Indicators of Restaurant Ability to Offer Healthy Foods to Customers in Nairobi City County, Kenya

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ABSTRACT

Whereas most people expect training and professional skills to lead in evaluating the ability of outlets to offer healthy food products, Nairobi restaurants goers had a different outlook. Based on the general perception among the population of restaurant patrons, this study set out to explore the myth of restaurant ability to offer healthy food products being tied to menus in these outlets. The study also sought to establish the approaches used by healthy food restaurants to differentiate these food categories from other products. A cross-sectional analytical design was adopted whose sample was drawn using random and purposive sampling procedures for restaurants, heads of department and targeted customers. The study involved 296 heads of departments and 382 customers drawn from 74 healthy food restaurants of Nairobi City County. Tools for data collection entailed semi-structured questionnaires and observation checklists. Once data collection was complete, analysis for questionnaire data was done using frequencies and percentages. Observation data was on the other hand analysed and interpreted for an insight into indicators of restaurant ability to offer healthy foods to customers. The study found that most (62.7%) restaurants had the ability to offer healthy foods. Elements that represent restaurant ability according to customers assessment were: menus (37.8%) followed by product quality (14.8%), Equipment (14.8%), raw materials (8.8%), while trained staff was 2.1%. Findings on approaches used to differentiate healthy foods from other foods showed that specialized suppliers (41.5%), freshness (29.9%) and sourcing procedure (28.6%) were used. The major finding of this study was that the main indicator of restaurant ability to offer healthy foods among restaurants of Nairobi city was Menus. This study recommends that another study be carried out to establish the quality of restaurant menus as well as the other indicators in order to rate the extent to which restaurants had the ability to offer healthy foods to customers

Key words: Healthy foods, indicators of restaurant ability, capacity of restaurants, food and human health, Nairobi restaurants

INTRODUCTION

Emerging eating out trends represent changes which have taken place over the last years from an occasional treat to a regular occurrence at which people do not just eat out to enjoy but seek health benefits from what they consume (Scott & Scott, 2020). This was influenced by lifestyle changes, increased access to knowledge about health and nutrition (Legrand & Sloan, 2015). This change in customer expectations and needs has in turn made it more difficult for eating outlets and their employees to satisfy health food product customer needs.

Angell and Silver (2023) argue that when restaurant guests are presented with items labeled with and without a health choice label, a reasonable number of customers choose the health choice menu items (Galliciano, Blomme & Rheede, 2016). Indeed, Fisher (2017) agrees that introduction of nutritional labels of menus influences consumer food selection behavior towards foods that had health features than those without. However, French, Harnack, Jeffry, Oakes, O'Dougherty and Story (2015) argue that the use of food tables and menu labels by customers to decide on the dishes to consume was a hindrance to a complete meal experience.

Moreover, earlier studies focused on product components such as sugar, salt, fat and calorie levels in food as the major concerns for customers whenever they dined out (Josiam & Foster, 2019). Indeed, earlier findings by some scholars also showed that health eating was about fat and energy content of food (WHO,2018; Fisher, 2017). There is however, evidence that health food market trends have long shifted from sugar, salt, fat and calorie levels in food to other factors such as indigenous products, organic products, non-genetically modified products, fiber content in products, unprocessed ingredient products, low carcinogen products and low cholesterol products (Josiam & Foster, 2019). Other factors include high poly unsaturated fat products, nutrient preserved products, carefully selected food combinations and portion sizes (Angell & Silver, 2023). Apparently, customers who sought for health food products in eating outlets were not sure of what they would find on offer in restaurants that offered health food products (WHO, 2018). Customers' doubts were in terms of the range of products on offer in this product category, product quality, equipment used to prepare these products, education levels (skills and knowledge) of staff who prepared health food products, the quality and source of the raw materials used to prepare this cadre of products among other doubts (WHO,2018).

