

Health and Nutrition Implications of Food Away From Home

- Current Trends for Marketing Restaurants -

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(Received October 25, 2005)

외식과 관련된 건강 및 영양문제 연구

- 레스토랑 마케팅을 위한 최근 경향 -

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배화여자대학 식품영양과
(2005년 10월 25일 접수)

국문요약

미국의 외식산업은 계속 증가하는 추세로 2005년의 레스토랑 매출은 U.S. GDP의 4%인 4,760억 달러에 달할 것으로 예측되며 약 4.9%의 성장이 기대되고 있다. 약900,000 레스토랑에서 식사와 간식을 제공하며 또한 레스토랑에서 근무하는 종업원의 숫자도 약 1억 2천만 명에 이르러서 민간부문에서 가장 큰 규모를 나타내고 있다. 미국 내 외식 산업의 환경은 사회변화와 함께 빠른 속도로 변화하고 있다. 베이비 붐 세대가 장년기에 들어서면서 노인 인구가 급증하고 있으며, 비만과 성인병의 증가로 인해 레스토랑 메뉴의 영양표시에 대한 요구도가 커지고 있다. 또한 외식이 비만에 미치는 영향에 대한 사회적인 문제가 관심의 초점이 되면서 레스토랑에서 건강 메뉴 개발이 요구되고 있다. 이와 함께 건강지향 고객의 증가로 인해 보다 건강한 외식에 대한 필요성도 증가하고 있는 추세이다. 따라서 이러한 환경변화에 대응하기 위한 레스토랑의 노력이 어느 때보다도 필요한 시점이다. 외식산업 시장에서 민족음식(ethnic food)은 중요한 위치를 차지하게 되었으며 고객의 보다 다양한 문화적 욕구를 충족시키기 위한 마케팅이 요구되고 있다. 미국 내 외식 시장에서 한식의 위치는 한식의 영양적 우수함에도 불구하고 낮은 인지도와 전략적 마케팅의 부재로 인해 아직 미약한 실정으로 보인다. 미국 시장 개척을 위해서는 미국의 현재 외식 산업의 추이를 파악하고 그 안에서 한식의 위치를 재정립 하는 것이 매우 중요하다. 그러므로 본 연구에서는 미국 외식 산업의 현재 추이와 영양과 건강문제가 외식 산업에 미치는 영향에 대해 조사하고 한식의 대미 진출을 위한 기초 자료를 제공하고자 한다.

Key Words : 외식, 건강마케팅, 레스토랑, 트렌드

I. Introduction

Restaurant-industry sales in U.S. forecasted continuing to rise in 2005, reaching a record \$476 billion and marking the 14th consecutive year of real sales growth for the industry¹). According to the National Restaurant Association Forecast, rising industry sales expected to be up 4.9 percent over 2004 sales and up to 4 percent of GDP(gross domestic product)²). And the industry expected to post average sales of more than \$1.2 billion per day and the nation's 900,000 restaurant

locations serve meal and snack occasions and provide employment for approximately 12.2 million people, almost 9 percent of the U.S. workforce making it the nation's largest private-sector employer.

As social environment changes, the environment of restaurant industry altered rapidly as well. Restaurateur had been challenged by social issues such as age shift, obesity epidemic, food labeling and lawsuits related with restaurant industries. Baby boomers are now between forty and sixty years of age, showing big increase of seniors as demographic

shift³⁾ and boomers are such a large blip in the nation's population that they have a tremendous impact on goods manufactured, services supplied and marketing strategies in restaurant industry⁴⁾. Seniors are vulnerable to degenerative chronic diseases and they already got the lifestyle-related diseases such as diabetes, coronary heart disease and hypertension, which resulted in the increasing need of health claim to restaurant menus.

Obesity is another epidemic in the world as well as US. and the relationships between incidence of obesity and food away from home emerged as a social issue. As the needs of healthy dining-out increases, restaurants should prepare healthier menus for health-conscious customers to maintain their market. The market for ethnic restaurants and cuisines grew a great deal in the 1990s. Customer attitudes toward ethnic cuisines have shifted and American customers don't feel as strongly about ethnic cuisines, because such foods have become more commonplace, more available and are found more often at non ethnic restaurants. According to the National Restaurant Association's study, *Ethnic Cuisines II*, ethnic foods have become mainstream and which are gaining in popularity⁵⁾.

