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**THE FOOD SERVICE INDUSTRY:
TRENDS AND CHANGING STRUCTURE
IN THE NEW MILLENNIUM**

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ABSTRACT

By 2010, foodservice establishments are projected to capture 53 percent of consumers' food expenditures, whereas in 1980, foodservice captured less than 40 percent. The foodservice industry accounts for approximately 4 percent of the Gross Domestic Product and about 11 million jobs. It has been rapidly changing due to economic factors, technological advances, and labor matters.¹ This overview covers many of the issues and trends affecting the different segments of the foodservice supply chain including the foodservice operators, distributors and food manufacturers.

Changing customer demographics are a driving force in the evolution of the foodservice industry. As the baby boomers reach middle age, they do not seem to have time to cook and their children and grandchildren do not seem to have the interest, or talent. The U.S. population in 2000 had over double (\$6,500) the per capita discretionary income that it had in 1975 (\$3,109)² and, with a high value for recreation and pleasure they are pulled out of the kitchen and into the restaurants. An ever-shrinking world also brings variety to menus as cultures and cuisines converge, introducing new flavors and textures.

A tight labor market has affected the foodservice industry from top to bottom leading to a derived demand for convenience products from manufacturers. At all links in the chain, companies are experiencing mergers and acquisitions. Operators, manufacturers, and distributors are all fighting for a share of the profits as competition continues to intensify.

This review of the foodservice industry incorporates interviews with industry professionals, current information from leading foodservice associations, and predictions from the top industry research firms and consultants.

1. National Restaurant Association, Oct. 2000

2. U.S. Dept. of Commerce, Bureau of Economic Analysis, 2000 estimate

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The Food Service Industry: Trends and Changing Structure in the New Millennium.

Introduction

The fresh whole chicken has lost its place in the kitchens of today's foodservice arena. cooking ingredients that take time, labor, and precaution to prepare. In today's time-pressed and labor-short economy, everyone is looking for a quicker, more efficient and convenient way to prepare food to eat. Foodservice businesses have not escaped this trend and have embraced the realization that if you are going to succeed in today's market, you have to prepare food for consumers better, faster, and safer than your competitors. However, in order to achieve this, chain and restaurant owners have had to turn to other links in the food supply chain for ways to meet consumer demands. An emerging strategy within foodservice involves the combination of culinary expertise, industry experience, and strategic marketing through a shared effort among food manufacturers, food distributors and foodservice operators. This alliance, along with many other trends, is re-shaping the foodservice operation into a highly technological, efficient, and flexible enterprise.

As the foodservice industry enters the 21st century, it is capturing more than 45 percent of the total food dollar of Americans. Restaurant sales were projected to increase 5 percent in 2000 reaching about \$375 billion. By 2010, foodservice is expected to have 53 percent of the food market with sales possibly exceeding \$577 billion. The table at the restaurant will continue to compete with the table at home and foodservice will continue to compete with traditional grocery stores.

With the 90's being one of the strongest and longest periods of economic growth in U.S. history, a sharp annual rise of 2.7 percent in real per-capita disposable personal income has been

one of the leading factors in the growth of foodservice sales. With only 7 percent of U.S. homes belonging to married couples with children where only the husband is employed outside of the home, very few households have a “traditional” family sitting down for a traditional two or three course dinner at 6 p.m. (National Restaurant Association, December 1999).

U.S. Food Expenditures

USDA estimates put 1999 total food expenditures at \$788.9 billion, up 4.9 percent from the previous year. Food at-home expenditures comprised \$413.9 billion (up 3.8 percent) and food away-from-home comprised \$375 billion (up 6.3 percent). (See Table 1)

Table 1: Growth in expenditures (Nominal values)

Annual Change	percent	Food at-home expenditures	Food-away-from-home expenditures
1995		3.6%	4.0%
1996		3.5%	4.4%
1997		3.7%	5.8%
1998		2.1%	3.9%
1999		3.8%	6.3%

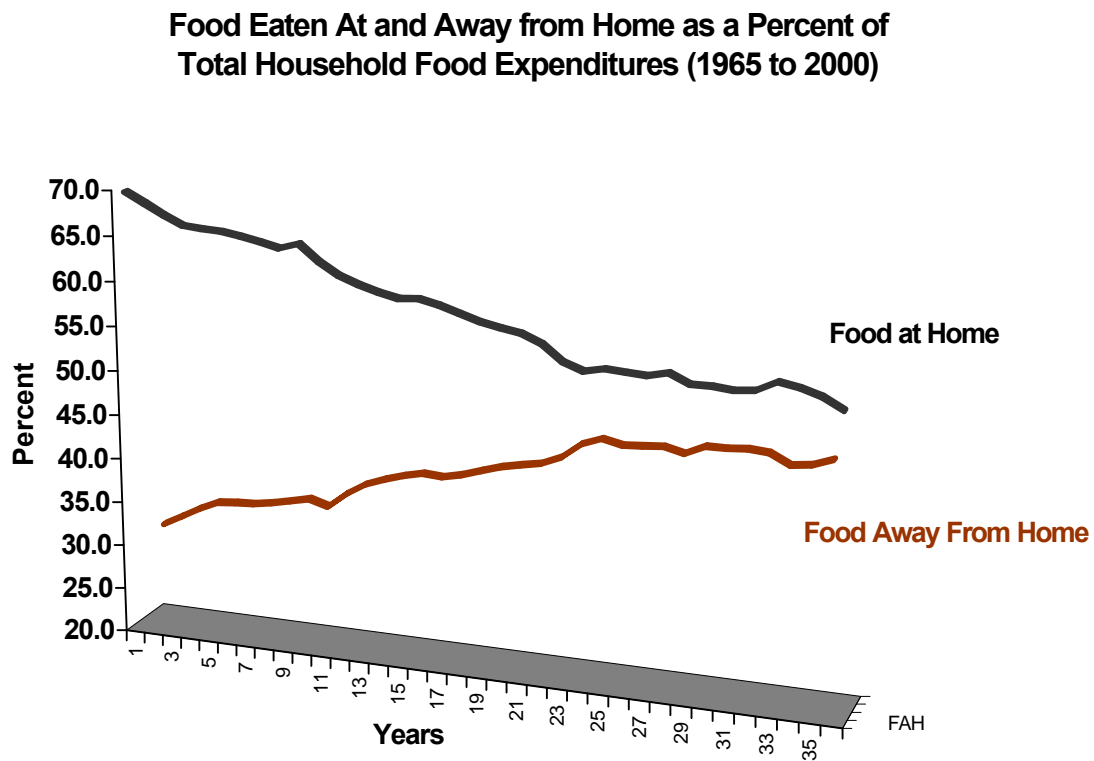
Source: Food Institute’s Food Industry Review 2000 Edition

The total share of disposable personal income spent on food fell from 20 percent in 1960 to less than 12 percent in 2000. USDA figures show that food away-from-home expenditures have grown to 47 percent of total household food expenditure, while food at-home expenditures have fallen to 53 percent. (See Figure 1)

Almost 50 billion meals are eaten in restaurants and cafeterias each year. On a normal day, the restaurant industry will have sales of around \$1 billion. It employs over 11 million people, second only to the U.S. government. The average annual household expenditure for food away from home is over \$2,000. This is about \$800 per person with the average household being

around 2.5 persons. One-third of all adults in the U.S. have worked in the foodservice industry at some point in their lives, with 60 percent of its workforce being female. The foodservice industry is an important part of the U.S. economy with sales making up approximately 4 percent of the U.S. Gross Domestic Product (National Restaurant Association, December 1999).

Figure 1



Source: Senauer, Asp, and Kinsey 1991; UDSA, 2001.

The Operators

Foodservice Segments

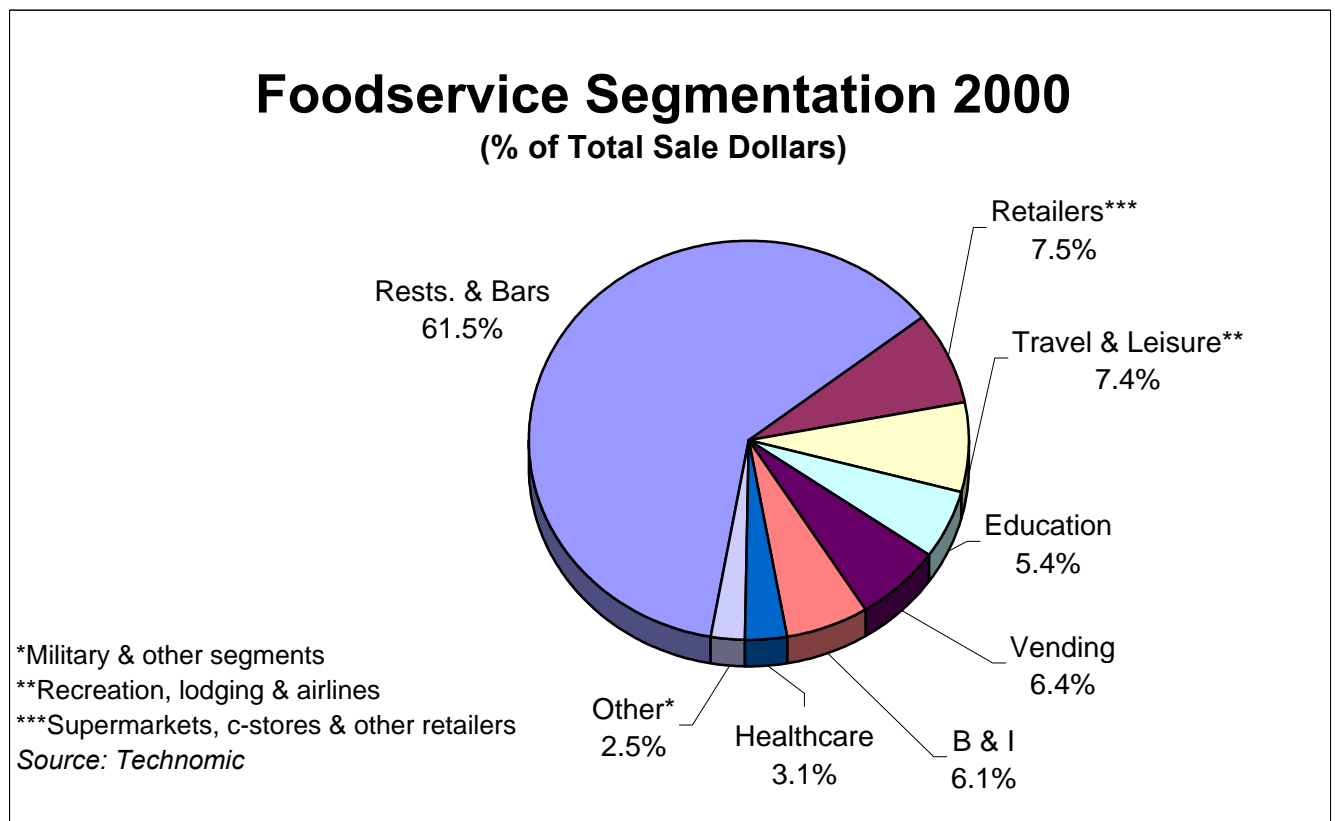
The foodservice operators are those who own, franchise, or manage a retail foodservice business. They can operate one restaurant or a chain of eating places. The food away-from-home segment, or foodservice segment (as they tend to be interchangeably used in the industry) comprises a plethora of commercial and non-commercial establishments ranging from full service restaurants to school cafeterias & prisons. The original distinction of food at home and food away from home was based on where food is consumed and assumed that food at home came from a grocery store. Now, restaurant take-out food is increasingly eaten at home or on-the-go and grocery stores provide ever more prepared food/foodservice types of offerings. Thus, the classification of the source of food, as noted in Foodservice 2005, is more appropriately based on where and how food is prepared rather than on where it is eaten (McKinsey,1996). The foodservice sector encompasses all providers of fresh prepared meals, including food sections of grocery deli. The food at-home segment refers to dry grocery, refrigerated items, frozen foods, bakery etc. that must be assembled, cooked or further processed at home before consumption.

Commercial foodservice accounts for about 90 percent of the total foodservice sector (National Restaurant Association, December, 1999). The commercial restaurant industry is divided into segments, with the largest segment, restaurants and bars, comprising 61.5 percent of total foodservice sales. The other foodservice establishments include places involved in education, travel and leisure, healthcare, vending, business and industry, retailers, and many more.

Restaurants and bars are further segmented into limited service and full service. Limited service restaurants are divided into quick service and cafeterias, which are establishments

without wait staff and that offer a limited menu of prepared food. These restaurants do not serve alcohol as a rule. Full service restaurants have a broad, full-line menu along with table, counter and/or booth service, and a wait staff. They often serve alcohol and accept credit cards. Bars and taverns typically only serve food for lunch and dinner and target higher dollar sales with full bars and appetizers; some serve full meals. The rest of the commercial foodservice industry has a variety of other formats, such as vending machines and kiosks. In 1998, the top 100 foodservice operators in commercial foodservice had 50.7 percent of the total sales dollars, but only 33.5 percent of the total store units (The Food Institute's Food Industry Review, 2000). The percentage breakdown of the commercial and non commercial foodservice segments with their percent of total sales of \$391 billion are pictured in Figure 2. (See Appendix 1.)

