DEFINITION AND CLASSIFICATION OF HEALTHY FOOD IN FOODSERVICE FOR BUSINESS AND INDUSTRY

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ABSTRACT

This study was designed to provide useful information for South Korean foodservice management in developing and implementing healthy menus. Using in-depth interviews and data from previous studies, this study was conducted to characterize and classify healthy food. In-depth interviews were conducted with six people in charge of menu management at six different foodservice companies in South Korea. A healthy menu was defined as "a menu with increased nutrition value and/or decreased unhealthy factors by changing to ingredients or cooking methods." Under the definition, four categories of healthy menus were defined as containing: "nutritionally-fortified food," "natural food," "organic food," and "medicinal food." Examples of unhealthy food or products included additives such as "MSG," "use bad fats," and "over processed foods."

Keywords: healthy menu, foodservice management, nutritionally-fortified food, natural food, organic food, medicinal food.

INTRODUCTION

The term "foodservice for business and industry" or "business dining" refers to on-site services that are usually contracted to provide foodservice to employees or executives of a particular business. Foodservice for business and industry has undergone a great deal of improvement in recent years and continues to undergo challenge and competition through internationalization, increased focus on healthy eating, and more sophisticated management techniques. The industry is also attempting to address new management challenges. Therefore, improving the performance of the foodservice industry could help increase overall revenues and customer satisfaction in the hospitality industry. Because of this, foodservice managers have to know and understand their customers' demands and needs (Barrash & Costen, 2007; Lynn, 2005).

In highly competitive markets, foodservice managers need to find more sophisticated ways for their companies to survive and prosper. Foodservice managers should consider what their customers want, and one of the big trends today is to provide healthier food choices. What are the characteristics of healthy food? There are few researchers who have studied healthy menus for the foodservice industry, and an obvious definition for healthy food is not readily available. The annual of market value of the South Korenan foodservice industry is around seven trillion won (Korea Foodservice Information, 2009).

The scale of on-site services restaurants accounts for around 56% of the foodservice industry in South Korea. They are serving food for their customers and employees in various segments such as hospital, school, and industry. Therefore, this study attempts to examine what is considered a healthy menu in South Korea, and how can the industry classify and define healthy food.

LITERATURE REVIEW

Obesity is recognized as a significant and growing health problem in the world (Flegal, Graubard, Williamson, & Gail, 2005). Over the past 30 years in the United States, obesity rates among adults have doubled (Ogdenm, Caroll, Curtin, Tabak, & Flegal, 2006). About 34.3% of adults and 12% of children in the U.S. are considered to be obese (Organization for Economic Cooperation and Development, 2009). Every year, more than 300,000 Americans die from obesity-related diseases and conditions (Centers for Disease Control and Prevention, 2007), and more than $100 billion is spent on diet-related disease (U.S. Department of Health and Human Services, 2001). South Korea has experienced rapid socioeconomic growth, resulting in life style changes that have led to mared increases in obesity (Park[1], Park[2], Oh & Yoo, 2007). Great attention has been given to obesity in Korea, while the obesity rate has rapidly risen from 1998 (26.0%) to 2007 (31.7%) for various reasons including the dietary change to more western food. In addition, diet-related disease (e.g., hypertension or diabetes mellitus) have been continuously on the increase, and death rate from obesity-related diseases has been increasing (Kwak, Kim, & Kim, 2010).

Recently, many quick-service restaurants have attempted to improve their menus and attract new customers by adding healthy menu items (Dipietro, Roseman & Ashley, 2004). Hwang (2008) reported that restaurant customers showed the most positive attitudes toward a low-fat item and were willing to pay more for that item when nutrition information was provided. Increased investment in renovating facilities has created more interesting dining environments, and foodservice managers have employed "healthy menus" to attract and retain customers. The big name chains in the U.S., such as McDonald's, Wendy's, Burger King, and Taco Bell now promote their healthy menus. All of these restaurants offer some type of healthy alternative on their menus to entice those who are worrying their weight or simply want healthier options such as salads (Nation's Restaurant News, 2004). Health and nutrition are already in the top trends on restaurant menus (National Restaurant Association, 2009).