A shift from earlier perceptions of eating out was set by the World Health Organization (2018) which from its study findings of 1980 to 2008, estimated that by the year 2015, 70 million adults in the United Kingdom (UK) would be obese. Africa has not been left behind in the consumer need for health food products. This has perhaps been triggered by the rise in lifestyle diseases. Statistics reveal that in Africa alone, the estimated number of lifestyle related disease deaths in 2005 was 2,446,000 with a further projection of 28 million deaths in the region over the proceeding 10 years (WHO, 2017). Sample statistics of people suffering from these silent killers in Africa entails cardiovascular disease (10%), cancer (4%), chronic respiratory disease (3%), diabetes (4%), maternal and per natal, nutritional disease (70%) and other chronic diseases (5%) (WHO, 2017).

LITERATURE REVIEW

Indicators of Restaurants Ability to Offer Healthy Foods

Research shows that consumers have been increasingly concerned about their personal well-being shifting their eating out habits towards healthier food choices (Legrand & Sloan, 2018).

More research reports indicate that although people have increased their frequency of eating out and their requests for healthy eating concept products when eating out, most hotels have no ability to offer healthy eating concept products or even way(s) to clarify the basics they consider when preparing healthy eating concept products. Gallicano, *et al*., (2020) recommendation that hotels place more focus on directing consumer menu choices towards healthier food products require such outlets to have sufficient ability to offer healthy foods. Hotels that had challenges in their ability to offer healthy foods would therefore require to (re)train employees on health food concept products or to find staff with the required skills or partner with nutritionist. In the long run, (re)training or hiring nutritionists may not be sustainable given the financial implications, employee turnover and the dynamic nature of human needs that keep changing (Kotler & Lane, 2020).

METHODS

The study targeted healthy food product restaurants, customers as well as heads of department. A total of 678 participants were sampled and include in the study whereby 382 were customers while 296 were heads of department drawn from 74 healthy food product restaurants of Nairobi city County, Kenya. Respondents were contacted for data collection between February 2016 and July 2016 from Mondays to Saturdays at lunchtime and dinner time. Tools used for data collection were Semi structured questionnaires and observation checklists. Whereas customers filled and returned questionnaires on the same day, heads of department requested for more time whereby they were allowed one week. This process of data collection was repeated week after week until data collection was complete. Observation data was on the other hand collected by the researcher and two trained research assistants. This data category was collected by observation as well as taking of photographs with permission from the management. All participants provided written informed consent.

Study Design

The study was a cross-sectional analytical survey research. Once the timelines for data collection were

identified based refined tools, permissions were then sought from the ministry of Education as well as the ministry of Tourism. Random sampling was used to sample healthy food restaurants and customers while purposive sampling was applied to heads of department.

RESULTS AND DISCUSSION

Restaurants' Ability to Offer Healthy Foods

In an effort to measure restaurant ability to offer healthy foods to customers, various elements were employed. These elements were: trained staff; equipment used to prepare and present health food products; the quality of menus used in these eating outlets and raw materials. Proportional quantification of elements that indicated restaurant ability to offer healthy foods found that the highest proportion (37.8%) of customers cited menus as a major element. This was followed by product quality (14.80%), equipment (14.80%), raw materials (8.80%) and trained staff (2.10%) in that order (table 1).

Table 1: Restaurants Ability to offer healthy foods

Elements of restaurant ability tom offer healthy foods N=357	**Customers n**	**% of each element of restaurant ability**
Trained staff	7	2.10
Product quality/trained staff	1	0.30
Raw materials	31	8.80
Equipment	53	14.80
Product quality	53	14.80
Menus	134	37.80
Lack capacity	78	21.40
Total	**357**	**100**

The high representation of menus (37.8%) as an indicator of restaurant ability (table 1) to offer healthy foods was attributed to the fact that menus were readily available in most outlets. Menus were also the first item that customers interacted with whenever they visited most of the eating outlets. The quality of a menu as a document in an outlet reflected the ability of the restaurant to offer healthy food products. This is because the level of detail on the menu in terms of product descriptions, groupings, sub-sections, nutritive content of the products, themes, accompaniments, portion sizes as well as captions on who should sample which products is a significant element of restaurant ability. Davis, Lockwood, Pantelidis and Alcott (2018) argue that a menu is an important tool that not only displays the image of the outlet but is also a source of information to customers as well as an indicator of the responsibilities of a food outlet staff. The authors argue that the menu gives both general and specialized information on products on offer. Specialized information catered for vegetarian products, unique ingredient products, warning to allergic customers, religion restricted foods, ethnic foods, quality standard statement among other functions (Davis et al., 2018). This study established that eating outlets that respondents rated highly on levels of ability to offer healthy foods had more informative menus with staff that had better menu knowledge.