Figure 2



Source: Technomic, Inc. (December 2000)

Quick Service Restaurants

Quick service restaurants, not only provide convenient fast service, but they are quick to adapt to the ever-changing tastes and preferences of their customers. In response to consumer demands, quick service restaurants are catering to a healthier diet, with 70 percent of fast-food chains now offering salads and many offering vegetarian options (National Restaurant Association, December 1999). In 2001 McDonald's was the first U.S. retailer to demand that all their suppliers of hamburger provide documentation that the cattle they buy meet U.S. FDA standards for food. That is, the feed will not contain infected tissue from other animals that could cause BSE or mad cow disease (Reuters Limt. 2001). It is an example of a food retailer assuming the role of gatekeeper to protect public health as well as its own sales.

United States consumers spend more on fast food, on average, than any other country in the world. At \$377 annually per person, the quick-service segment accounted for 32.2 percent of total foodservice sales in 1999. The highest spenders on fast foods are aged 35-44 and are typically more affluent. Quick service restaurants' nominal sales are expected to increase by 5.1 percent in 2001. The hamburger chain operators rank first for purchases from the manufacturers in the fast food world with pizza operators second, but losing ground with only a 4.4 percent expected growth compared to 4.7 percent in hamburger chains in 2001. Specialty and other sandwich entrees are growing aggressively with 8.1 percent and 5.9 percent growth respectively forecast for 2001. Chicken chains are in the middle with 5.7 percent expected growth. Appendix 1 shows expected sales from 3 segments of the foodservice supply chain. The differences within the sales dollars reflect the approximate value added at each link in the chain. For example, if Restaurants and Bars retail sales are \$240 billion, they added a value of approximately \$159 billion to the \$82 billion of food they purchased from food suppliers in

2000. Appendix 2 shows the growth of sales of the operator purchases broken down by menu selection.

Some new developments within the quick service segment involve its leading chain, McDonald's. McDonald's had sales of around \$19 billion in 1999, more than double its next competitor, Burger King, with sales of \$8.7 billion (For a List of the Top 25 Limited Service Restaurants, see Appendix 3). It had been McDonald's policy in the past to not expand into further foodservice markets, however, in 2000 it bought a small Mexican restaurant chain out of Colorado. Also this year, McDonald's introduced an "electronic wallet" where consumers can keep money on a special "smart" card issued by McDonald's. When they use the drive-thru facility, the customer can just swipe the card and the charge for the meal will be deducted from the balance on that card. Other innovations in quick service places involve menu preview boards so the customer doesn't have to wait until someone is ready to take their order to be able to see what is available, and using clear plastic bags for order accuracy. Innovations are aimed at, quicker and higher quality quick service.

One of the biggest expanding activities of quick-service restaurants is the introduction of smaller units in establishments not historically directed towards foodservice or even food. McDonald's has alliances with several major operators such as Wal-Mart and many gas stations, where a foodservice unit is within the main part of the building where shoppers or travelers can eat. This is also proving to be a very good concept for smaller communities that can not support a housed-alone restaurant because of overhead costs and lower volume sales. Subway has used this concept from the beginning with most of its establishments sharing the space and parking lot with other businesses. Competitors are even joining forces. For example, Taco Bell, Kentucky Fried Chicken (KFC), and Pizza Hut (all owned by Tricon Global Enterprises), often share the

same building and the same drive-thru window. The concept of 'my space' is going by the wayside.

Full Service Restaurants

Full service restaurants control 28.8 percent of retail sales in the total foodservice industry, excluding sales of alcohol, and they have been outpacing the growth of their fast-food counterparts for the last five years. Since 1995, full-service restaurants have had total sales growth of 33 percent. Full service restaurants benefit from customers' desire for customization, personal attention, and an increasing demand for alcoholic beverages with afternoon and evening meals. Most full-service restaurants that have average checks above \$8 offer some form of alcoholic beverage. Microbrews and wine service have increased tremendously in popularity over the last decade (Technomic, Inc., December 2000).

Also, the demand for take-out food has turned upscale as more consumers want the convenience of take-out, but want higher quality food with more variety than that available at a fast-food restaurant. More than 50 percent of restaurant operators with average check sizes between \$8 and \$25 reported that customers are ordering more take-out from their establishments than in the past. Because of this increasing demand, operators are trying to provide a convenient take-out experience for their customers. Some operators, such as Outback Steakhouse, have even formed a curbside service where the customer places an order by phone or e-mail and gives the restaurant his/her car license plate number. When the customers drive into the parking lot, a restaurant employee brings the ordered food out to the car. This has been a very popular service and has helped increase sales in all operations offering this service. Home delivery is also growing in popularity (National Restaurant Association, December 1999).

Applebee's Neighborhood Bar and Grill is the largest of the full service chains with sales reaching \$2.3 billion with 1,142 units in the U.S. in 1999. (See Appendix 4, for a List of the Top 25 Full Service Operators.) Denny's has the highest number of units in the U.S. with 1,715 retail outlets and is second in sales dollars with \$2.1 billion. Cracker Barrel Old Country Store has the highest per unit sales of the chains with close to \$3.6 million annually from each store. Red Lobster, which was formerly the number one full service restaurant has been going through a nationwide remodeling and has fallen to number three in sales. However, the remodeling seems to be working with some stores seeing much higher sale dollars reflecting a greater emphasis on bar service and an expansion of the fresh fish menu.

Expected growth for 2001 is 6.6 percent for the full service segment. Casual steakhouses, like Outback and Lonestar, are the fastest growing segment within full service with an expected increase of 10.7 percent in purchases from food manufacturers. Varied menu restaurants, such as Applebee's and TGI Friday's, are also growing rapidly with 10.4 percent growth expected in the upcoming year. Italian and seafood are also growing at good rates. The slowest growing restaurants are family steak houses with only a 2.8 percent growth expected. Family style restaurants such as Denny's, which is the largest segment of full service restaurants, are only expecting a growth of 4.3 percent.

Other Foodservice Segments

Other segments of the foodservice industry are also looking at growth in food purchase in the future. Travel and recreation is looking at the largest jump with 5.9 percent increase expected. Retail establishments are also looking ahead to a growth of 4.9 percent with convenient store sales growing 5.6 percent in 2001. Business and industry foresees a modest 4.6 percent increase while foodservice in education and healthcare facilities is expected to be

stationary with little growth in 2001. All other segments within foodservice, which includes vending, military sales, and all others, are expecting a 4.6 percent growth in 2001.

International Foodservice

In contrast to the retail food store (supermarket) segment, foodservice has a large presence on the international scene. Many fast-food chains have taken advantage of the foreign demand for “American” food. McDonald’s has as many restaurants outside the U.S. as it does in the U.S. and many of the international units have been more profitable than the domestic operations. The entertainment restaurants such as Hard Rock Café and Planet Hollywood are also surviving abroad, even though they are floundering somewhat in the U.S. In 1998, the top twenty chains with international outlets had about \$34 billion in sales with approximately 22.4 percent of those sales coming from abroad. This closely matches the 22 percent of the total number of retail units that are housed abroad (37,469 out of 170,314). (See Appendix 5 for a list of International Chains.)

Mergers and Acquisitions

For many industries in this era, the keys to survival are mergers, acquisitions, and other ways to expand. Restaurant companies which own two or more chains are becoming more and more prominent. McDonald’s Corporation, the largest restaurant company, has almost all of its sales coming from the McDonald’s chain. Tricon Global, is second. Another notable restaurant company is Darden Restaurants, Inc. It runs The Olive Garden, Red Lobster, and Bahama Breeze. CKE Restaurants, Inc., in turn, controls Carl’s Jr., Hardee’s, Taco Bueno and Rally’s. With control of several operations, these companies are able to cut costs by having centralized product and development operations and volume purchasing. Public investment in the restaurant business finances most of the expansion of large chains. Private investors tend to stay clear of

this market because profit margins are typically small and start-up costs are expensive. Barriers to entry are high for those who seek financing in the restaurant industry, so those who hope to enter must present a viable financial opportunity to potential investors. (See Appendix 6 for a list of the Top 20 Chain Restaurant Companies.)

Consumer Demographics

Changing consumer needs, wants, and desires drive foodservice trends. Innovative operators are responding to changing consumer needs by reformatting their menus and services. Now, an overall successful dining experience is key to winning the customer, not just the food, service, or location. American consumers demand convenience and want variety, quality, and consistency. The key consumer drivers are an aging population, growing ethnic diversity, increases in dual income families, single person households, time constraints, and a variety of attitudes correlated with different generations.

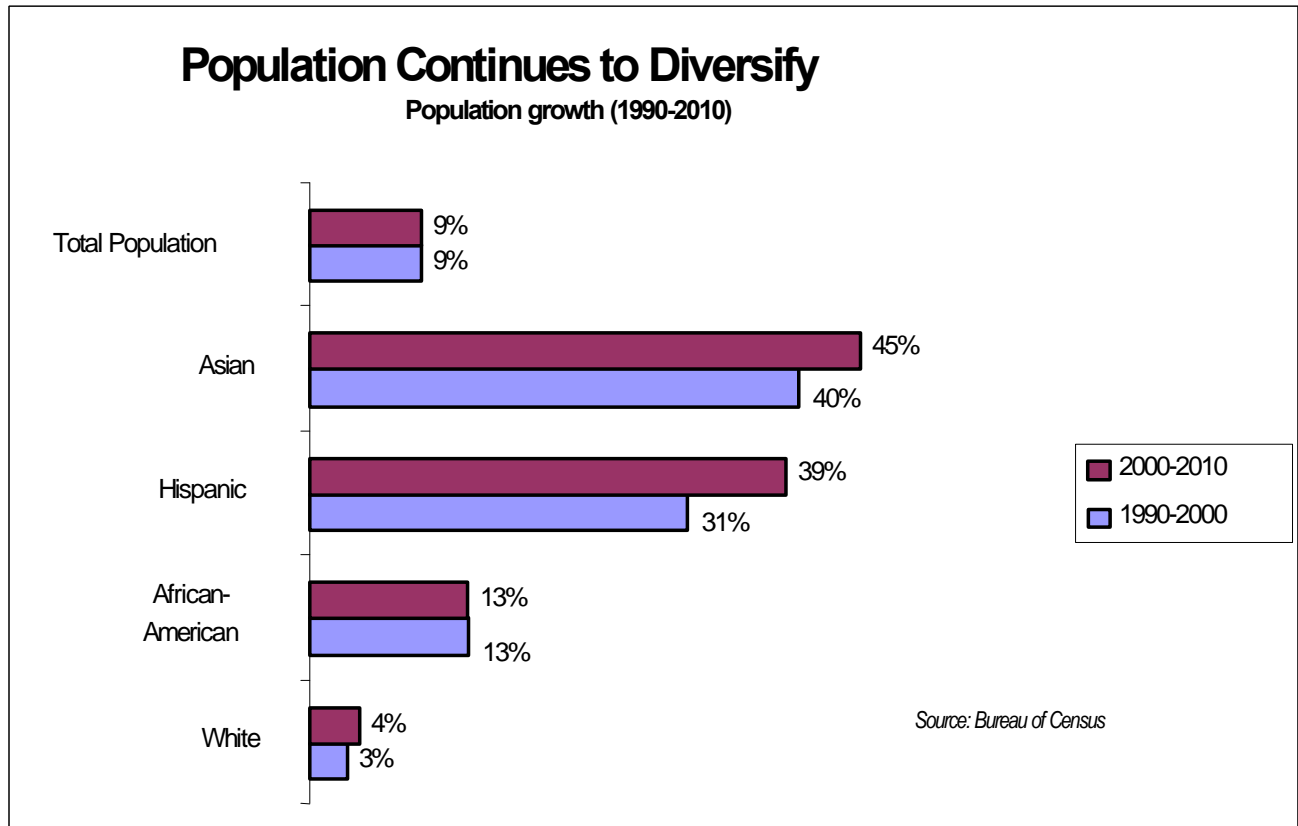
The baby-boomer generation, which propelled fast-food restaurants in the 60's and 70's, is now reaching its peak income levels. It has considerable discretionary income to spend on pleasure and leisure. In the next ten years, the population of persons aged 45-64 will increase by 19 percent, 20-30 percent more than any other age group (Technomic, December 2000). The median age of the U.S. population has gone from 32.8 years in 1990 to 35.8 years in 2000 and is expected to grow to 37.2 by 2010 (National Restaurant Association, Bureau of Census, December 1999). The boomers see foodservice dining as a form of recreation and take much pleasure in trying new restaurants and fresh menu ideas. They are more inclined to visit casual and fine dining establishments with a more "adult" setting. Typically, their children have either left the nest or are old enough to do their "own" thing. The boomers place a high emphasis on "food sophistication" with greater attention to portion size and variety. As one ages, taste buds

tend to become less sensitive, so aging generations are demanding bolder/higher impact flavors. A greater importance is also placed on healthy diet options as the boomers fight the realities of health problems that come with age.