But, the position of Korean cuisine in restaurant industry of US. is still negligible even though Korean food is nutritionally well balanced and healthful. Partly, it is due to the lack of perception to Korean foods and partly to the lack of strategic marketing. For finding a new market, it is important to have a good grip on current trends of restaurant industry and positioning Korean foods in dynamic structure of restaurant industry in US. This paper review current trends of restaurant industry in US. and its implication in health and nutrition providing the basic data for pushing Korean foods into American market.

1. Trends of Food Away From Home in US

1) Increase of Total restaurant-sales

Total restaurant-sales anticipated continuing to increase. The average food spending per person increased about 2.4 percent during 1992-2002, from \$2,191 to \$2,245 and food spending in average annual expenditures was 13.2 percent(Table 1). About 43 percent of the food dollar was spent on food away from home in 2002⁶⁾. Restaurant industry's share of the food dollar had increased

continuously and it shares 46.4% of food dollars now and will share 53% of it in 2010. And the restaurant-sales growth tends to be continuing and it compare with a 1.3 percent in real gain in 2003. 69.5% of total restaurant sales spending (306 billion) are in eating places including both full-service restaurants and quick service restaurants. As shown in <Fig. 1>, managed services, which are onsite foodservice and food contractors forecasted to grow as 6.2%. Until 2010, over 1,000,000 locations will operate with providing jobs.

<Table 1> Average food spending by all households, 1992-2002 (dollars per person)

Year	Total Food	Food at home	Food away from home
1992	2,191	1,355	836
1994	2,196	1,342	856
1996	2,254	1,376	878
1998	2,212	1,266	946
2000	2,209	1,282	927
2002	2,245	1,287	958

Source: Consumer Expenditure Survey, Bureau of Labor Statistics. 2003 <http://www.ers.usda.gov/Briefing/FoodMarketStructures/foodservice.asp>

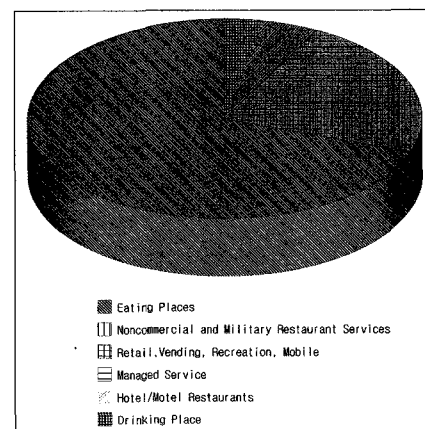
<Table 2> Annual U.S. expenditures for food

Year	Food eaten at home		Food eaten away from home ^a		Total billions
	Billions	Percent	Billions	Percent	
1990	\$317	56%	\$249	44%	\$566
1995	\$364	54%	\$307	46%	\$671
2000	\$433	53%	\$391	47%	\$824
2005 ^b	\$510	51%	\$483	49%	\$993

^a Includes both meals and snacks.

^b Projected.

Source: Food Institute Annual Industry Review. 1993-2004, Elmwood Park, NJ: Food Inst.



<Fig. 1> Restaurant- Industry Sales by Segments (unit: billion)

Source: 2004 Restaurant Industry Forecast, NRA, 2004

<Table 3> Average annual expenditures by age of household head

	Under 25	25-34	35-44	45-54	55-64	65 and over	All ages
Income before tax	\$20,773	\$49,1333	\$61,532	\$64,974	\$53,162	\$29,711	\$49,430
Average annual expenditur	\$24,229	\$40,318	\$48,330	\$48,748	\$44,330	\$28,105	\$40,677
Food	\$3,621	\$5,471	\$6,314	\$6,228	\$5,559	\$3,910	\$5,375
Food at home	\$1,926	\$3,093	\$3,601	\$3,528	\$3,114	\$2,548	\$3,099
Food away from home	\$1,696	\$2,378	\$2,712	\$2,700	\$2,445	\$1,362	\$2,276
Average Number of Persons	1.9	2.9	3.2	2.7	2.1	1.7	2.5
Food away from home (per capita)*	\$892.6	\$820.0	\$847.5	\$1,000	\$1,164.3	\$801.2	\$910.4
% food away from home of total food expenditure*	46.95	43.47	42.95	43.35	43.98	34.83	42.34
% food away from home of average annual expenditur	6.70	5.90	5.61	5.54	5.52	4.85	5.60