Hurley & Liebman (1995) reported that healthy food had less fat, fewer calories, and included fresh vegetables and fruits. Generally speaking, a variety of healthy foods are now being provided for consumers including low-fat and fewer-calories menu options. Lee & Um (2004) wrote that healthy food contains Natural food, Functional food, and/or Organic food. And Song & Kim (2008) reported that healthy food had low calories and low cholesterol. These categories explain food concepts in South Korea but are not always parallel to consumer perceptions in the U.S. These trends show that the foodservice industry is examining new ways of exploiting market opportunities to satisfy their customers, i.e., they are trying to make the food they serve healthier.

METHODOLOGY

Representatives of six South Korean companies agreed to be interviewed. These companies were representative of foodservice companies in South Korea. Interviews were conducted with foodservice managers who were in charge of menu planning to find out what they thought about healthy menus and how many provide healthy items on their menus. Included were questions about what characterizes a healthy menu and how to classify the characteristics of healthy food. Based on interview responses, a definition for healthy food for business and industry was developed through the use of content analysis.

RESULTS

Several characteristics of healthy food derived from the in-depth interviews are presented in Table 1. The interviewees reported that the term healthy menus could be used to explain a menu with improved nutrition value or decreased unhealthy factors such as MSG, sodium, and/or trans fats by changing food materials or cooking methods.

Two factors that classify healthy food emerged: (a) increasing nutrition value of the ingredients, and (b) decreasing unhealthy factors. Examples offered include increasing the nutrition value by changing cooking method. For example, to reduce the amount of fat in a food, use steam cooking instead of frying. Also, the type and quality of ingredients affect whether a food is healthy or not. In the previous studies, researchers noted that some ingredients such as broccoli (Finley, Davis & Yi, 2000) and green tea (Yu, McLaughlin, Blot, Bu, Qi, & Fraumeni, 1994) may protect against cancer. Including these items more often may increase the perception and the reality of healthier food. Decreasing or reducing unhealthy factors such as chemical fertilizers and pesticides was also listed among the responses as important. Organic food is a good example for this.

Several characteristics of healthy food were defined utilizing in-depth interviews with foodservice managers. Healthy food was classified as nutritionally-fortified food natural food, organic food, and medicinal food (see Figure 1). Nutritionally-fortified food has increased nutritional value added to healthier ingredients such as seaweed, asparagus, and broccoli rather than chemical fortification. Natural food is a kind of food that is minimally processed, i.e., the food the food is served naturally and freshly. By definition organic foods are made in a way that limits the use of synthetic materials and pesticides during production and must use all organic ingredients. A medicinal food is a food with medicinal properties such as ginseng that has perceived direct health benefits. Based on these characteristics, a healthy menu is designated as a menu with increased nutrition value and/or decreased unhealthy factors by changing to ingredients or cooking methods.

APPLICATIONS

A feature of most American diets is fast-food that is high in fat and sodium content (U.S. Department of Health and Human Services, 2001). A report of the Public Health Agency (2001) showed that the term healthy eating meant cutting down on fried or fatty foods, and 51% of the respondents also said eating plenty of fruit, vegetables, and salad. One quarter (25%) thought that the term healthy eating meant eating plenty of fiber or cutting down on sugar, cakes, and candies. Generally speaking, healthy menus are now being provided with more varied choices including low-fat and lowered calorie menu options in the foodservice industry. OECD (2009) reported the ranking of obesity rate from 30 countries. According to the report the United States was most obese country in the world but South Korea was ranked at 28. The Korean obesity rate is lower than American in the obese rated for several reasons. T Different perceptions of healthy food eating behavior and characteristics have been noted in previous comparative studies between U.S. and South Korea (Joung & Lee, 2006; Grant, Wardle, & Steptoe, 2009; Ruka, Rie, Yoshie, Naotaka, & Kenji, 2005). Therefore, this study will provide useful information on healthy menus for foodservice industry healthy menu planning in South Korea and the United States. Additionally, this study also provides specific ways for foodservice managers to adapt food preparation to improve a food's healthy properties.