Immigration in the U.S. is as heavy now as it was at the turn of the century when floods of Europeans entered the Americas to fulfill their dreams of making a better life. More than one million immigrants arrived annually in the past decade. This wave of immigrants is flowing primarily from Mexico, Latin America, and Asia. There is no doubt that immigration has had an impact on the restaurant industry. Just as the early immigrants did, today's immigrants bring their cultures and foodstuffs with them. Their flavors have found favor in the U.S. marketplace and restaurants. One of the most popular ethnic cuisine stems from the fact that over the past decades the largest number of immigrants came from Mexico followed by Asia. African American and White populations will continue to rise at about the same pace, more slowly than other ethnic groups. Figure 3 compares expected growth in a diverse population in the United States between now and 2010 to the growth rate in the 1990's (Technomic Inc., December 2000).

Household income is the most influential demographic factor when it comes to how much is spent on food prepared away from home. Median household income has been rising for several decades reaching \$39,000 in 1998 (National Restaurant Association, December 1999). Poverty in the U.S. is also in decline. Today, close to half of all households have dual-incomes. The number of households with incomes of \$50,000 or more is expected to increase 34 percent between 1995 and 2005 according to the National Restaurant Association's Conference Board (NRA, December 1999).

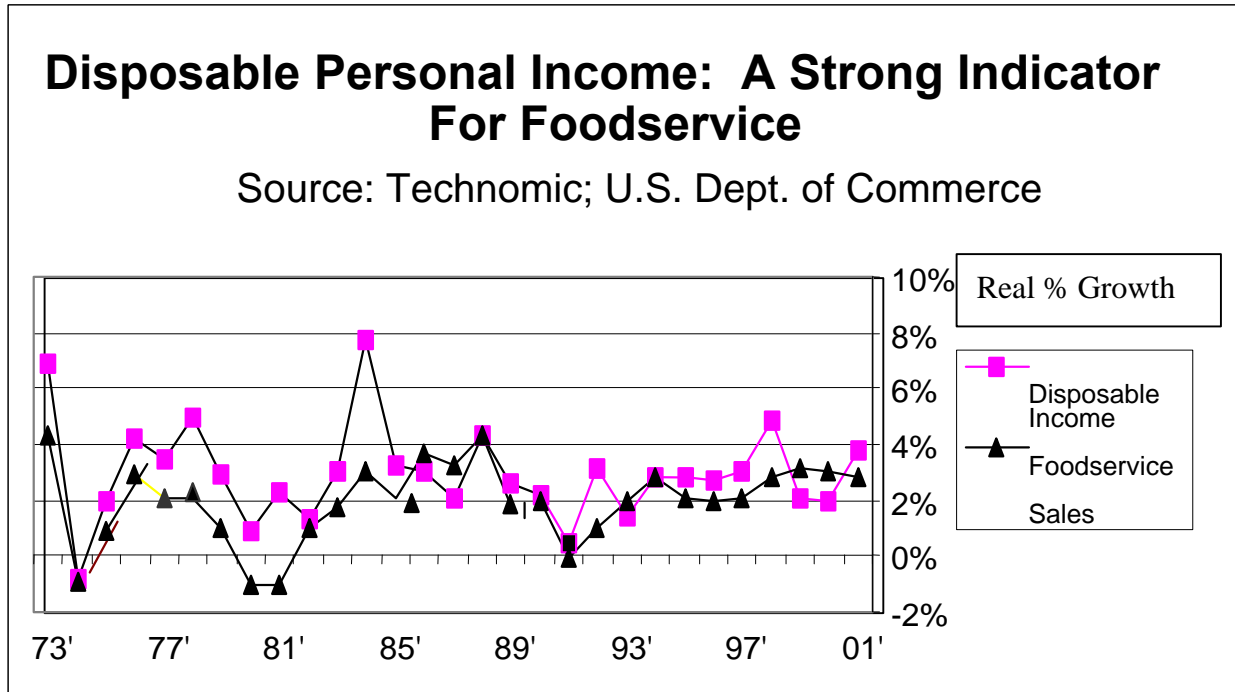
Figure 3.



Source: Technomic, Inc. December 2000

Households with incomes of \$50,000 or more are the largest segment of restaurant users. The wealthiest top 13 percent of Americans make-up 25 percent of all the spending in restaurants. In contrast, the 52 percent of households that have incomes less than \$30,000, account for only 30 percent of spending in all types of restaurants (Canada Market Research Centre, April 2000). The average U.S. household spends about \$167 a month on food away from home. Figure 4 illustrates that changes in food service sales tend to follow changes in personal disposable income but have been relatively stable since 1994.

Figure 4.



The need for convenient meal solutions continues to increase as the number of employed persons, especially employed women, continues to climb to record-breaking levels. Spending more time in the labor force, the amount of time consumers have left to prepare meals at home continues to fall. Because of this, breakfast and lunch meals are often eaten on the go or during the one-hour lunch break at a business-time conscious, casual restaurant close to the office. The lunch pail of old is now replaced by a paper sack full of take-out food. Great importance is placed on speed and accuracy of service, and consumers want it their way, right away. An increase in the number of people traveling in the “fast lane” has also swelled the need for one-handed, driver friendly foods available for take-out.

Generational attitudes towards cooking are different, yet they are all amplifying the growth of foodservice. Mature consumers, born before 1946, are reaching retirement age and are happy that they do not have to cook anymore and can enjoy their retirement years. The baby boomers wish that they had time to cook, but with their busy lives, they cook mostly as a hobby. The Generation Xers have too

much going on in their lives to be bothered with having to cook. Microwave cooking is about the only form of cooking that Generation Y knows. With parents who rarely cook because of time constraints and other things to do, the youngest generation is the culmination of diminished cooking activities and skills. Ironically, cookbook sales have reached their highest numbers ever. Perhaps what economists call “option demand” explains some of these sales. If one has a nice cookbook, it gives them the option of cooking a great dish, if and when they get around to it.

Although cooking skills may be lacking in the U.S. population, the consumer of today is still very knowledgeable about what is available in the market and what constitutes high quality. They require value to meet their expectations. The qualities of fine-dining establishments are now expected in more casual restaurants. The emerging foodservice concepts are indicative of changing consumer demands as consumers insist on the freshest and highest quality of menu items. “Made-to-Order” is the slogan for restaurants as the millennium turns the corner. From made-to-order burritos and tacos at McDonald’s Corporation’s Chipotle Mexican Grill to “wok’d-to-order” Chinese food at a Western U.S. Favorite, not to mention the Pick Up Stix to the popular Sonic Drive-In chain with their made-to-order frozen desserts, consumers are able to customize their diets even while eating out. It is even becoming popular for those in the higher income brackets to occasionally hire chefs to come to their homes and prepare a gourmet meal exactly to their specifications. These personal chefs are becoming more and more popular and this new trend in foodservice is expected to decrease in price and become more affordable to middle class families who want a really special meal prepared at home – by someone else.

Labor Issues

The biggest issue facing the foodservice industry, as well as many other food industry businesses, is the shortage of labor. Ninety-two percent of operators that responded to a survey done

by the National Restaurant Association reported labor retention and training would be a challenge in the next few years. Ninety percent believed that labor recruitment would be difficult and 73 percent labor costs would be an issue. Labor is a significant 29 percent of the cost for quick service and between 30-34 percent for full service restaurants.

As the labor crunch continues, restaurants have to handle several issues. Quick service has a lot of wage pressure and an image problem. Typically they hire at minimum wage, but in some extremely labor tight areas they now have to raise wages to up to \$12 per hour. Also, the quality of worker is declining because managers are forced to keep disgruntled and non performing employees on because bad employees are better than no employees. Full service restaurants must have employees with good personalities because their customers expect it. Wait staff has a tendency to “burn out” if they must work too many hours and too steadily. There is a great need for replacement employees.

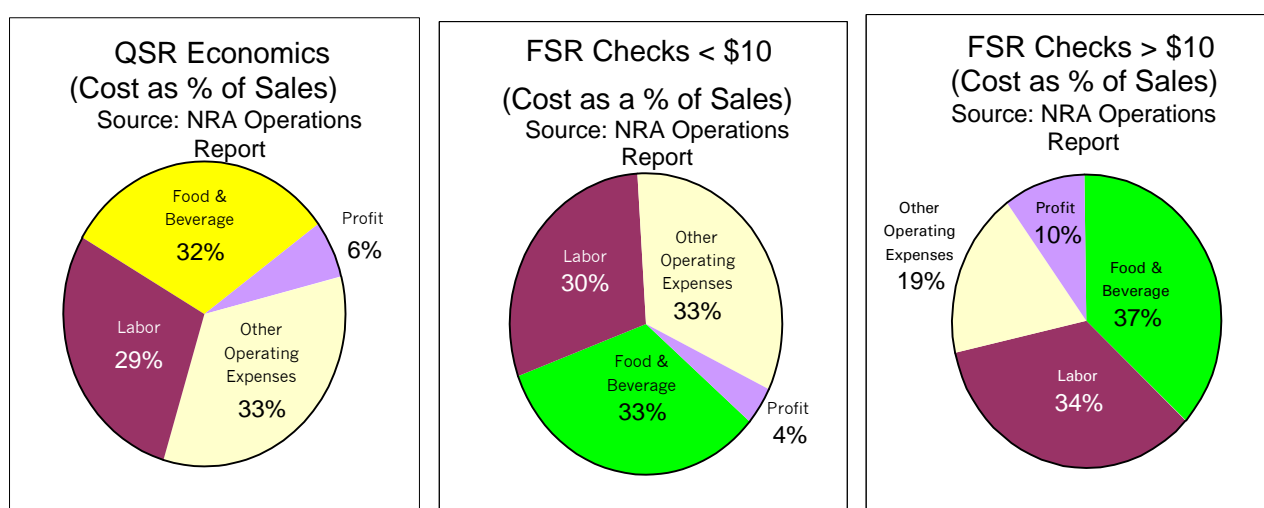
Employee turnover increased from 100 percent to 123 percent for quick service restaurants from 1998 to 1999. For full service restaurants with checks less than \$10, turnover decreased from 96 percent to 86 percent, and full service restaurants with checks greater than \$10, turnover increased from 67 percent to 87 percent. Operators need to be creative and financially generous in order to find and keep good employees. Many have turned to the Internet in order to find employees by advertising. They are also using employment offices, which in the past has not been a place to find a fast-food job. Also, benefits are being given to part-time as well as full-time employees.

Operators have responded to tight labor markets by changing the way they run their kitchens. They buy more convenience products that are already prepared or are partially cooked so they do not need as many employees and those employees they have do not need to have a high level of cooking skills. Since labor is almost as important to the restaurant industry as the food itself, many steps are

being taken by operators to ensure that their customers get the service that they expect from a smaller restaurant staff (Technomic Inc., December 2000).

Figure 5 illustrates how costs are distributed, as a percent of sales, for quick service (QSR) and full service restaurants (FSR). Clearly the greater the expenditures per check, the larger portion of that check goes for labor costs and the higher is the profit to the operators.

Figure 5: Where the Money Goes



Operator Marketing

Marketing to the consumer is also changing in the new millennium. With a vast amount of data on hand from huge customer databases, restaurants are able to micro-market their menu items and advertisements. Restaurants are also finding it budget friendly to participate in joint marketing ventures with suppliers, retailers and others. This expands their coverage to many more mediums of communication and shares the cost. Branding and cross-branding is also becoming a factor in the restaurant industry where featured brands display high quality and recognition. An example of this is McDonald's seasonal introduction of Johnsonville® Bratwursts.

Government Impact

The impact of the government is expected to continue to play an important role in the restaurant industry. The largest expectations seem to lead to governmental mandates for employee food safety training and certification. Hazard Analysis Critical Control Points (HACCP) may also become mandatory in restaurant operations as it is in manufacturing and processing facilities. Regulations are becoming stricter on alcohol service and taxes are expected to increase. The government may also pass legislation mandating wage rates and increased benefits that will increase the cost of labor.

Another large policy issue that faces the foodservice industry in certain regions of the country is “tip credit.” State laws vary, but wait staff usually receives a discounted wage from the Federal minimum wage and then receive the extra wages from tips. This is called tip credit. Some states however, have not adopted this practice, therefore, forcing operators to pay the full minimum wage and the wait staff also receives tips. This is an extremely sensitive topic in states that do not have the tip credit in place, especially in border areas because they have an automatic disadvantage with a higher labor cost.

Technology

Electronic and computer technology has been the key to many of the changes in the restaurant industry. With competition between operations intensifying, those with the higher technology are reaping profits by being able to more effectively control costs and enhance management efficiency. Computers and software will also be invaluable tools in nutritional development and enhancement of menu items. Training of employees is changing from videos and training manuals to computerized training software. Managers are also becoming more computer savvy and more efficient, therefore allowing them to spend more time with employees

for training and monitoring purposes and with customers for feedback. It is common to see managers checking on customers and asking them questions as they dine. This helps the manager keep up with what is really occurring in the dining area vs. what is recorded on the computer screen.