Source: Consumer Expenditures in 2002(Report 974), Bureau of Labor Statistics, U.S. Department of Labor, February 2004

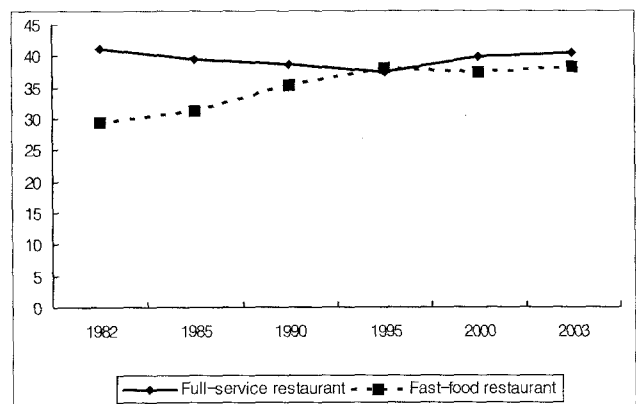
*Calculated from above data.

2) Spending of full-service restaurants

Spending of full-service restaurants will increase larger than fast food restaurants. Stewart suggested that, between 2000 and 2020, Americans will increase their spending by about 18 percent per person at full-service restaurants, and about 6 percent per person at fast food establishments⁷⁾. These predictions were based on a statistical model that incorporates the changing demographics of the U.S. population most importantly, rising incomes, a decrease in the proportion of "traditional" households, and an increase in the average age. Traditional families accounted for 30 percent of all households in 1980 and 24 percent in 2000. By 2020, they are expected to account for 17 percent of all households. This change alone will lead to increased spending of 2 percent per person at both full-service and fast food places. And they suggest also that per person spending on fast food may decrease by over 2 percent with the aging of the population because the older people derive less satisfaction from the foods and services traditionally offered at fast food restaurants.

2. Health and nutritional issues of food away from home

As the popularity of eating away from home increased, some concerns about impact of dining-out on the quality of diet and health have raised. Although obesity is viewed as resulting mainly from individual behavior rather than as the responsibility of industry and diets are not a sole cause, restaurant industries have been forced to ensure providing healthful diets. Restaurant marketers should solve the problems of low diet quality, super size and developing healthful menu in restaurants.



<Fig. 2> Sales of meals and snacks away from home by type of outlet

Source: Food CPI, Prices, and Expenditures: Expenditure tables. Economic Research Service <http://www.ers.usda.gov/Briefing/CPIFoodAndExpenditures/Data/table17.htm>

1) Epidemics of obesity and food away from home

Obesity is a worldwide problem, but it is more epidemic in U.S.⁸⁾⁻¹⁰⁾ The rates of both overweight and obesity in the US are 61% and 14% in adults and children, respectively¹¹⁾¹²⁾. The Centers for Disease Control and Prevention predicted that obesity would overtake smoking as the leading cause of preventable death in the United States by 2005 if current trends continue¹³⁾. It is estimated that in the United States, more than 300,000 deaths per year (14% of all deaths) are directly related to conditions and diseases associated with being overweight and obese¹⁴⁾. Considering the prevalence of the overweight condition today in the United States and its predicted future social and economic costs, obesity can no longer be considered as just the individual's problem, but rather should be seen as a broad population problem requiring attention by government¹⁵⁾.