Table 1.

Characteristics of Healthy Food Referred by Interviewees

| Company	Contents of interview	Characteristics
A	- Food including medicinal ingredients - Food prepared with natural ingredients such as unprocessed ingredients - Food prepared by modified cooking methods	1. Medicinal food 2. Natural food 3. Changing cooking method food
B	- Food prepared with organic ingredients - Food including much vegetable - Food prepared by modified cooking methods - Low calorie food - Food including less trans fat	1. Organic food 2. Vegetable 3. Changing cooking method food 4. Low calorie food 5. Less trans fat food
C	- Food prepared with vegetable protein - Low calories menus - Food prepared by unsaturated fat - MSG free food - Trans fat free food	1. Vegetable 2. Low calorie food 3. Unsaturated fat food 4. Free MSG food 5. Free trans fat food
D	- Food prepared with natural or vegetarian food - Low calorie food	1. Natural or vegetarian food 2. Low calorie food
E	- Food including medicinal ingredients - Food including environmentally-friendly food - Food prepared by modified cooking method - Low calorie food - MSG free food	1. Medicinal food 2. Environmentally-friendly food 3. Modified cooking method food 4. Low calorie food 5. Free MSG food
F	- Food prepared with organic ingredients - Food prepared by modified cooking method - Trans fat free food - Free MSG food	1. Organic food 2. Modified cooking method food 3. Free trans fat food 4. Free MSG food
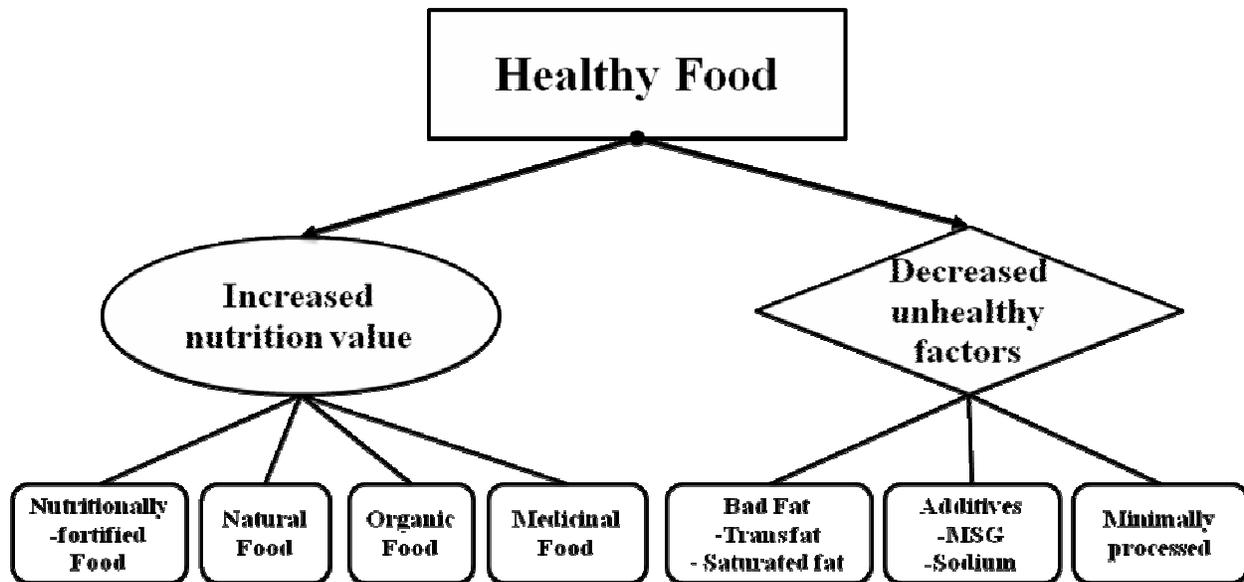
Figure 1. Classification of healthy food

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