Simpler and faster point of sale data is becoming very prominent in inventory management as it allows managers to know exactly, at a click of a button, what is being sold and at what times. Therefore, they can plan daily specials and seasonal dishes that enhance the variety on the menus. As computer systems become more widely used, they can be linked to ordering operations creating a just-in-time supply system that reduces waste and spoilage and lessens the need for storage space. Efficient Foodservice Response (EFR), which is discussed in detail later on in this overview, is an example of one of the new tools being used to collect data.

The Internet and e-mail are playing increasing roles in the restaurant industry even though few customers actually place orders via e-mail. Many restaurant patrons use the Internet to find out about restaurants that they have never patronized before. E-mail is also being used to make reservations at restaurants. Several people are also on city list serves that have a weekly restaurant focus and give ratings to local establishments. With over half of Americans possessing Internet access, 35 percent with home access, the Internet is a viable market for the future and shouldn't be ignored by foodservice operators. Generation X is the largest group that uses the Internet and the most likely to look up information on restaurants on the Internet.

Advances in the field of food safety are also becoming extremely important in the foodservice industry. Biotechnology and new processing and packaging methods, are allowing processors to supply food that is safer and just as nutritional and tasty as "fresh". Hazard Analysis and Critical Control Points (HACCP) programs are also playing a critical role in food

safety, establishing a higher standard and sanitation of food than ever before. Irradiation of foods has been a controversial issue that is finally winning customer approval as fears of poorly prepared food in restaurants outweigh the concept and fears of “nuclear” food sanitation. Health inspections are also becoming readily available to consumers as cities are posting inspection results on the web and area wide publications.

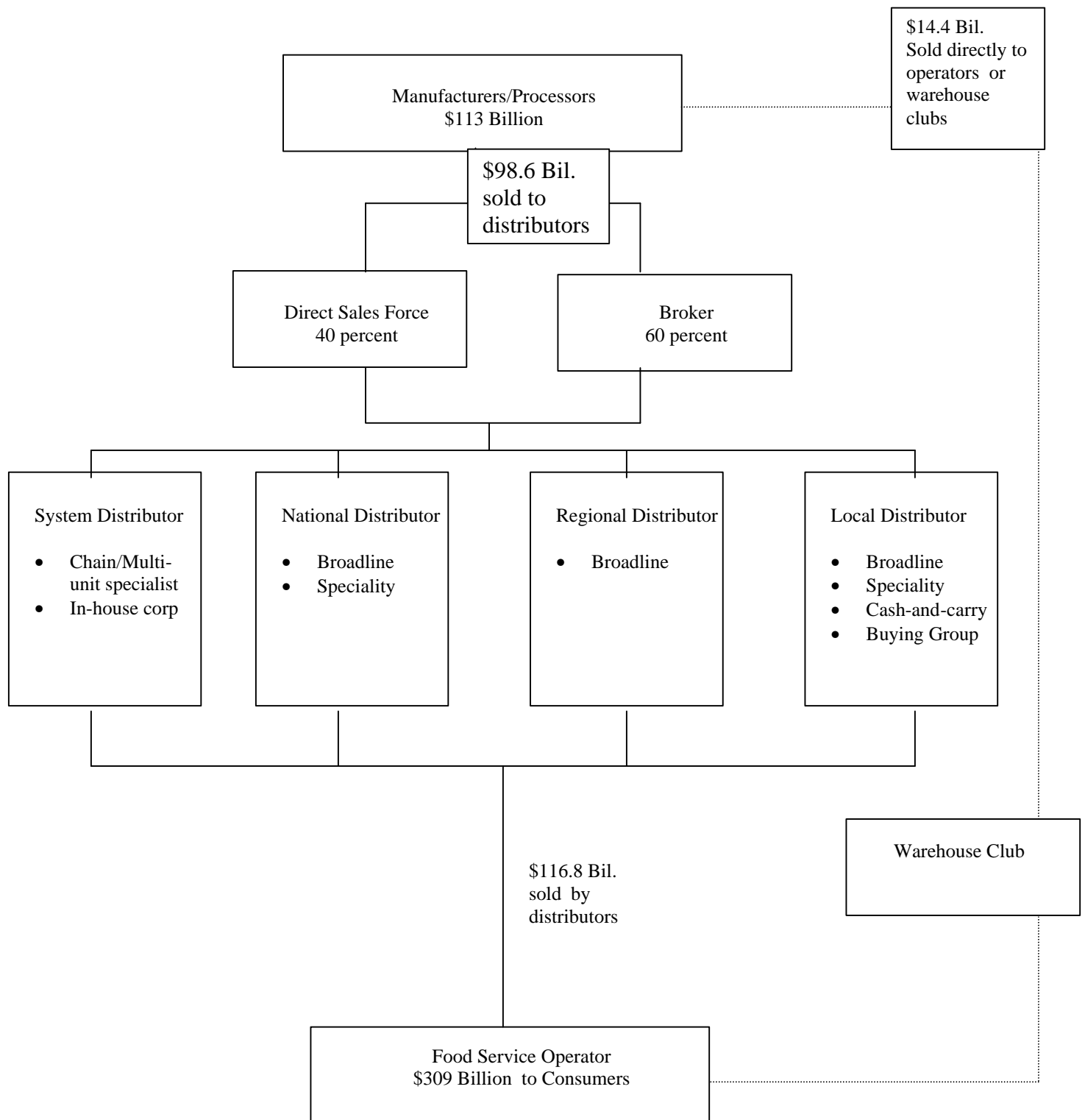
Technological movements in the development of fat and sugar substitutes that don’t lose any flavor or texture from the real thing have allowed restaurateurs to offer lighter menu items that are just as flavorful and filling as their higher calorie counterparts. Chefs are also working very hard to create dishes with naturally low-fat characteristics and combining new spices and herbs that create savory dishes with great taste appeal. As customers attempt to improve their diets with the consumption of healthier meals, they do not seem to be willing to sacrifice taste for their nutritional lifestyles.

Distribution

The Distribution Chain

The foodservice industry’s supply chain is complex and diverse. In 1997, linking the approximately 740,000 operator locations to the manufacturers’ are more than 3000 distributors who supply both food & non food items. The business has been consolidating rapidly and in 2000, the number of operator units totaled over 800,000, yet the number of distributors had shrunk to only 2,675. A brief sketch of the foodservice supply chain is given in Figure 6. Approximately 85 percent of manufacturers’ products (\$98.6 billion worth in 1997), are sold through brokers/distributors and the rest (\$14.4 billion in 1997) is sold either directly to foodservice operators or through warehouse clubs. All distributors together sell about \$116.8

Figure 6: Foodservice Supply Chain –1997



Source: IFMA, EFR: Enabling profitable growth in the food~prepared~away~from~home industries by FDI, Jan 1997.

billion worth of products to foodservice operators, adding \$18.2 billion in value to the products they have purchased from manufacturers. The retail sales at foodservice places totaled \$309 billion. The distribution chain adds value of 173 percent after the food leaves the manufacturer. Distributors play a major role in supplying both food and non-food items to foodservice operators. The following definition of foodservice distributors attests to the diversity of retail foodservice operators that the distributors cater to. "Foodservice distribution involves the wholesale supply of food and related products to retail meal providers, including restaurants, hospitals, schools, and hotels. These distributors also serve convenience stores, cruise ships, the military, and other purveyors of prepared foods, both commercial and not-for-profit" (Credit Suisse First Boston,1999). Even though about 85 percent of the manufacturers' products are sold to retail outlets through distributors, Table 2 shows that retail foodservice operators typically deal with a multitude of distributors.

Table 2: Foodservice Operators Purchase From Many Sources

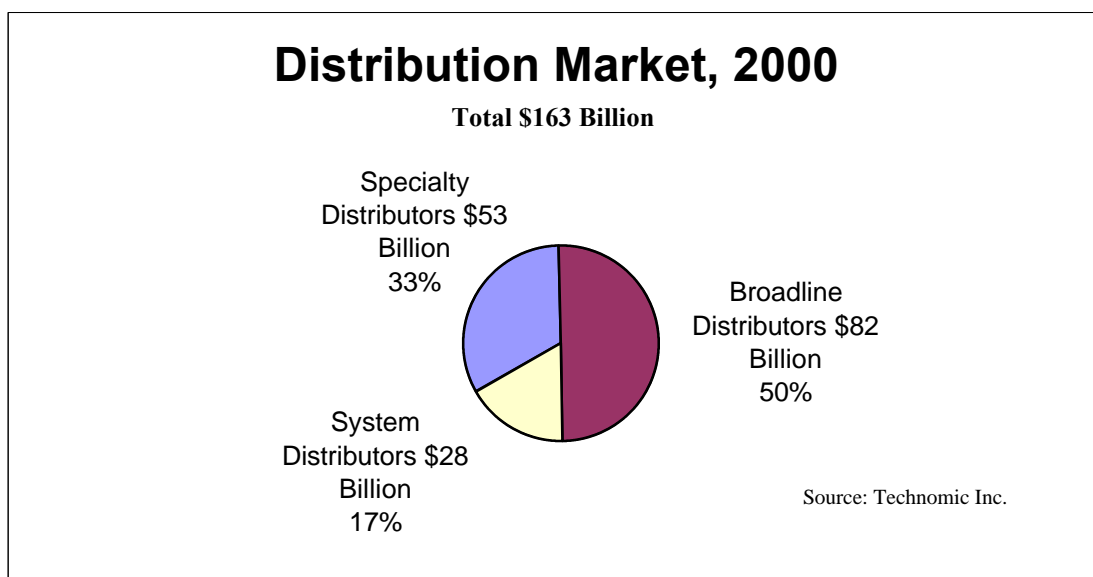
Type of Foodservice Retail Operation	From how many distributors do you purchase food?		Percent of food dollars spent with primary distributor	
	2000	1999	2000	1999
Limited-menu Restaurants	4	3	65	74
Full-menu Restaurants	5	5	63	62
White Tablecloth Restaurants	7	5	52	55
Hotels/Motels	5	7	70	66
Hospitals	6	6	79	82
Nursing Homes	4	5	72	74
School Foodservice	8	6	51	64
Colleges/Universities	7	7	70	72
Annual Dollar Sales				
Less than \$200,000	5	3	79	78
\$200,000 - \$299,999	3	5	71	63
\$300,000 - \$499,999	6	4	57	74
\$500,000- \$999,999	4	5	63	68
\$1,000,000 - \$1,999,999	5	6	67	64
More than \$2,000,000	7	7	62	69

Food Institute Report May 22, 2000; CSBF, 1999.

Distributors may be grouped into local, regional, national, and systems distributors (Figure 6). The local and national categories include broadline and specialty distributors along with warehouse clubs or cash-and-carry operations. Regional distributors are primarily broadline, and a few may also run warehouse clubs or cash-and-carry operations. System distributors include chain/multi-unit specialists and in house distributors (Technomic Inc., December 2000).

In 2000, according to Technomic, the US foodservice distribution market generated sales of about \$163 billion among approximately 2800 companies whose primary business is delivering to foodservice. (This is an update of the \$116.8 billion estimated in 1997, Figure 6.) Credit Suisse First Boston (CSFB) estimates that at an annual growth rate of 3 percent they will approach \$180 billion in sales by 2005. There is a consolidation in the industry as indicated by the fact that though the market grew at approximately 4 percent between 1993 and 1998 from \$120 billion to \$147 billion, the number of distributors fell at approximately the same rate from 3,350 to 2,675 (CSFB,1999; Technomic, 2001).

Figure 7



Broadliners

Broadline distributors serve the needs of a diverse customer base, consisting largely of single unit operators and small chains. A typical broadliner can have between 2000-4000 customers. They attempt to offer one-stop shopping by carrying an array of food, equipment, and supplies. They carry upwards of 10,000 stock keeping units (SKUs) and deliver value pricing by leveraging economies of scale. They negotiate pricing with independent operators while often using cost-plus pricing with large chains.

With 2000 sales of \$82 billion, they comprise almost 50 percent of the market. The top six broadline distributors based on 2000 sales, as estimated by Technomic, are given in Table 3. The compound annual growth rate (CAGR) is impressive over the last five years, with the top 3, namely Sysco, Alliant, and U.S. Foodservice driving broadline share growth. Figure 8 Illustrates the difference in market share between 1995 and 2000 for the top three foodservice distributors.

