

Consumers' Patronage of Healthy Meal Options in a Food Establishment

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The Global Strategy on Diet, Physical Activity and Health by the WHO suggests that the private sector become partners with governments to facilitate and enable integrated effort to encourage healthier environments (WHO 2006). A restaurant is a promising venue in promoting healthy eating (Story 2008; Saelens 2007). This study aimed to promote the healthy plate (*Pinggang Pinoy*) concept among Filipino consumers through a Bakeshop in the Philippines with some of its branches having a food shop. The Healthy Plate is a plate-based food guide showing right food proportions that provide optimal amount of nutrients required by an average Filipino. The study involved consumer patronage. For the healthy meal options, Plate 1 consisted of Fried Marinated Milkfish, Sauteed Mungbean, Steamed Rice, and Fruit Gelatin & Water; Plate 2 consisted of Fried Marinated Milkfish, Sauteed Assorted Vegetables, Steamed Rice, and Fruit Gelatin & Water. It undertook a customer study using frequency counts and percentages on the sales of Plates 1 and 2. Data showed that majority of the customers who bought meals were females, 35-64 years old. Plate 1 was accepted by Filipinos as shown in the increase in number of orders for dine-in and take-out. Consumption of Plate 1 through dine-in and take-out increased by 60% from 2015 to 2016, from 66,093 to 110,604 orders. In 2016, Plate 2 recorded orders of 35,760 and 11,953 in Metro Manila and Luzon, respectively. Based on the number of orders, healthy plate meals were bought by Filipino costumers, which may suggest that Filipinos nowadays are becoming more aware of healthy meals. Data showed that there is a growing number of Filipinos who prefer dining-out rather than preparing food at home (Nielsen 2014). Thus, providing healthy meals in restaurants can encourage healthy eating.

Key words: dining out, food plate model, healthy eating, healthy food plate, healthy meal options, nutrition education

INTRODUCTION

Protection and promotion of public health is a core responsibility of government (Gortmaker et al. 2011). Due to the big role in producing, distributing, and providing food products, the food industry is also a significant player in promotion of public health (Hawkes & Buse 2011).

Nutritional choices play an important role in the increasing prevalence of overweight and obese adults and children (Dipietro 2006). The latest National

Nutrition Survey showed that 1 in every 20 Filipino adults had high fasting blood glucose, 3 in every 10 were overweight and obese, 1 in every 5 Filipino adults had elevated BP and high BP, and 1 in every 5 Filipino adults had high total cholesterol (DOST-FNRI 2013). Meanwhile, according to the World Health Organization (WHO 2012), more than half (67%) of total deaths in the Philippines was caused by non-communicable diseases (NCDs), while diseases of the heart and vascular system comprised 33% of all deaths in the Philippines (WHO 2014).

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Dining-out or eating-out has been increasingly popular among Filipinos. More Filipinos are resorting to dining-out than eating at home as shown from the shopper trends report conducted among 1,783 males and females, aged 16-65 years old, belonging to different socio-economic classes in urban locations throughout the Philippines (Nielsen 2014). Results of the survey revealed that 25% of consumers eat-out at fast food restaurants at least once a week in 2014, a contrast to the 2012 survey with only 14% (Nielsen 2014). The shopper trends report also confirmed that there are now fewer shopping baskets containing food items that need to be cooked at home as Filipinos go to fast food restaurants and convenience stores to grab a meal (Nielsen 2014).

Results of a 1999 study by Lin and co-authors on nutritional quality of foods at and away from home suggested that away-from-home foods contained more fat and saturated fat and less of calcium, fiber, and iron than home-cooked foods. Similarly, away-from-home foods have more calories, salt, sugar, and fat and provide fewer fruits and vegetables than recommended by national nutrition guidelines; thus, frequent consumption of away-from-home foods contributes to obesity, hypertension, diabetes, heart disease, and cancer (Cohen & Bhatia 2012).

Another study on the role of food prepared away from home in the American diet revealed that meals and snacks based on food prepared away from home contained more calories per eating occasion, and “away” food was higher in total fat and saturated fat on a per-calorie basis than at-home food. “Away” food contained less dietary fiber, calcium, and iron on a per-calorie basis and was more sodium and cholesterol dense (Guthrie 2002). Fast-food consumption and neighborhood fast-food exposure are associated with poorer diet (Moore 2009).

Another study on the impact of food away from home on adult diet quality was conducted by Todd and co-workers based on dietary recall data from the 1994-96 Continuing Survey of Food Intakes by Individuals (CSFII) and the 2003-04 National Health and Nutrition Examination Survey (NHANES) among adults age 20 and older. The study showed that food away from home, increases daily caloric intake and reduces diet quality. It also showed that as a percent of average dietary density, the negative effects on fruit, whole grain, dairy, and vegetable intake are quite large (Todd et al. 2010).