Eating away from home has been shown to be associated

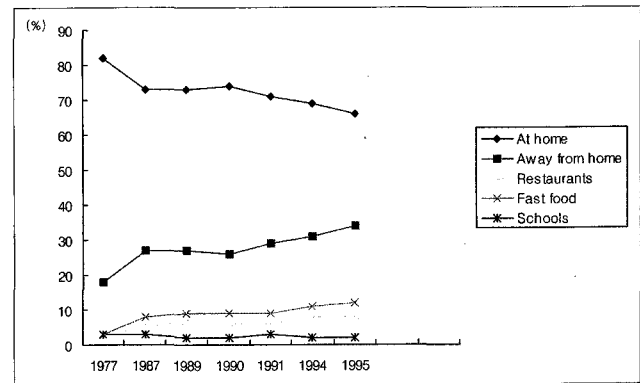
with increased energy intake as well as with overweight and obesity¹⁶⁻¹⁷). The frequency of consuming restaurant food is positively associated with body fatness among men and women of 19 to 80 years of age¹⁶). Binkly and other researchers reported that, in women, frequent consumption of meals at fast food establishments is associated with increased BMI (Body Mass Index), and in men, eating at both restaurants and fast food establishments is associated with increased BMI¹⁸⁾¹⁹).

Analyzing 17,370 adults and children who participated in the 1994-1996 and 1998 Continuing Survey of Food Intakes by Individuals (CSFII), Paeratakul showed that adults and children who reported eating fast food had significantly higher intake of energy, fat, saturated fat, sodium, carbonated soft drink, and lower intake of vitamins A and C, milk, fruits and vegetables than those who did not reported eating fast food ($P < .001$)²⁰⁾²¹). The increased proportion of eating breakfast and dinner away from home was associated with an increased risk of obesity. Subjects eating dinner out frequently had an approximately twofold increased risk of obesity in comparison with subjects who rarely ate dinner away from home²²). Therefore, based on those scientific data, consumption of fast food of Americans seemed to have an adverse effect on dietary quality in ways that plausibly could increase risk for obesity.

2) Diet quality, super size and food away from home

When consumers eat away from home, they are offered a large variety of low-cost, energy dense foods in large portions and all of these factors may encourage over consumption of energy and lead to obesity. The nonprofit consumer advocacy group Center for Science in the Public Interest (CSPI) had called attention to the high fat, saturated fat, and sodium contents of many menu items in popular restaurant and it is said that the increased popularity in dining out may represent a barrier to meeting dietary recommendations for fat, saturated fat, sodium, and other nutrients both in children and adults²³⁾²⁴).

Contribution of calories obtained from foods away from home had been increased (Fig. 3). The main issues of diet quality in foods away from home are high fat and cholesterol and high sodium and high calorie intake caused by supersize. Compared with home foods, away-from-home



<Fig. 3> Proportions of total calories obtained from at home and away-from-home foods (1977-1995)

Source: Lin, Guthrie & Frazao, 1999

foods had on average, higher fat, saturated fat, and cholesterol densities. Home foods provided average fat and saturated fat densities of 34.7 grams and 12.0 grams per 1,000 calories, respectively, compared with 41.8 grams and 14.3 grams per 1,000 calories for away-from-home foods. And these tendencies occurred for all aged groups and both genders. On average, restaurant foods had higher fat and lower saturated fat densities than fast foods, although fast foods consumed by children had a slightly higher fat density than restaurant foods consumed by children. Restaurant foods had the highest sodium density of all food sources. Restaurant foods eaten by adults had a sodium density of 1,952 mg per 1,000 calories, which is 17 percent higher than home foods and 12 percent higher than fast foods²⁵).

Recently, Bowman reported that children who ate fast food, compared with those who did not, consumed more total energy(187Kcal), more energy per gram of food(0.29 kcal/g), more total fat(9g), more total carbohydrate(24g), more added sugars(26g), more sugar-sweetened beverages(228g), less fiber(-11g), less milk(-65g), and fewer fruits and non-starchy vegetables(-45g). And Using within-subject analysis, children ate more total energy and had poorer diet quality on days with, compared with without, fast food²⁶).