Table 3

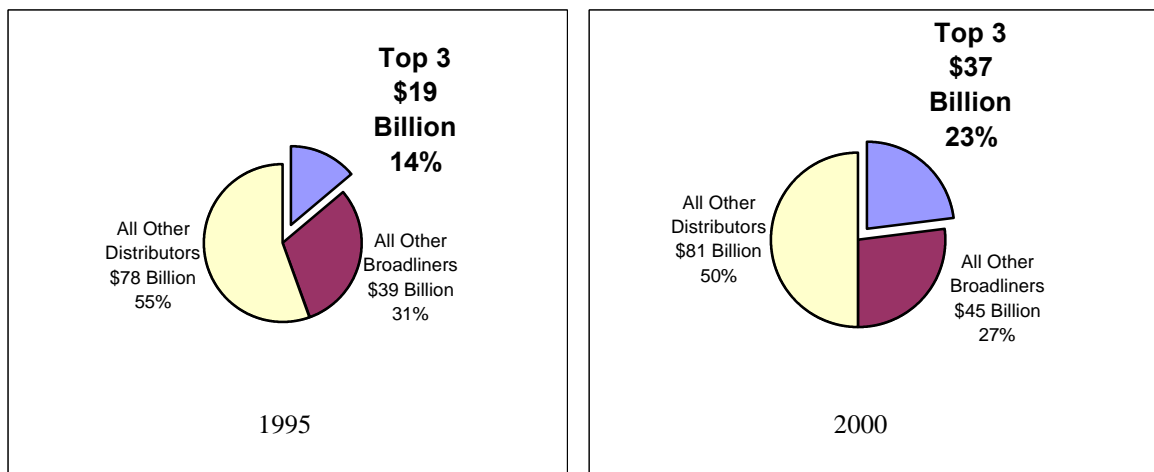
	2000 Sales (projected) in billions	5 Year CAGR
Sysco Corp.	\$20.0	10 %
U.S. Foodservice ¹	\$10.0	37 %
Alliant Foodservice	\$7.0	8 %
Performance Food Group	\$3.0	n/a
Gordon Food Service	\$2.3	12 %
Food Services of America	\$1.3	6 %

Source: CSFB, 1999

¹ Includes PYA/Monarch; Both companies owned and operated by Ahold.

Figure 8

Top Three Companies Have Driven Broadline Share Growth, 1995-2000



Source: Technomic Inc., December 2000

System Distributors

System distributors target specific multiunit customer channels. They have evolved to serve large chains by emphasizing efficiency, centralized service, low-cost, and no frills with highly reliable product movement. They may also focus on segments such as convenience stores, hospitals, and hotels. They normally have limited inventory carrying 500-1000 SKUs and have lower overheads. With the chains, they normally use cost-plus pricing. Table 4 lists the leading systems distributors in the foodservice supply chain. The four at the bottom of the table are chain owned distribution systems. The primary differences in the business models of the generalists (broadliners) versus the system specialists can be found in Table 5.

Table 4: Leading Systems Players

Independent	1999 Foodservice Sales
AmeriServe/McLane	\$10.49 Billion
MBM Corporation	\$2.5 Billion
Martin Brower	\$2.38 Billion
Golden State	\$1.6 Billion
Marriott Distribution Services	\$1.3 Billion
Chain Owned	
Carl's Jr.	Domino's
Little Caesar's	White Castle

Source CSBF 1999; Directory of Foodservice Distributors 2000

Table 5: Contrasting Broadline and Systems Distribution Models

	Broadline Distributor	Systems Specialist
Typical Customer	Single-unit operator	Multi-unit chain
Negotiates price with manufacturer	Distributor	Chain
Impact/power of single customer	Low	High
Customer use of proprietary products	Low	High
Distributor-label sales	Often above 35 percent	Often next to nothing
Gross Margins	Often high teens	Often single digits
Commissioned sales reps	Yes	No
Operating expenses	High	Low
Inventory Breadth	Often over 15,000 SKUs	Under 1,000 SKUs
Sales per delivery ("drop")	Often under \$500	Typically over \$5000
Delivery frequency	High	Low
Inventory turns	Low	High
Delivery radius	Often less than 150 miles	Often over 1000 miles
Warehouse Size	Large	Small
Accounts receivable	High	Low
Pricing Strategy	Typically percent markup	Usually flat per-case fee
Inflation impact on price strategy	Generally positive	Generally negative
Business under contract	Some	Most
Real estate tendency	Own	Lease

Source: CSFB Research (1999)

The lower margins that system distributors operate under is offset by their larger asset turnover & lower overheads. CSFB Research analysis shows that the top broadline distributors and system distributors have similar profitability. However, they believe that in the long run, the broadline model may be less risky as it is not dependent on the vagaries of a single or few large customers. Also, broadliners can add greater value through their proprietary products and services.

Specialty Distributors

Specialty distributors may focus on a product (meat, dairy, equipment) or a segment (vending, airlines) or they may be warehouse clubs or cash-and-carry operators. They (especially the product specialist) often adopt a quality positioning and flourish in niches that require uncommon knowledge in product sourcing, handling, or service. Some leading specialists with their areas of operation are given in Table 6.

Table 6: Leading Specialist Distributors

	1999 Sales	Specialty
Costco	\$7.9 Billion	Warehouse Club
Multifood Specialty Distribution	\$1.9 Billion	Pizza/vending
Smart & Final	\$1.7 Billion	Cash-n-carry
McLane	\$0.5 Billion	Convenience Store
Sage	\$0.4 Billion	Airlines

Source: CSBF, 1999

All three types of distributions, viz. broadline, system, and specialist, may belong to buying groups which offer members, who typically are small/medium size distributors, buying clout. Additional benefits such as private labels, merchandising and marketing programs, and other support services may also be provided by these buying groups. Table 7 lists some of the leading buying groups of foodservice distributors.

Table 7: Distributor Buying Group Membership

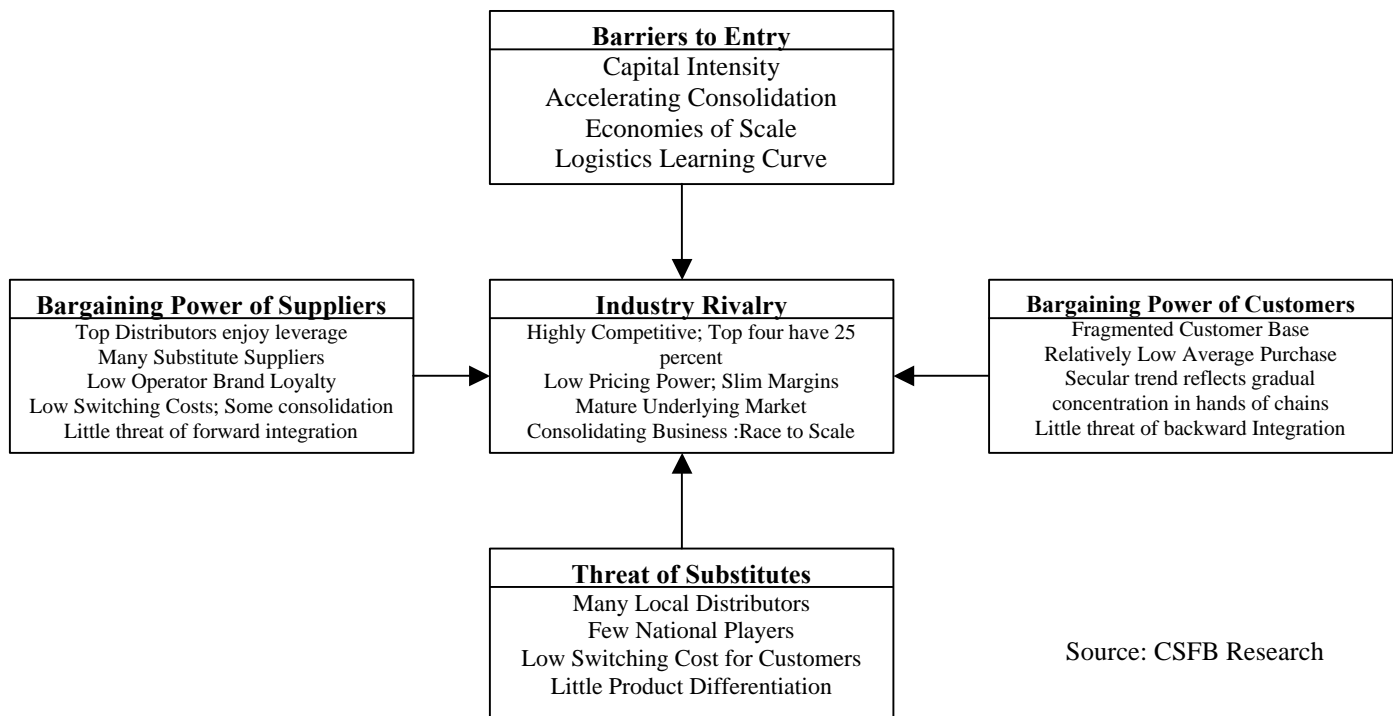
	1999 Member Sales	Number of Members
UniPro	\$23.0 Billion	206
Foresight Partners	\$15.5 Billion	244
Pocahontas	\$10.5 Billion	379
FAB	\$9.6 Billion	60
Premier	\$7.0	162

Source: CSBF 1999

Porter's five forces analysis of the foodservice distribution industry carried out by CSFB

Research is reproduced in Figure 9 below (Porter, 1980).

Figure 9: Porter's Five Forces for the Foodservice Industry



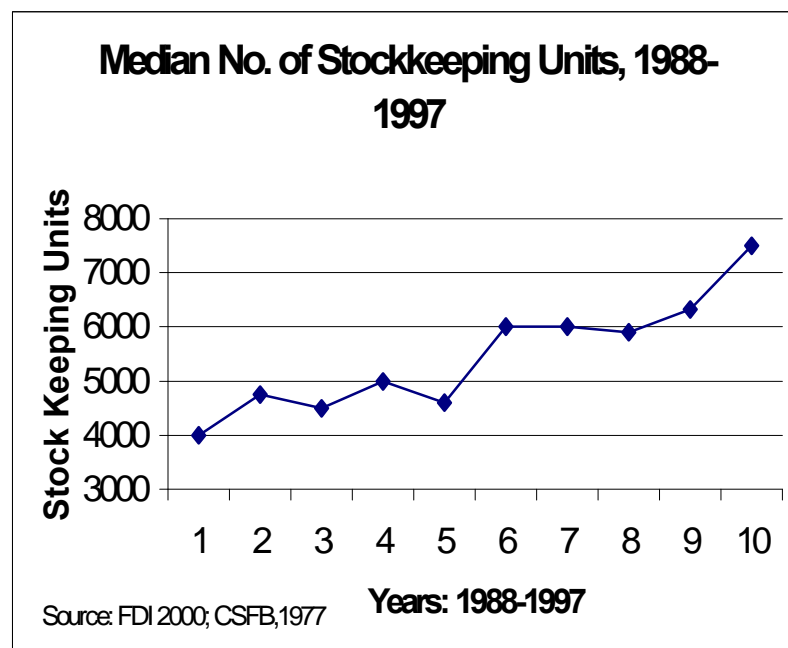
Source: CSFB Research

Note that depending on the type of distributor, some of the factors mentioned above will differ. For example, system distributors do not face a fragmented customer base and their customers definitely enjoy large bargaining power.

It was noted earlier that growth in the foodservice sector is expected to be robust due to favorable demographic and sociological changes. However, between 1993 and 1998 while the US population had grown by 1 percent per year, the supply of restaurants increased by 4 percent annually (Technomic, 2000). This (oversupply) has led to price competition. Coupled with the inability of restaurants to increase menu-prices beyond the general rate of inflation, operational efficiency has become the buzz word. The share of chains in the total restaurant market has also increased since the 1990s. CSFB (1999) estimates that this trend shall continue. Chains help distributors, especially the large ones, since their drop size is larger but this efficiency comes with decreased bargaining power for the distributors.

The distribution game has become complex because, along with the increased emphasis on efficiency, demand for variety in restaurants menus has led to an increase in the product selections that distributors have to carry. As Figure 10 shows, the median number of SKUs that distributors have to carry has been rising. This trend is expected to continue.

Figure 10: Foodservice Distributors SKUs



Increased complexity, with customers demanding more value in terms of service, product quality, and variety while minimizing expense, has led to a consolidation among distributors with broadliners and system distributors gaining share at the expense of the specialists. Table 8 and Figure 11 illustrate the trend in the number of each type of food service distributor since 1985. Broadliners lost the most number of distributors but gained 10 percentage points in market share, while specialists lost 8 percent of their distributors and lost 16 percentage points of market share.

Table 8: Consolidation in the Foodservice Distribution Industry

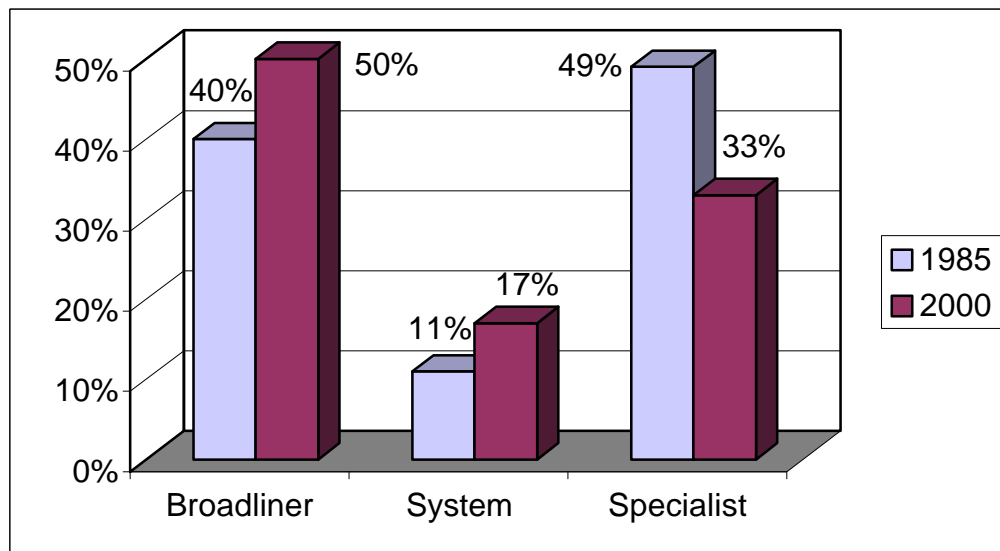
	Number of Distributors ²			% Change of Total	Change (1985-2000)
	1985	1995	2000		
Specialist	1,950	1,900	1,800	-8%	-150
Broadline	1,500	1,300	1,000	-7%	-500
Systems	100	75	50	-1%	-50
Total	3,550	3,275	2,850		-700

Source:Technomic (12/2000)

The increased concentration of power with the big distributors, especially the broadliners, has been aided by a number of top foodservice players' strategic decision to get out of the distribution business (Burger King, ARAMARK, and PepsiCo to name a few). Also, little threat of forward integration by manufacturers exists, given the increased complexity of the business. PYA/Monarch, a subsidiary of Sara Lee Corporation, the last big distributor run by a manufacturer, was acquired recently by U.S. Foodservice, which itself was recently acquired by the Netherlands based Ahold.