The second largest element (14.8%) of restaurant ability to offer healthy foods (table 1) was was product quality. Quality, according to the respondents was the value that customers attained from the products that they sampled. Customers would respond to product quality by satisfaction or dissatisfaction. Attributes of quality would as such include: product type in comparison with customer needs, the final appearance of the product when presented to the customer, portion size, taste, flavour, texture, among other perceived attributes according to the customer. Kotler and Keller (2021) define quality as the total number of features and characteristics of a product that satisfies customers' stated or implied needs. Health food product customers

had their own perceived product quality which they used to gauge performance of eating outlets, thus, their ability. Customers would as such use factors like the raw materials used to prepare the product, appearance of the product presented to the customer, utensils used to present the product, staff as well as the ambience in the outlet to arrive at product quality.

Thirdly, equipment (14.8%) as an element of restaurant ability to offer healthy foods (table1) to customers took the third position. This element of restaurant ability to offer healthy foods involved equipment used to prepare and present the products to the customers. Although most customers would use equipment to gauge restaurant ability based on the utensils they are served on as well as furniture on which they sit, cooking equipment were also very important. The cooking equipment which healtyh food product customers interacted with during mealtimes were small clay pots. These were used for both cooking and food presentation or service. In cases where clay pots were not used to present the food to customers, cooking equipment could be easily gauged based on the flavour of the food. The cooking equipment could also be gauged based on the fact that most eating outlets had long adopted the practice of preparing food in front of the guest also called show kitchens. Indeed, some of the restaurants that were sampled for the study prepared their food in front of their guests indicating that they had nothing to hide and that their products were among the best in the market. Wayne (2020) argues that the quality of products in eating outlets depends on the nature of the equipment installed in their kitchens. Other elements of that represented restaurant ability to offer healthy foods included raw materials, trained staff and product quality/trained staff. The low representation of materials (8.8%) and trained staff (2.1%) – table 2 was because these two elements were difficult to access/gauge since they were not exposed to customers. Raw materials would, for instance, require customers to check where the outlets sourced their materials or required the customers to interview suppliers which would not be easy. Heads of department, however, show that there was a specialized method of differentiating raw materials for health food products as shown in table 2.

Table 2: What differentiates health food products from other products on offer in restaurants (HODs)

Characteristic N=296	**N**	**% Proportion**
Specialised suppliers	122	41.50
Sourcing procedure	85	28.60
Freshness	89	29.90
Total	296	100

The above (table 3) approaches used by health food product restaurants to differentiate healthy food products from other products is another indicator of the ability of these outlets to offer health food products. If well applied, these approaches would be very useful in gauging and moderating the quality of healthy food products on offer in restaurants.

Equipment as an Indicator of Restaurant Ability to Offer Healthy Foods to Customers

A wide range of facilities had been employed by various restaurants to meet the needs of health food product customers. Major facilities used by restaurants to prepare health food products were earthenware/pots followed by Earthenware/boilers; Boilers, all indigenous/health cooking equipment; Roasters, Grills, Ovens and boilers/steamers (Table 3).