Large portion size has been another issue of foods away from home and it is considered another contributor of obesity epidemic in US. The increasing size of American food portion is linked to US. food industry's growing reliance on "value" marketing. It encourages the customer to spend a little extra money to purchase larger portion sizes and leaves the customer with the feeling that they have

'gotten a deal' but there are the hidden costs of super sizing²⁷⁾. When consumers eat away from home, they are offered a large variety of low-cost, energy-dense foods in large portions²⁸⁾²⁹⁾. During the last 25 years, researchers showed that portion sizes of commercially available foods have increased in parallel with the increase of the incidence of overweight and obesity³⁰⁾³¹⁾. Portion sizes began to grow in the 1970s, rose sharply in the 1980s and have continued in parallel with increasing body weights³²⁾.

Both studies in laboratory-based experiment and in a restaurant setting, the portion size of food directly influences the amount that is consumed. In laboratory-based experiment, Rolls *et al.* showed that when participants were served a portion of macaroni and cheese that was 50% bigger than a standard portion, their energy intake increased by 19%, and when the portion was increased by 100%, intake increased by 30%³³⁾. And similar increases observed in increased portion size of packaged potato chip, deli-type sandwiches in laboratory studies³⁴⁾³⁵⁾. Recent research in a restaurant setting showed that increasing the size of an entrée resulted in increased energy intake. Portion size had a significant effect on intake of the entrée ($p < 0.0001$). Compared with customers who purchased the standard portion, those who purchased the larger portion increased their energy intake of the entrée by 43% (172 kcal) and of the entire meal by 25% (159 kcal). There was no difference between the two groups of customers in ratings of the appropriateness of the portion size or of the amount that was eaten in relation to their usual meal³⁶⁾. These results strongly support the suggestion that large restaurant portions may be contribution to the obesity epidemics and public health efforts to address obesity should focus on the need for people to consume smaller portions.

3) Nutrition labeling and legal issues in restaurant industry

Nutrition labeling and legal issues are another challenge for restaurant industry today. The rising rates of obesity and the increasing role of restaurant foods in Americans' diets pressured to provide nutrition information in restaurants.

(1) Changes of nutrition labeling

The 1938 Food, Drug and Cosmetic Act, an amendment of the 1906 Pure Food and Drug Act, is still the leading law in food and drug regulation and has been modified many

times to reflect the needs of consumers and the changing food industry³⁷⁾. Truth-in-Menu also known as "Accuracy-in-Menus" and "Truth-in-Dining" is a term used to describe regulations governing restaurant menus⁴¹⁾. After The White House Conference on Food, Nutrition and Health in 1969 and food labeling initiatives undertaken by the FDA and the U.S. Department of Agriculture(USDA) in 1973 and 1974, in the 1980s, a change in the nutrition information claims on food labels emerged³⁷⁾⁴¹⁾.

After years of operating with voluntary program for providing nutrition labeling for processed foods, Congress passed The Nutrition Labeling and Education Act (NLEA) of 1990 (1990, 21 U.S.C. 301). The NLEA requires nutrition labeling on almost all packaged foods sold at supermarkets, convenience stores, and other retail stores, however, the information on nutrition requirements was not binding on the restaurant meals.

Amendment to the NLEA of 1990 to include nutrition and health claims made by restaurants was passed in 1997. Under current law, the requirement is that when restaurants make a health or nutrient-content claim for a food or meal, nutrition information relevant to that claim must be available⁴²⁾.

(2) Labeling of Restaurant foods

While it may be relatively easy to estimate the nutritional content of some menu options offered in restaurants, this may not be the case for many others. But, labeling of restaurant foods will be more important issues for restaurant marketers in near future. Actually, there are no state or federal laws that require nutrition labeling of restaurant food and the NLEA specifies that, in general, restaurant foods are exempt from nutrition labeling requirements⁴³⁾. Nutritionists said that there were a number of limitations with the current voluntary system for providing nutrition information in chain restaurants. They pointed out insufficient providing of nutrition information, low accessibility and difficulties using nutrition information provided by restaurants⁴⁴⁾. A survey of the largest chain restaurants found that two-thirds(65%) do not provide customers with any nutrition information⁴⁵⁾.