² At least 50 percent of business in foodservice and \$2 million in sales

**Figure 11: Market Share as a Percent of Sales Dollars (1985 & 2000)
Foodservice Distributors**



Source: Technomic Inc., December ,2000

Almost 65-70 percent of a distributor's margin now comes from "trade dollars" (extra incentives paid by manufacturers to distributor's to promote their products). This also favors the largest distributors who have bargaining power and can negotiate more favorable terms with the manufacturers. The increased complexity and specialized nature of the distribution business will favor the large broadline distributors who can take advantage of economies of scale, national penetration, proprietary brands, information technology, and logistics excellence. The recent trend towards growth through mergers, and acquisition is expected to continue. The success of industry wide initiatives to increase efficiency in the supply chain such as Efficient Food Response will hinge on the support of the large distributors.

Efficient Foodservice Response

Efficient Foodservice Response (EFR) is a collaborative effort among manufacturers, distributors and operators to align their trading practices and eliminate non-value-adding costs

through the supply chain. The purpose is to do away with inefficiencies and wasteful practices and make each component in the chain work in unison with the others to create a highly flexible, reliable and responsive system that responds quickly to consumer/customer demands. A study conducted by Stanford University showed that there is \$14.3 billion industry wide in non-value-adding costs accruing throughout the foodservice supply chain (IMB Global, 1999). EFR is based on five principle strategies: Equitable Alliances, Supply Chain Forecasting, Electronic Commerce, Logistics Optimization, and Foodservice Category Management.

Equitable alliances have no economic benefit, but they lay the base for the rest of the EFR strategies. This is a “cost-neutral” mechanism that allows for shifts in the way costs and revenues accrue in the supply chain. To achieve this, the company must address the complex flow of funds within the supply chain and assess how they are measured. Activity-based costing is the fundamental base for value-adding incentives. In this strategy, companies will take a look at their management and organizational structure as well and assess what changes need to be incorporated.

Joint forecasting of demand by supply chain trading partners creates a common view of future sales within the supply chain, combined with an integrated set of planning processes. The industry benefits to be gained from this strategy are estimated to be around \$2.9 billion. Initiatives within this strategy combine demand creation and demand fulfillment processes across all segments. These initiatives include standard product identification and bar coding, common product databases, demand and planning information sharing, and market-level reporting and forecasting. The EFR project has a goal to have 100 percent case-level bar coding on foodservice products by December 31, 2001. As of September 2000, 61 percent of cases were

coded, up from 54 percent in 1999 (Efficient Foodservice Response homepage; www.efr-central.com/barcode/000925barprog.htm).

The largest EFR initiative, in terms of possible benefits, is business-to-business e-commerce. An estimated \$6.6 billion in savings could be reaped from implementation of effective e-commerce trading practices. The majority of these benefits come from reduced administrative costs by restructuring the revenue cycle process between buyers and suppliers. The five assimilated initiatives include business practice simplification, product maintenance EDI (Electronic Data Interchange), revenue cycle EDI, electronic funds transfer, and invoiceless payment.

Logistic optimization tackles the physical flow from point-of-supply to point-of-consumption. The industry benefit from this strategy is believed to be \$2.7 billion. The initiatives with logistic optimization include direct shipment, consolidation, shared distribution, coordinated transportation, and cross-docking. For these practices, special transportation and warehouse management software helps businesses gain control of their fleet management which in turn results in improved customer service, accurate routes, reduced distribution costs, and improved driver efficiency.

Foodservice category management incorporates products into the supply network and raw demand in the marketplace. Initiatives include balanced variety, product deletions, new products, and centralized changeups. An estimated \$2.1 billion in industry savings may be attributed to this strategy.

Food Manufacturers

Foodservice shipments (food and non-alcoholic beverages) from food manufacturers totaled \$129 billion in 1999. In the foodservice supply chain, food manufacturers only control

25-35 percent of the gross margin compared to the 55-65 percent in grocery products. The retail foodservice outlets control 65-70 percent of the gross margin compared to 20-25 percent in grocery retailers (Technomic, Inc., December 2000). Also, in the foodservice realm, the food manufacturer has little control over brands and consumer demand. In the food manufacturing sector there are about 1,500-2,000 suppliers of food and beverages. Small, regional processors are prevalent, but they usually service only single unit restaurants in their area. For the most part, however, a few major companies in each segment of food and beverage dominate the food manufacturing sector, with some conglomerates serving overlapping segments. Directions in foodservice for most of these companies involve keeping new technologies flowing through their already huge foodservice divisions and acquiring smaller companies that have created a niche in a market where they would like to penetrate or expand. Manufacturers also form alliances throughout the chain and across industries in order to capture cost breaks, branch into new markets, acquire brand promotion opportunities, and reduce risk.

An extensive number of large corporate mergers and acquisitions have occurred in the last few years within the food manufacturing and processing sector. In 1999 alone, there were over 750 acquisitions by food industry firms at various links in the supply chain. As the government regulations get tighter and the big get bigger, there is a definite force putting small, medium, large and even on occasion, giant companies up on the sale block. This trend doesn't seem to be slowing down either with the emerging international market. More opportunities are becoming available for the big to expand their horizons across borders and oceans. Table 9 shows recent trends in the number of food industry mergers and acquisitions since 1995. The total number peaked in 1998 at 813, but has decreased a little since then. The average number of mergers and acquisitions in the five years between 1995 and 2000 was 673.

Table 9: Mergers and Acquisitions – Food Sector

Food Business Mergers and Acquisitions: 1995-2000								
<i>Category</i>	<i>First Half</i>			<i>Full Year</i>				
	2000	1999	1998	1999	1998	1997	1996	1995
Agricultural Cooperatives	4	4	7	7	12	3	4	5
Brokers	2	7	7	16	14	22	14	6
Diversified Firms with								
Interests in the Food Industry	11	9	11	12	20	11	12	9
Food Processing Firms	91	129	91	229	230	186	139	168
Bakers	6	11	8	18	19	20	8	10
Brewers	2	4	4	5	6	5	2	6
Confectioners	2	3	2	4	5	7	4	2
Diversified Processing Firms	41	57	55	112	140	103	96	96
Dairy Processors	14	11	11	24	27	15	4	18
Fruit and Vegetable Processors <i>b.</i>	8	17	<i>b.</i>	32	<i>b.</i>	<i>b.</i>	<i>b.</i>	<i>b.</i>
Meat Processors	4	12	6	18	14	12	10	10
Poultry Processors	6	5	3	6	12	8	4	10
Seafood Processors	7	3	1	4	3	7	4	4
Snack Food Processors	1	6	1	6	4	9	7	12
Investment Firms/Banks <i>a.</i>	17	17	<i>a.</i>	37	26	<i>a.</i>	<i>a.</i>	<i>a.</i>
Nonfood Marketers Selling								
Through Supermarkets	0	0	0	0	0	3	2	3
Packaging and Equipment Suppliers	31	7	12	28	46	13	19	14
Raw Product Suppliers	9	13	19	28	44	31	28	26
Restaurant & Foodservice	56	43	72	112	140	127	108	78
Retailers	28	41	33	66	67	54	43	44
Convenience Stores	6	6	7	11	10	6	4	5
Supermarkets	13	21	17	34	39	25	20	22
Others	9	14	9	21	18	23	19	17
Soft Drink Bottlers	4	19	9	30	20	17	8	15
Sugar Refiners	0	0	0	0	3	1	1	1
Wholesalers	25	31	40	63	71	76	30	45
Foodservice	13	11	25	31	38	36	10	23
Grocery	12	2	15	32	33	40	20	22
Foreign Acquisitions of U.S. Firms:								
By Canadian Firms	8	5	11	7	15	18	4	8
By Other Foreign Firms	25	23	26	34	39	36	49	38
Unclassified <i>a.</i>	39	38	55	84	66	136	77	69
Total	350	386	393	753	813	734	538	529
<i>a.</i> Prior to 1998, Investment Firms and Banks and Equipment Suppliers were included in the Unclassified category.								
<i>b.</i> Prior to 1999, Fruit & Vegetable processors were included in diversified food processors.								
Source: Food Institute Report, July 3, 2000								

The draws of vertical integration and its cost saving entities and reduction of risk have fueled the purchases of vital links throughout the chain for manufacturers. The poultry industry is a model of a truly vertically integrated industry with almost every poultry processor owning its own broiler houses, hatcheries, feed mills, slaughtering plants, further processing facility, and corporate sales and marketing teams. Every step in the process from the animal genetics to the consumer's plate is under the control of manufacturers. Tyson Foods, the world's largest poultry processor, begins the process by owning one of the world's largest poultry stockbreeder, Cobb-Vantress, and ends with owning its own distribution facilities. However, Tyson's expansion into non-poultry operations such as seafood and pork proved not to be as profitable as their solid poultry line and for the last few years has been in a state of divestiture, getting back to the basics by selling off most of its non-poultry related businesses.

Also, the economies of scope that are achieved from horizontally integrating (buying out you competitor) are becoming more and more crucial in this world where purchasing power is everything. For example, Smithfield Packaging Company out of Smithfield, Virginia gained the status as the world's largest pork producer by buying out its next competitor, Murphy Family Farms, during the 1998-1999 pork price slumps. H.J. Heinz company has recently expanded its leading supplier of customized dressings, sauces, mixes, and condiments to the foodservice industry, a category of which it has extensive working knowledge.

Diversification, too, has its place in the corporate food world. Pillsbury, which was recently acquired by General Mills, owns Green Giant vegetable brand as well as Haagen-Daaz Ice Cream and many others. Some of these businesses will be sold off as General Mills finalizes the acquisition of Pillsbury. Pillsbury also has a large share of the bakery market in foodservice. Huge conglomerates have an interest in this ever-changing segment of the global venue. Some notable acquisitions over the last few years are Kraft Foods, Oscar Mayer, Nabisco, and General

Foods all comfortably tucked under the empire of Philip Morris, the tobacco giant. PepsiCo controls the Pepsi soft drink line and owns Frito-Lay Snack Foods, Tropicana Orange Juice, and its recent acquisition of Quaker Oats.

Table 10: U.S. Food Manufacturing Companies

TOP 25 FOOD MANUFACTURING COMPANIES				
Rank			Company Name	Food Sales (in millions)
1995	1998	2000		1999
1	1	1	Philip Morris Cos. Inc	\$ 31,139
2	2	2	ConAgra Inc.	\$ 24,594
4	3	3	PepsiCo	\$ 20,367
3	4	4	Cargill, Inc.	\$ 21,400***
5	5	5	Coca-Cola Co.	\$ 19,805
-	7	6	Mars Inc.	\$ 15,000
6	6	7	Archer Daniels Midland	\$ 14,283
7	8	8	IBP Inc.	\$ 14,075
8	9	9	Anheuser-Busch Inc	\$ 11,704*
9	10	10	Sara Lee Corp.	\$ 10,823
10	11	11	H.J. Heinz Co.	\$ 9,300
-	13	12	Bestfoods Co. **	\$ 8,637
12	12	13	Nabisco Holdings Corp.**	\$ 8,268
14	14	14	Nestle USA Inc	\$ 7,986
-	15	15	Dairy Farmers of America	\$ 7,435
20	19	16	Tyson Foods, Inc.	\$ 7,363
16	16	17	Kellogg Co.	\$ 6,984
15	17	18	Campbell Soup Co.	\$ 6,424
21	20	19	General Mills	\$ 6,246
11	18	20	The Pillsbury Co.**	\$ 5,920
26	23	21	Dole Food Co. Inc.	\$ 5,061
18	21	22	The Quaker Oats Co.**	\$ 4,725
25	22	23	Procter & Gamble Co.	\$ 4,381
55	52	24	Flowers Industries Inc.	\$ 4,236
23	24	25	Hershey Foods Corp.	\$ 3,971
* Includes Sales of Busch Entertainment Corp. *** Estimate ** 2000 purchases by other companies: PepsiCo acquired Quaker Oats; Unilever acquired Bestfoods, Inc; General Mills acquired The Pillsbury Co.; Philip Morris Co.(Kraft Foods) acquired Nabisco Corp.				