Frequency of eating-out may contribute to the increasing prevalence of overweight and obesity (Musaiger 2011). Some studies revealed that increased fast food availability and access to televised entertainment may contribute to increasing obesity rates in the United States (Jeffery 1998; Binkley 2000). A similar study also showed that frequency of fast food restaurant patronage is associated

with higher energy and fat intake and greater bodyweight, and could be an important risk factor for excess weight gain in the population (French et al. 2000). Another study among premenopausal women demonstrated that women who reported eating-out for a greater number of times per week had more total energy intake as well as higher fat and sodium intakes (Clemens 1999).

Restaurants provide a convenient and often necessary alternative to home-prepared meals. Several studies have attempted to influence the diners and restaurant owners toward nutritious and healthy choices (Acharya et al. 2002; Richard et al. 1999). In the study of Acharya, consumers who were aware of the healthy dining campaign tend to have more positive beliefs about healthy dining, formed more favorable attitudes towards healthy menu selections, and were more likely to purchase these items. Although consumers seem to understand the importance of healthy dining, they continue to be less willing to adopt these practices. Similarly, Richard and co-authors (1999) also found that there was a demand for healthy menu options in a fast-food restaurant and a family-style restaurant, both located in a low-income, inner-city neighborhood.

Healthy Eating Promotion Initiatives in the Philippines

Various promotion strategies have been implemented in the Philippines to promote healthy eating at home or away from home using healthy eating promotion initiatives like Nutritional Guidelines for Filipinos (NGF), Daily Nutritional Guide Pyramid, and *Pinggang Pinoy* that complements and supplements the Food Guide Pyramid (Narciso 2014).

The *Pinggang Pinoy* for apparently healthy Filipino adults was developed by DOST-FNRI. It is a new and easy-to-understand food guide that uses a familiar food plate model to convey the right food group proportions on a per-meal basis. The guide shows the recommended proportion by food group – Go, Grow, and Glow – on a per meal basis. The guide aims to help Filipinos acquire healthy eating habits needed to maintain overall health (DOST-FNRI 2015).

The *Pinggang Pinoy* is being promoted by government and private agencies targeting various age groups (DOST-FNRI 2015). The DOST-FNRI has used various strategies and channels to educate the stakeholders and specific population groups on *Pinggang Pinoy*. One way of intensifying nutrition education and promotion of *Pinggang Pinoy* is through public-private partnership (PPPs) with food establishments.

The most recent DOST-FNRI interaction with private sector is the partnership on the promotion of FNRI *Pinggang Pinoy* to ensure wider coverage of the *Pinggang*

Pinoy Campaign and advocate consumption of healthier meal alternatives through its accessibility in dining outlets. This study aimed to promote the *Pinggang Pinoy* (healthy plate) concept among Filipino consumers through *Sarap Pinggang Pinoy* Meals of a Bakeshop in the Philippines. In this way, the country's number one Bakeshop offers healthy Filipino meals that are affordable and available for most Filipinos.

The study aimed to determine consumer's patronage of *Sarap Pinggang Pinoy* (healthy plate meals) through sales record report.

MATERIALS AND METHODS

DOST-FNRI, in partnership with a Bakeshop, came up with healthy plate meals based on the concept of FNRI Healthy Plate (*Pinggang Pinoy*). This well-known Bakeshop has several of its branches with food shop nationwide. Healthy Plate 1 (*Pinggan 1*) was offered in 2015 composed of Fried Marinated Milkfish, Sauteed Mungbean, Steamed Rice, and Fruit Gelatin & Water; Healthy Plate 2 (*Pinggan 2*) was offered in 2016 composed of Fried Marinated Milkfish, Sauteed Assorted Vegetables, Steamed Rice, and Fruit Gelatin & Water. Promotional materials like menu board, media releases, menu standee, and tarpaulin were developed and disseminated both by DOST-FNRI and the Bakeshop to promote the healthy plate meals among Filipinos. The nutrition information on *Pinggang Pinoy* as food guide in eating adequate meals with right food group proportions on a per-meal basis were promoted through the Bakeshop collaterals. Healthy Plate Meals were offered in the Bakeshop nationwide at Php 119.00 per meal (or USD 2.50).