Restaurants, particularly fast-food chains provide nutrition information regarding their menu items in their brochures. And several fast-food chains provide in-store nutrition information after pressure from state attorneys

general and consumer groups. In 1986, state attorneys general from several states, including Texas, New York, and California, negotiated an agreement with McDonlad's, Burger King, Jack in the Box, KFC, and Wendy's to provide nutrition and ingredient information in their restaurants⁴⁴). Some restaurants provided menu items that are labeled as "light fare", "healthy heart", or other "healthy" designation and some of those programs have been shown to increase the sales of the healthy-designated items but restaurant industry should have paid more attention to health and nutrition claims⁴⁶⁾⁴⁷).

There were examples of violation of the NLEA with respect to nutrition claims. In the "State of California v. High Tech Burritos (1997)," the company sued by state and local prosecutors who alleged that High Tech Burritos had exaggerated the health benefits of its foods and the company paid \$95,000 in fines and was required to drop all references to its food being heart healthy and meeting guidelines set by American Heart Association³⁹). And Kentucky Fried Chicken (KFC) was forced to rename its "Lite and Crispy" chicken to "Skin free Crispy" and pay a fine of \$25,000 because the number of calories in the product was virtually identical to the "Original Chicken" recipe³⁸).

Recently numerous bills have been introduced at the federal and state levels that would establish a nutrition labeling requirement for restaurant foods. "The Menu Labeling and Education Act"(MEAL) would establish a nationwide requirement for nutrition labeling of chain restaurant foods. Although this requirement would apply only to restaurants that are "part of a chain with 20 or more outlets", restaurants would be required to include on their menus key nutrition information clearly and conspicuously. In 2003, five states (California, Maine, New Hampshire, New York and Pennsylvania) and District of Columbia introduced similar legislation. And in March 2004, the FDA's Obesity Working Group (OWG) issued a report, which they concluded that food consumed away-from-home is an important part of American diets and that more informed dietary choices away-from-home could help reduce calorie over-consumption and the risk of obesity and its associated health problems. And it recommended that FDA urge the restaurant industry to launch a nation-wide, voluntary, and point-of-sale nutrition information campaign for customers⁴⁸).

It seems that there is a gap between the view of nutritionists, scientists and restaurant marketers to nutrition labeling on restaurant foods. But considering the importance of customer's opinion in restaurant business, knowing customer's needs of nutrition labeling is important. According to the Department of Health and Human Services (DHHS), more than three-fourths of consumers use food labels⁴⁹). And American Dietetic Association reported that consumers are actually seeking nutrition information and getting the message and making changes⁵⁰). Use of the labels was associated with eating more healthful diets and persons suffering from diet-related diseases use nutrition labels as a means of identifying appropriate foods for managing their conditions⁵¹⁾⁵²). Considering those needs of consumers, nutrition labeling in restaurants would be one of major factors to choose a place to go out.

3. Increasing needs of healthy marketing strategy in restaurants

1) Health-conscious customers

For restaurateurs, the greatest point of contention concerning the nation's obesity problem and the ensuing focus on health and diet is the question of responsibility. According to the Restaurants & Institutions' Obesity in America survey (n=403), nearly 30% of consumers said restaurants have a great deal of responsibility ensure that the food they serve is nutritionally balanced, while 45% believe operators have some responsibility. On the other hand, only over one-quarter said restaurants have no responsibility at all⁵³⁾⁵⁴).

Although the responsibility of restaurants are doubted, but as long as customers believe that restaurants should provide such as more healthful items, restaurateur can not be free from health and nutritional issues in restaurants. While consumers seem reluctant to place blame on restaurants for their own dining decisions, many people believe that operators should provide choices such as more-healthful items and smaller portions. Professional nutritional agencies including American Dietetic Association support industry claims that fast food can be part of a healthful diet⁵⁵).