Source: Food
Processing/May 00'

Table 10 lists the top twenty-five U.S. food manufacturing/processing firms. Most of these are multinational firms. Some, like Nabisco USA and Pillsbury, are/were subsidiaries of companies headquartered in other countries.

Almost every one of the top 25 food companies in the U.S. has made at least one acquisition within the last year, several acquiring each other. Many of these consolidations have strengthened or expanded retail oriented companies into large contenders within the foodservice arena. According to Steve Sanger, General Mills' Chairman/CEO, the purchase of Pillsbury quadrupled the size of General Mills' foodservice business, an industry growing 6 percent annually, double the rate of retail food sales. Kraft Foods' purchase of Nabisco also added to the ce supply business. ConAgra, the country's largest foodservice supplier with \$10 billion in annual sales, has also made several purchases to reinforce its dominant position in the foodservice supply market. IBP Foods, Inc. recently bought several companies, such as Foodbrands America and The Bruss Company, for the sole purpose of expanding its foodservice business.

Almost all of the top firms in the industry have a foodservice division. Most of the larger firms have many divisions within their company with separate teams to handle retail, foodservice, international, etc. Most of the larger companies such as Kraft, Nestle, Tyson, and Sara Lee have this departmental setup. Some companies are primarily suppliers to foodservice such as J.R. Simplot, a potato processor, and Dorskocil, primarily a meat supplier. Others like Quaker Oats just incorporate their foodservice division into their retail department with the same sales teams and marketers.

The Manufacturer and the Operator

The manufacturer and operator relationship is much more than buying and supplying food. Operators need products that promise a high degree of reliability in the areas of food safety, versatility, and ease of preparation. Manufacturers are taking an educational approach to servicing their foodservice customers as well as supplying them with food products. Manufacturers supply restaurants with market trend information, possible opportunities, nutritional information, ongoing recipe development, and a long list of other services.

Manufacturers have even had several requests to help operators come up with menu-able applications for leftovers – not uneaten plated food, but the excess left at the end of the day. In the foodservice business the consumer at a restaurant does not demand a brand of product like they would in a grocery store. Therefore, the foodservice operator controls the demand for brands and the manufacturers with branded products must keep on their toes in order to keep foodservice operators as customers.

As demands from operators increase, manufacturers have stepped up to the plate, albeit, under some grueling challenges. Many food items are highly “commoditized” and it is difficult to add significant value and make them better, more fresh-like, and better performing. Trying to provide innovation in a category such as fruits and vegetables can sometimes be difficult. But, through technological advances in growing practices, processing practices, distribution techniques, and refrigeration, fresh fruits and vegetables can now be supplied from Florida to Alaska economically and timely.

The Food Manufacturers Inside

New Product Development

Food manufacturers have to watch the market and the consumer very closely to be able to capture trends and the occasional profitable “fad” market. A great amount of money is spent on researching the market and making sure there is a market. In a survey of research and development (R&D) managers, they were asked to report which aspects of R&D their companies were allocating more or less time to. Fifty-six and one-half percent said they were devoting more time to identifying consumer trends and 73.9 percent were focusing more on brand extensions (Food Processing 2000).

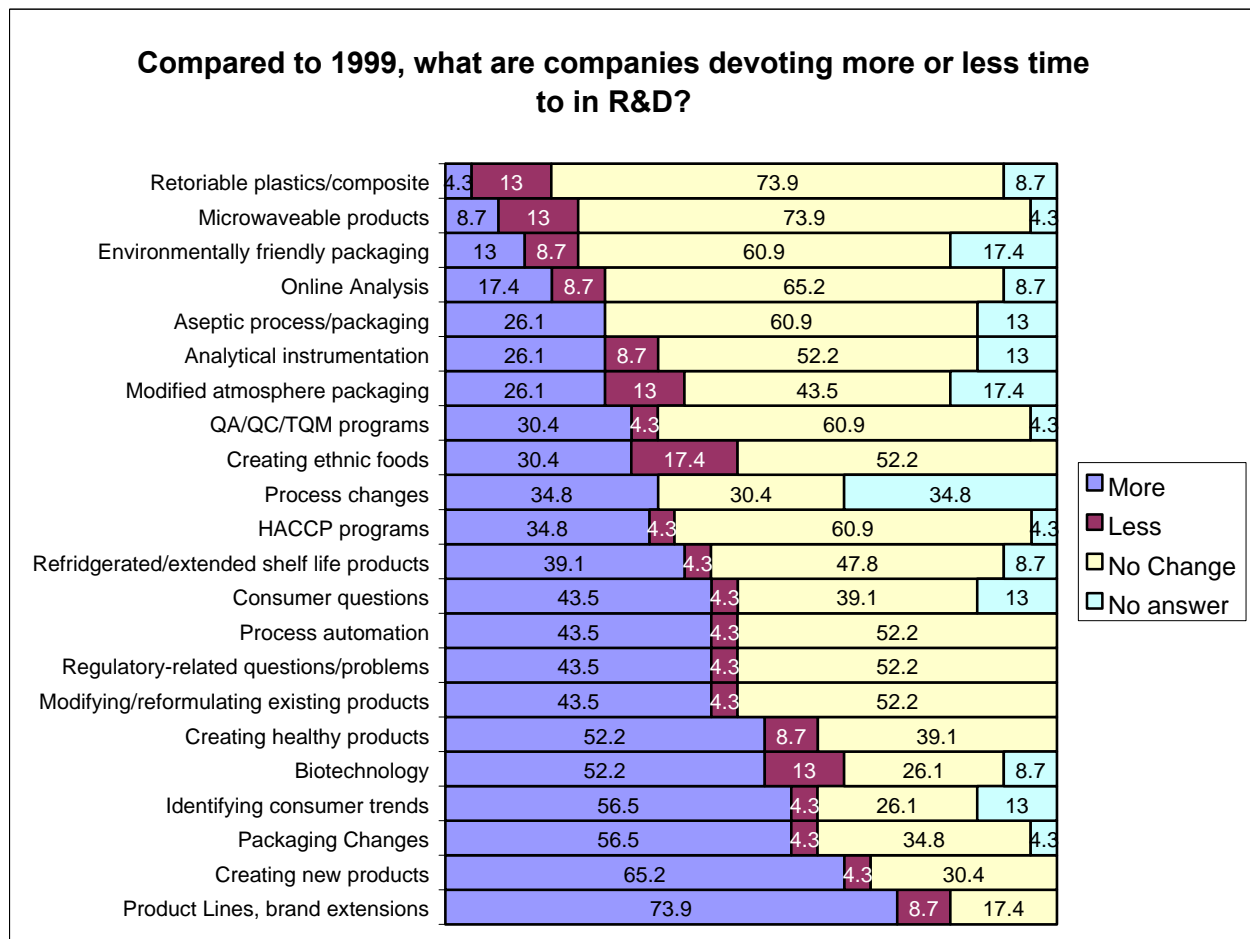
The results of that survey are reported on Figure 12. Areas where there was some cut back between 1999 and 2000 include creating ethnic foods, biotechnology, microwave products and

reusable plastics/composite. Much more time was being devoted to new products and line extensions.

In the case of Tyson Foods, products that are under research will probably not enter the market for at least nine months. R&D development, however, can range from 4 weeks to 16 months, according to Nanette Ray, foodservice product manager at Tyson Foods, Inc. Capturing fad markets are slightly different because the foodservice chain wanting to run the product has already completed the research to determine that a market exists for a “fad” and therefore a processor can usually begin product turnout in four to six weeks if equipment is already in existence.

Most of the changes in the food product development for foodservice have come from the “back of the house” needs of foodservice establishments. “Back of the house” refers to the kitchen and preparation areas. Due to the shortage of labor and the rising costs of “skilled” labor, restaurants of all kinds need more convenient, consistent, and “fool-proof” ingredients. Food service establishments of every level – from the convenience store on the corner to the \$200 a plate New York City dinner theater – purchase some ingredients partially or fully prepared. Partial cooking is growing in popularity the fastest; often the final cooking time can be cut in half. Since there has been some form of heat applied to a product, a lot of the food safety concerns are also minimized. Most foodservice cooks/chefs then use these ingredients in their own recipes in such a way that they put an individual flare on them. Since most restaurants, especially quick-service establishments, are placing their success on the minimum wage worker who just started, taking as many concerns out of the cooking and preparation process is one of the most important factors. From flattened chicken breasts that cook more evenly and faster to “scoop and bake” cake/muffin mixes that come in 18 lb buckets to fully cooked bacon slices if restaurants need a short cut, a food manufacturer is probably willing to provide it. Most large

Figure 12



Source: Food Processing; Sept. 2000

chains have processors design special products to their specific needs. With these products, the chain usually has the full ownership of the recipe. Manufacturers have their own signature, company owned recipes that are available for smaller restaurants' needs.

Time and labor savings are not the only reasons that restaurants are turning to manufacturers to "cook" for them. Consistency and waste reduction are also playing an important role in foodservice development. Foodservice consumers of today are expecting a consistent, uniform, and predictable product each time they patronize an establishment. If a

consumer has a “Quarter Pounder” from McDonalds in New Jersey, they expect a “Quarter Pounder” in Montana to be exactly the same. The same consistency is expected from local, full service restaurants because one disgruntled customer can speak to several friends and an establishment can lose several customers or potential customers from one bad food event. This is sometimes very difficult to achieve with restaurants facing a variety of skills in kitchen staff and irregular quality in raw products. Portion control done by manufacturers is helping to control irregularity in serving size and product appearance.

The high expense of product waste is also turning restaurants towards manufacturers for help. Salads, for instance, used to create a tremendous amount of waste for a restaurant and take up a lot of space in the precious cold storage area. A larger restaurant might use 40 heads of one type of lettuce in one night if it served salads with most dinner entrees. Today’s pre-chopped salads, however, are fresh and uniform and take minimal labor and time to prepare for serving. The restaurant can then use its own specialty dressing and garnishes to create signature recipes. These prepared items are often cheaper than buying the raw ingredients, as well, because the manufacturer can take the waste material and use it in some other production process therefore making a profit off the whole product whereas before, the refuse was just thrown away.

Since foodservice has experienced growth over the last several years as more and more people are choosing to eat out, it is inevitable that the manufacturers that supply the industry are also experiencing growth. Table 11 shows that every product category has experienced growth over the last five years. Fruits and vegetables have experienced the highest growth overall, with fresh fruits and vegetables experiencing the largest growth (90 percent over the five years prior to 1999). Soups/sauces were second with 33.3 percent overall growth and prepared foods were third with 30.9 percent increase in sales. This can be partly explained by the trend for more

exotic tastes and flavors demanded by the consumers of today. With disposable income being relatively high, diners are demanding more expensive and unique flavors. Fresh fruits and vegetables tend to be more expensive, and special sauces give meals more spice or essence, especially with ethnic tastes. The demand for prepared foods is a derived demand from the need for more hassle-free items. Meat/Poultry/Fish and Juices were the slowest growing of the product categories, while meat still held the largest number of dollar sales, which is to be expected with meat being typically the dominant item of the plate. The only category that experienced a decline in sales was the shelf stable soups/sauces segment. However, the fresh and frozen soups/sauces, items not found in kitchens much five years ago, have grown in popularity. This can be explained by better technologies in delivery and a higher consumer demand for fresh products.