The two healthy plate meals were offered in 72 branches in 2015 and 62 branches in 2016 nationwide, including Metro Manila, Luzon, Visayas, and Mindanao. The Bakeshop obtained the sales of healthy plate meals dine-in and take-out in 72 branches from their annual sales record. The Bakeshop also obtained data on age and sex of customers through a database as customers bought the meals. The following data were submitted to DOST-FNRI for analysis of the frequency counts and percentages to socio-demographic characteristics, geographical locations, and type of dining (whether dine-in or take-out).

RESULTS

Based on the sales records provided by the Bakeshop, a total of 228,013 customers bought the Healthy Plate Meals 1 and 2 in 2015 and 2016 (Figure 1).

Majority of customers for Healthy Meal Plates 1 and 2 were female and customers who belonged to the 31-40 year age group (Table 1).



Figure 1. Distribution of Customers by Healthy Meal Plates (2015-2016).

Table 1. Distribution of customers by sex and age.

| Socio-Demographic Characteristics | 2015 | | 2016 | | | |
|-----------------------------------|-----------------|---------|-----------------|---------|-----------------|---------|
| | Healthy Plate 1 | | Healthy Plate 1 | | Healthy Plate 2 | |
| | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| Sex | | | | | | |
| Female | 46,265 | 70 | 77,423 | 70 | 35,921 | 70 |
| Male | 19,828 | 30 | 33,181 | 30 | 15,395 | 30 |
| Total | 66,093 | 100 | 110,604 | 100 | 51,316 | 100 |
| Age in years | | | | | | |
| 21-30 | 15,201 | 23 | 26,545 | 24 | 10,263 | 20 |
| 31-40 | 33,708 | 51 | 58,620 | 53 | 28,224 | 55 |
| 41-50 | 15,862 | 24 | 23,227 | 21 | 11,803 | 23 |
| 51- 60 and above | 1,322 | 2 | 2,212 | 2 | 10,026 | 2 |
| Total | 66,093 | 100 | 110,604 | 100 | 51,316 | 100 |

Looking at geographical location, Plate 1 had the greatest sales in Metro Manila in 2015 and 2016 compared to other regions. The number of orders for Plate 1 also increased from 2015 to 2016 in all geographical locations suggesting acceptance by customers nationwide (Figure 2).

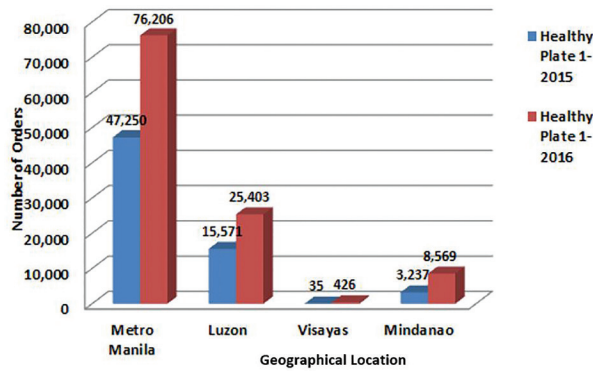


Figure 2. Distribution of customers by healthy meal plates (2015-2016).

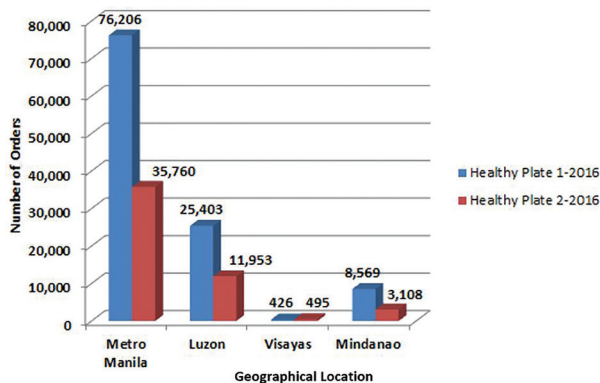


Figure 3. Percent distribution of healthy plates 1 and 2 by geographical location (2016).

Plates 1 and 2 had the greatest sales in Metro Manila followed by Luzon, as shown in the number of orders compared to Mindanao and Visayas (Figure 3)

Consumption of Plate 1 through dine-in and take-out increased by 60% from 2015 to 2016 (66,093 vs. 110,604 orders), as shown in Figure 4.

Plate 2, which was introduced in the market in 2016, recorded 41,053 number of orders. Comparing Healthy Plates 1 and 2, Plate 1 was more popular than Plate 2 in 2016, as shown in the number of orders (Figure 5).