Table 3: Equipment used to prepare and present health food products

Equipment N=74	**Restaurants where observation checklists were used**	**% of each equipment category used in the sampled restaurants**
Earthenware, Pots	13	17.50
Boilers	13	17.50

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Steamers	5	6.70
Skillets	16	22.00
Earthenware, Boilers, Steamers	13	17.50
None response	14	18.91
Total	74	100

To begin with, the highest proportions of the sampled outlets prepared health eating products using earthenware/pots (17.5%). This is because earthenware cooking equipment were believed to retain the natural flavour of food, instill the scent of micro-minerals especially the iron element; and conserve food nutrients because of the slow cooking of food at a lower temperature gives food a unique natural flavour. Examples of foods coked using earthen ware pots were: dried beef stew/boil, traditional chicken stew/boil, indigenous vegetables, boiled mashed green bananas, boiled sweet potatoes, boiled cassava, boiled maize and beans among other foods whose cooking also involved infusion of herbs. Paranjape &Kulkarni (2018) posits that food cooked in clay pots is full of nutrition and that cooking in clay pots preserves micronutrients and also makes the food tasty and delicious.

The second most used category of equipment to prepare health food products in the sampled restaurants was earthenware/ boilers. Boilers were used to prepare food products which did not require addition of fat. This equipment was used for foods which required long slow cooking to infuse flavor. Boilers were mostly used to cook food in cases where herbs and rare condiments were introduced in the cooking. The increased use of boilers to prepare health cooking products was attributed to customers' need of products prepared using health cooking methods. Health cooking methods that required the use of a boiler include boiling, poaching, braising and steaming. Omofuma, Peterson, Turner, Merchant, Zhang, Thomson, Neuhouser, Snetselaar, Caan, Shadyab, Saquib, Banack, Uribarri, Steck (2021) argue that cooking using moist heat, at lower temperatures, and by use of acidic ingredients such as lemon juice or vinegar reduces the production of dietary advanced glycation end products (dAGEs) linked to the epidemics of diabetes and cardiovascular disease.

Thirdly, other equipment categories used by the sampled restaurants to prepare and present health cooking products were indigenous equipment; skillets and boilers/steamers. Indigenous equipment was mostly made of clay. The equipment was used for food preparation, presentation and service. Popular traditional food service equipment was calabash, gourd, coconut shells as well as equipment made from reeds/palms (bowls, plates, trays and even furniture). This equipment was used for both functional purposes as well as making a statement on the cultural themes of the products that were being served. Examples of such equipment were gourds, calabashes, coconut shells, snail shells, seaweed baskets, palm leaf trays/baskets, traditional earthenware bowls and pots among others. Foods served in this equipment were mostly traditional and medicinal foods.

In addition to the above skillets came fourth in proportion of outlets that used them to prepare and present health food products. These cooking equipment required minimal use of fat. The reduced use of skillets was due to a decline in the number of customers seeking this category of products. The reduction in the number of customers who sought after products prepared using skillets was due to the perceived link of these methods of cooking to lifestyle diseases such as coronary heart disease, cancer, hypertension, gout, diabetes, the renal disease and stroke. Cooking using skillets was popular with meats (beef, pork, mutton, lamb, and veal) and foods whose recipes already included fat such as pastry.

Apparently, customers who sampled healthy food products kept away from products prepared using skillets. This cooking equipment exposes food to high heat and electromagnetic waves which is perceived to change the cells in the food, making it potentially harmful to the human body. The smoke absorbed by food during skilleting was also believed to form poisonous substances in the body once consumed. Indeed, Omofuma, et al., (2021) state that heat-processed diets contain high levels of advanced glycation end products (AGEs). They also argue that dietary advanced glycation end products (dAGEs) are known to contribute to increased oxidant stress and inflammation which were reported to be linked to the epidemics of diabetes and cardiovascular disease.

Summary of the Results

Based on the study findings, menu (37.8%) was the major indicator of the ability of restaurants to offer health foods to customers. Other indicators were product quality (14.8%), Equipment (14.8%), raw materials (8.8%), while trained staff was 2.1%. Findings on approaches used to differentiate healthy foods from other foods showed that specialized suppliers (41.5%), freshness (29.9%) and sourcing procedure (28.6%) were used.

CONCLUSIONS

Major indicators of capacity of restaurants to offer health food products are Menus while product quality and Equipment take a minimal influence.

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