The increasing number of health-conscious restaurant customers is important to restaurant operators. Needs of

targeting to health-conscious consumer was urging to restaurants since 1980s⁵⁶). Understanding customers will enable restaurateurs to know whether and how fast to introduce healthy menu on restaurant menu. Recent research reported that 47% of consumers under age 25 and 13% of those ages 26 to 37 and about 30% of those ages 38 and older said restaurants have a great deal of responsibility for serving nutritionally balanced food. Compared with previous results in 1993, which reported that over one-third of restaurant customers are concerned with the nutritional value of foods, those portion of health-conscious customers has been increased⁵⁷⁾⁵⁸⁾⁵⁹). And when selection places to dine out, the availability of nutritious and healthful food is more important to females than it is to males and to those age 38 or older than to younger respondents⁵⁶). Baby boomers are most likely among all age groups to have asked about nutrition information of menu items and to rank nutritious and healthy food higher in importance as a factor in selecting restaurants and to say they are well informed about the nutritional value of foods they prepare at home.

Increasing boomers is a global trend, and in the United States, the proportion of the population aged ≥ 65 years is projected to increase from 12.4% in 2000 to 19.6% in 2030. The number of persons aged ≥ 65 years is expected to increase from approximately 35 million in 2000 to an estimated 71 million in 2030⁶⁰). Boomers are only part of a complex demographic story. Generation Y, today's teen, is a savvy, cynical, sophisticated and very powerful group. Women have special dietary needs, and an increasing array of fortified and specialized products is addressing them. The U.S ethnic landscape continues to diversify, with Latin and Asian cultures flowing into the mainstream of the marketplace. The African-American demographic also continues to move upscale and increasingly middle and upper middle class. The impact of diversified demographics underscore the importance of niche marketing, the health needs, life-styles, and cuisine preferences of a diverse population are difficult to address with one-size-fits-all solutions⁶¹).

2) Efforts to making Healthier environment in Restaurants

With health-conscious consumers seeking lean, nutritious meals when they are on the go, and lawyers warming up the

obesity lawsuits, the fast food industry is feeling the heat. The major chains are increasingly trying to offer healthy options, from bunless burgers for the low-carb Atkins crowd to grilled chicken and salads for the fat-and-calorie counters. Nevertheless, it seems that menu items that are based solely on nutrition concerns or that emphasize nutrition over taste have rarely been successful. Spurred on by government agencies and public opinion, McDonald's has begun eliminating super-size portions, Burger King has introduced low-carbohydrate food options and Taco Bell is heavily promoting its Fresco. But, regulation of government to health claims are only baseline. Considering obesity epidemic in the world and increasing numbers of health-conscious customers, healthy dining out will be a key factor to select restaurants. Bull and Wise investigated chefs' knowledge of nutrition and their ability to apply it to a selection of recipes and they found that there was a gap in chef's knowledge of perceived and actual "healthy" dishes and suggested a detailed review of the nutrient component of catering courses is needed⁶²).

II. Summary and Conclusion

In Korea, as market of food away from home is getting large and obesity is now emerging one of the serious health problems just like U.S. Therefore Korean restaurants should pay more attention to health and nutrition implications of their food on customers.

Aging of the Korean population is going to be more accelerating and it can affect marketing strategy of restaurants. Mature consumers that have been underserved are one of the fastest growing markets in terms of size and economic power and mature customers are more health conscious and expecting more nutritious meal when selecting a restaurant. Restaurant managers should solve the problems of low diet quality and develop healthful menu in restaurants.

It seems that there is a gap between the view of nutritionists, scientists and restaurant marketers to nutrition labeling on restaurant foods. But considering the prevalence of the chronic disease problems including overweight today, it can no longer be considered as just the individual's problem, but rather should be seen as a broad population

problem requiring attention by government. Although the responsibility of restaurants are doubted, but as long as customers believe that restaurants should provide such as more healthful items, restaurateur can not be free from health and nutritional issues in restaurants.

People's taste for ethnic edibles continues to grow both in America and Korea. And it is predicted that food manufacturers will compete for market share in the faster-growing ethnic cuisines like Thai, Carribean, Mediterranean, and India food in U.S. Many Korean foods are considered inherently healthy but the marketing of healthy traditional Korean food is very limited. Therefore it is needed to find our way into healthy food segment both in Korea and U.S and restaurateurs have to develop healthy menu items based on scientific data for foreigners as well as Koreans.

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