrition labelling scheme and a number of perceived barriers were identified from the transcripts of the staff interviews. These barriers are presented in Table I. Resistance and/or barriers to the scheme were grouped into three main themes:

	Barriers perceived by restaurant staff
Menu restrictions	Less flexibility in menu writing
	Decreased opportunities for promotions because of decreased flexibility of menus
	Extra space taken up on menus by nutrition information
	No clear suggestions what are the best formats for nutrition information on menus
	Standardised menus require more accuracy in all cooking processes
Consumer interests	Consumers may find menu choices restrictive
	Consumers may perceive additional information confusing
	Employees believe healthy choices are not tasty and will not sell
Increased costs	Longer implementation times for menus
	Standardised menus need more administrative time
	Need for regular nutrition training for employees
	Danger of decreased sales

Table I.
Summary of perceived barriers to point of purchase nutrition labelling prior to implementation

(1) menu restrictions;

(2) consumer interests; and

(3) increased costs.

Following the implementation of the nutritionally labelled menu not all the barriers, initially hypothesised and presented by the interviewees, were actually observed in practice. In particular many of the barriers in the menu restriction theme were not founded, as the staff became more familiar with the process they were able to make more imaginative menus and became more aware of healthy eating alternatives and culinary substitutions. Thus nutrition labelling may also create a need to rethink traditional cooking styles and recipes.

Although at first it was believed by the restaurant management there would be fewer opportunities for special promotions, staff found they could use the menu itself as a special promotion and use "healthy eating" as a marketing tool in house. Despite this the marketing of the nutritionally labelled menu was not considered a priority and no external marketing was pursued.

One of the barriers identified in the menu restriction theme (Table I) which was a genuine concern prior and post implementation, was that nutrition labelling did take up more space on the actual menu. However, staff became better at typographically presenting the information on the menu, ensuring it was at the point of purchase where it would be most effective (Wootan *et al.*, 2006).

It has been previously reported that consumers often have problems understanding and evaluating nutrition information (Cheftel, 2005; Gracia *et al.*, 2007) but this was not found to be the case for this study. Waiters reported that guests who chose from this menu were able to find their way around and make choices successfully and as such the consumer interest barriers were deemed as being unfounded. However, this study was reliant on the waiters' perception of the guests understanding of the menu, as the hotel management did not want to burden their guests with questionnaires. Further work should certainly canvas the opinions and perceptions of the guests who have seen and ordered from the calorie labelled menu.

Disappointingly, sales from this menu were only 13 per cent of total food sales for the period during which it was implemented (actual sales figures withheld by the

restaurant), and as such the menu was withdrawn from sale after only three weeks. Whilst it is not clear exactly why sales were low, and this may not be entirely because of the nutrition labelling, low sales were the reason restaurant management withdrew the menu. In order to make comparisons with previously published literature it is noteworthy that approximately 65 per cent of the clientele, in this particular restaurant where the case study was conducted, were male and as previously stated may be less interested in nutritional information than female customers (Josiam and Foster, 2009; Lone *et al.*, 2009). However the fact remains that sales from the nutrition labelled menu were low, and reasons why customers chose not to select food from this particular menu warrant further investigation.

Post-implementation, increased costs associated with the introduction of the nutrition labelled menu remained a potential barrier to the scheme. Although in this case the cost of the menu to the customer was comparable with all other menus, additional expenses being absorbed by the restaurant on this occasion, long term implementation of such a menu would entail additional costs. The menu took longer to create and plan from administrative and culinary perspectives:

> On average it took twice as long to plan the menu and we needed to keep going back and forth before we could get the menu, recipes and kcal info right. [. . .] It was very time consuming (Hotel Nutritionist).

Communication between different areas of the hotel was also vital for success. Chefs needed to become familiar cooking with weighing scales and precise recipes, conversing with the nutritionist and ensuring the administration team had the correct nutrition information to present on the menu.

There is an obvious requirement for a dietary analysis package or even laboratory analysis to calculate the nutritional content of foods and conceivably a Nutritionist to conduct the analysis. Nutritionists are not part of regular costs to most restaurants and this would influence costs further (nutritionists can cost upwards of £40 sterling per hour on a freelance basis). Regular nutrition training for employees to enable them to advise customers on menu choices was considered a necessity. Moreover high employee turnover (Savage and Johnson, 2006) will mean training needs to be repeated regularly. Employees need to gain basic nutritional knowledge to be able to answer customer questions; it would also be useful if they have a nutritionist to refer customers to in case of unusual requests out of their knowledge range. Customers may also need to be made aware about the limitations of labelling. If for example the customer has specific requirements and the menu needs to be adapted to accommodate their needs then resultantly the nutrition information is no longer accurate. It is essential that staffs are aware of the varying nutrient needs of different populations groups and differences in requirements that vary with age, gender and activity levels, to prevent the dissemination of misleading information.

The main barrier for nutrition labelling appears to be time and cost. The time and subsequent financial costs of creating a menu which presents accurate nutritional information in appropriate detail and the subsequent staff training involved could ultimately be quite considerable for small and independent restaurants and could perhaps increase the gap in prices and profits between chain restaurants and independents. Low-cost alternatives for nutrition labelling in restaurants need to be created (Maestro and Salay, 2008) or such schemes may only be operational in chain restaurants (Harnack, 2006).

Further research is required into the best practice for implementing nutrition labelling schemes in catering establishments of all sizes but also to investigate consumer opinions and requirements.

Conclusion

The literature provides some evidence that the trend for healthy food choices is increasing (Leontos and Palmer, 1996) and nutrition labelling appears to be beneficial in helping consumers make healthy dietary choices (Detter *et al.*, 2008; Savage and Johnson, 2006; Galanko *et al.*, 2005), although at present not all consumers prioritise or are interested in nutrition information (Lone *et al.*, 2009). From this study we have observed and evidenced that the implementation of nutritional labelling at the point of purchase in a restaurant does increase the costs per menu item due to increased operational expenses, staff training and time constraints. Catering companies with few items and/or rarely changing menus may have fewer costs associated with nutritional labelling than the restaurant reported here that has a large selection and a regularly changing menu. Despite the difficulties associated with nutritional labelling in restaurants the true aim of such schemes is to enable consumers to make healthy eating choices and assist in the battle against obesity; a worthy aim that is difficult to refute.

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