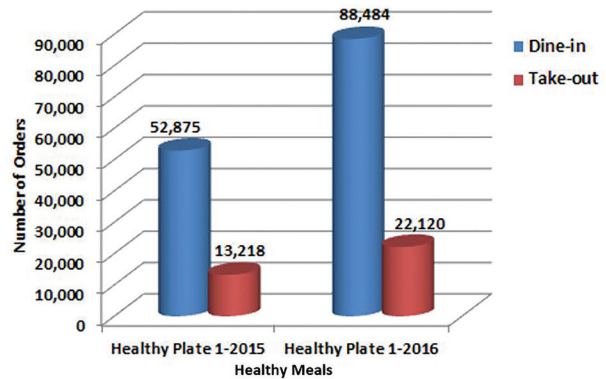


Figure 4. Percent distribution of healthy plate 1 by type of dining (2015-2016).

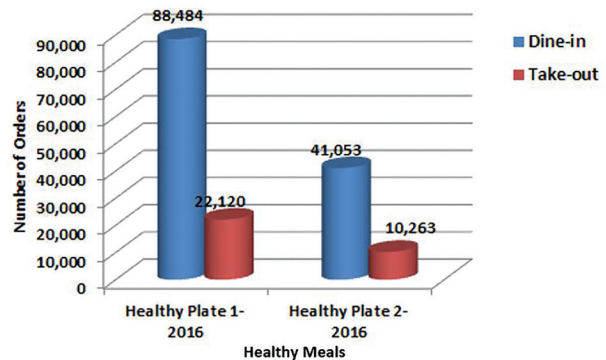


Figure 5. Percent distribution of healthy plates 1 and 2 by type of dining (2016).

DISCUSSION

The result of the study may suggest that females may be more conscious than males on what they eat. This result is similar to several studies citing gender differences in health behaviors, such as women's greater beliefs in the importance of healthy diets, dieting, fruit and vegetable intakes (Wardle et al. 2004; Baker & Wardle 2003; Beardsworth et al. 2003; Davy et al. 2006).

Several studies have described difference in food choice and health behaviors between men and women. Consistently, women placed greater importance to healthy diets or eating, higher intakes of fruits, vegetables and dairy products, lower intakes of meats, and dieting compared to men (Wardle et al. 2004; Baker & Wardle 2003; Westernhoefer 2005; Prattala 2007). In line with theories about women's higher health consciousness, women in general reported dietary changes corresponding to the dietary recommendations, and may also have learned more about health than men through their choice of information sources (Fargeli 1999). A study of Conklin and co-authors (2005) found that females were

more likely than males to use the nutrition information labels to make food choices. Females used nutrition information to identify and select lower-fat, lower-calorie foods, while males used the information to select foods with higher levels of protein.

Majority of the customers of Healthy Plate 1 in 2015 and 2016 were 31-40 years old. For the Healthy Plate 2 in 2016, majority of the customers were also 31-40 years old and followed by 21-30 years old. These age groups were middle-aged and young adults who can be considered as working age groups. In the Philippines, the minimum age for employment is 15 years old and below that age it is not allowed (DOLE 2015).

The increase in the number of orders in 2015 to 2016, whether dine-in or take out, of Plate 1 suggests patronage of this offering among Filipinos. The promotion of Plate 2, which was only introduced in the market in 2016, was considered to be effective with the number of orders by the consumers. According to the Bakeshop, both Plates 1 and 2 were mainstay menus of the food service institution after high sales in 2015 and 2016, despite being new food items in the menu list of the said Bakeshop (Personal communication with Ms. Rosario Caluya, Marketing Manager of the Bakeshop).

These healthy meals offered in the Bakeshop adopted the concept of Healthy Food Plate. This strategy encourages customers to become health conscious and follow the recommended food group portion sizes every time they will eat. This can be considered similar to the environmental intervention in the study of Glanz (1988), where it showed that environmental approaches to dietary behavior change can reach large segments of the population through increased availability of nutritious foods, provision of quality nutrition services in workplace and health care settings, and accessible information about healthful food choices. Nutrition intervention can also serve as a model for other types of health promotion initiatives using multi-dimensional environmental and educational technologies. The food industry has made some voluntary attempts to reformulate existing products in order to promote healthier choices (Gortmaker et al. 2011).

CONCLUSIONS

The Healthy Plate in the Bakeshop's menu list as healthy options resulted positive changes among portion of their customers as shown in the increased numbers of orders for two years.

The results of this study support the need for continuous offering of healthy meals to sustain the interest and patronage of said options among Filipino customers.

Likewise, it is put forward to include the calorie content of Healthy Plates 1 and 2 to further encourage healthy eating behaviors of Filipinos. By providing Filipino customers correct nutrition information, they will be properly guided in selecting healthy and nutritious meals when eating or dining out.

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