Table 11: Changes in Demand for Foodservice Products 1995-1999

<p style="text-align: center;">Manufacturer' Foodservice Sales By Product Category – 1999 (Source: Technomic, Inc.)</p>									
In Billion \$ Product Category		%Chge 5 Years Ago		%Chge 5 Years Ago		%Chge 5 Years Ago		%Chge 5 Years Ago	
	Fresh		Frozen		Shelf Stable		Total		
Meat/fish/poultry	\$ 23.72	15.8%	\$ 22.54	15.8%	\$ 1.18	15.7%	\$ 47.43	15.8%	
Dairy Products	\$ 7.34	27.2%	\$ 5.33	27.2%	\$ 0.66	26.9%	\$ 13.33	27.1%	
Beverages	\$ -	n/a	\$ -	n/a	\$ 12.96	28.3%	\$ 12.96	28.3%	
Fruits/Vegetables	\$ 7.79	90.0%	\$ 5.72	39.5%	\$ 2.38	32.2%	\$ 15.89	58.9%	
Bakery Products	\$ 7.90	26.0%	\$ 3.02	25.8%	\$ 0.69	25.5%	\$ 11.61	25.9%	
Prepared Foods	\$ 1.31	31.0%	\$ 2.46	30.9%	\$ 2.71	30.9%	\$ 6.48	30.9%	
Fats/Oils	\$ 2.26	29.1%	\$ -	n/a	\$ 2.88	29.1%	\$ 5.13	28.9%	
Sugar/Sweets	\$ -	n/a	\$ -	n/a	\$ 2.81	31.3%	\$ 2.81	31.3%	
Flours/Cereals	\$ -	n/a	\$ -	n/a	\$ 2.69	31.9%	\$ 2.69	31.9%	
Soups/Sauces	\$ 0.04	n/a	\$ 0.66	n/a	\$ 1.50	-9.1%	\$ 2.20	33.3%	
Juices	\$ 0.25	8.7%	\$ 0.86	10.3%	\$ 0.60	11.1%	\$ 1.71	10.3%	
Total	\$ 50.61	27.8%	\$ 40.59	23.7%	\$ 31.06	26.0%	\$ 122.25	25.9%	

Wholesale Food Prices

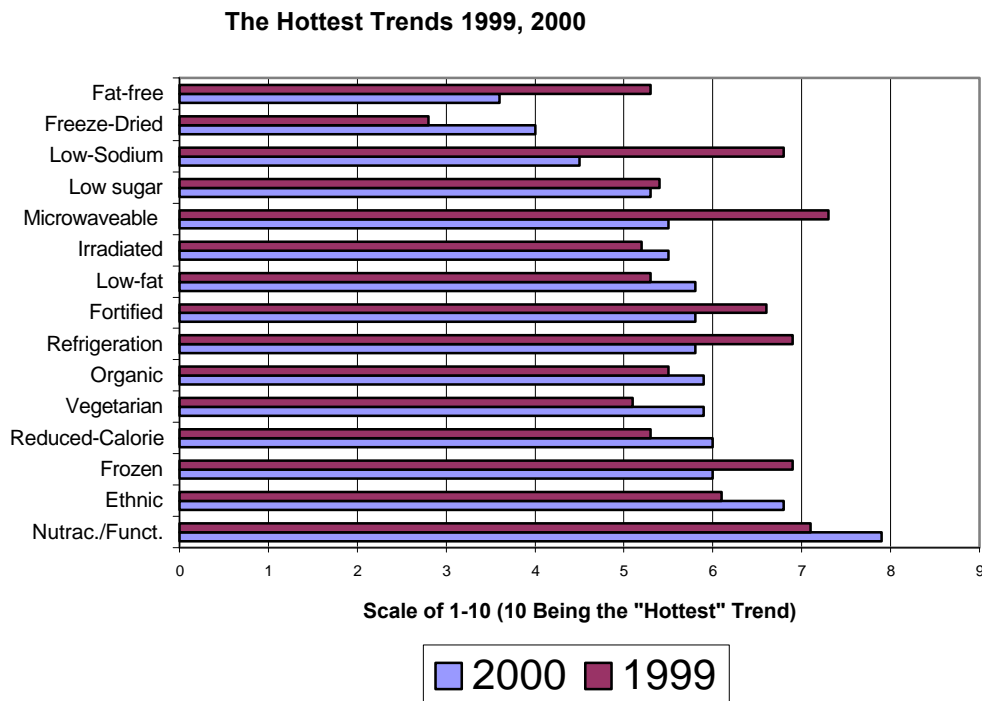
Food and beverage makes up the largest percentage of the total cost of sales for a restaurant standing at 32-38 percent according the National Restaurant Association 1999 Operations Report. Labor is second with 29-34 percent of the cost. This is why manufacturers' relationships with retail foodservice operators is so very important. Stable food prices and product consistency aid the foodservice industry. Over the last few years, restaurant operators benefited from very stable food prices. In 1999, prices rose only a moderate 0.4 percent after a decline in 1998 of 0.3 percent. However, in 2000, price increases are expected to be around 1.5 percent - which indicates a moderate acceleration from the virtually flat growth trend of the past few years.

The price rises are expected to register from the meat commodity sector. Sharp upward moving trends in beef and pork prices will increase the "center of the plate" costs. Per capita beef supplies are projected to decline 3-4 pounds next year, driving the price per pound up. Pork is on the recovery after the record low prices of 1998 and 1999, which has caused a sharp decline in production. Poultry, in contrast to beef and pork, is expected to decline in price, which could indicate that more chicken and turkey dishes than ever before can be found on restaurant menus.

Food Product Trends

In a panel taken from R&D executives in foodservice manufacturing companies around the country, "functional" and "ethnic" are words appearing more often in connection with new food product flavors seen in today's and tomorrow's restaurants (Food Processing, September 2000). Figure 13 shows that functional, or nutraceutical foods and foods which are fortified with vitamins and minerals are becoming more popular partly due to the tremendous number of children today who are growing up in the "food-away-from-home" world. School cafeterias are

Figure 13



Source: Food Processing, September 2000

one of the largest segments that use these relatively new introductions to foodservice offerings. International and ethnic flavors are expanding rapidly as the public awareness of the world's cuisine grows. It is likely that single theme restaurants, such as Italian and Japanese, will continue to have a strong presence in foodservice, however, restaurants that provide a greater sampling of international blends are beginning to emerge. Regional product profiles are also growing in esteem such as Alaskan king crab and Black Angus from Texas. Also, expect to see "edge" flavors such as sharp tasting ginger/rosemary/lime and fiery chipotle/black bean/curry to gain even more prominence on menus. Cajun, teriyaki, and buffalo spice are a few of the current popular seasonings that add "spice" to menus.

“Exotic” and “Gourmet” are also key terms for the up and coming restaurant trends. As disposable income continues to rise in the U.S. and around the world, items like wild game, ostrich, buffalo, goat cheese, domestic caviar, fresh herbs, and many other specialty products that in the past were only considered “for the elite” are becoming more and more common on menus. As their popularity increases, it is expected the price will become more reasonable which will advance their introduction to menus. Most of these flavor trends start in niche foodservice establishments and then as popularity increases, manufacturers pick up the flavor profile and develop new product concepts revolving around that profile (FSPronet, 2000).

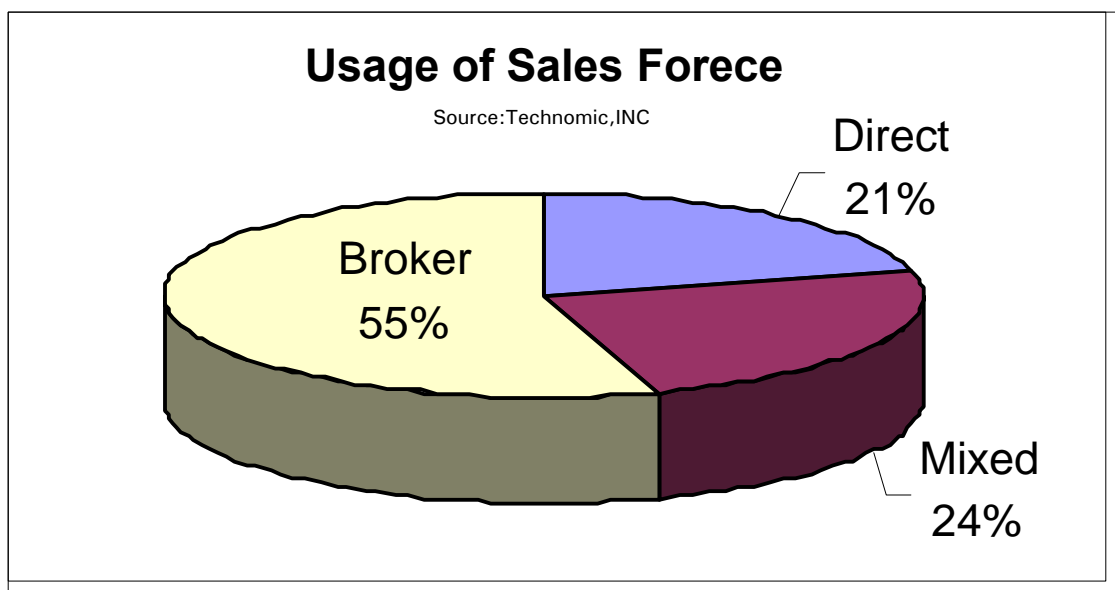
Health is important to diners, and manufacturers and operators know this. “Light” reduced-calorie and reduced fat meals are not, however, expected to be popular in upcoming foodservice operations. When diners eat out, they want to indulge and want food that tastes “good.” Some restaurants even consider their “light” options on their menus as “good public relations,” but have little importance as profitable items. Nutrition is a key element as more families are getting their daily meals from restaurants, rather than just special occasion meals. There is a growing need to serve the special needs of the 60 million Americans that suffer from hypertension, high cholesterol or adult onset diabetes and also those who are doing what they can to prevent health problems. Several restaurants are finding a compromise with smaller portioned meals that are exactly like the full dinner plates. Operators are also starting to use different cooking practices in order to give food more nutritional value, such as steaming vegetables rather than boiling to preserve vitamins and offering more baked and grilled items instead of fried.

The Manufacturers’ Sales Force

The manufacturer’s sales force is a highly complex structure that is usually divided into the two groups: National Accounts and Regional Sales. National Accounts are the larger chains

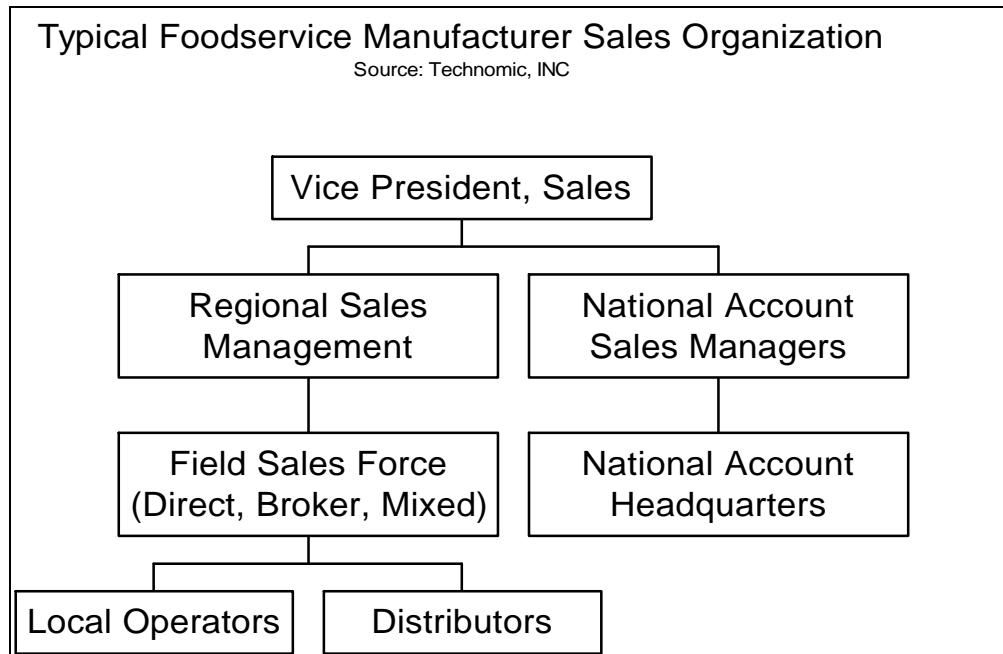
such as Burger King and Applebee's. Regional Sales cover most other sales. The larger manufacturers have employees or team-members, usually 50-200, hired to take care of national account business and most sales agreements are generally done through direct contracts between the operator and the manufacturer. Regional sales are done through a combination of direct sales and broker sales. Brokers are independent sales organizations that represent multiple manufacturers from both smaller and larger firms. A larger manufacturer may have as many as 100 different brokers that work with them. Most firms utilize brokers as part of their sales force. Figure 14 shows the percentage of sales that are handled by brokers, direct sales, and some mix of the two.

Figure 14



The sales organization in most food manufacturing companies is depicted in Figure 15.

Figure 15



Retail and Foodservice Differences and Similarities

There are many differences in developing food products for foodservice versus retail grocery stores. Packaging is typically minimal for a foodservice product because the packaging doesn't have to attract attention to sell the product as it would in a grocery store. Retail store products are developed for the masses, relying more heavily on focus groups and marketing. Foodservice is more customer specific. With the foodservice business being highly segmented, with restaurants typically having a particular theme or atmosphere, manufacturers need to have a clear idea as to what an establishments' consumers expect. Also, customer needs drive foodservice sales and manufacturers do their best to listen to the customer and try to translate their needs into a viable product. In retail grocery, the manufacturer usually develops a product and then tries to convince customers (retailer or final consumer) that this is a something that they

should buy. Often, restaurant chains come to manufacturers with a product that they have created and want mass produced. Few grocery stores have their own R&D teams.

Foodservice, like retail, has its “private label” brands. Foodservice has non-consumer brand names, distributor brands, and consumer brands. Non-consumer brands are those that have no place in the retail market. They are not names that grocery store customers would recognize and they do not have consumer advertising. Distributor brands are similar to non-consumer brands where the distributor has a whole product mix produced by manufacturers and labeled with the distributors’ brand name. The distributor then competes for sales on the same ground as the manufacturer.

New Manufacturer Concepts for the New Millennium

Food manufacturers who are used to having their brands recognized on retail shelves have discovered a way to give their products a new identity by establishing “brand” restaurants. These usually small, quick service restaurants are becoming very popular in airports, universities, corporations, and malls. Oscar Mayer Meats, a popular processed meat maker, has introduced its Oscar Mayer Hot Dog Construction Co., which allows people on-the-go to get “stadium” type products and Hot Dogs with special “toppings” made to order. The Healthy Choice brand of ConAgra has found its way into a deli format in the college scene as students place more emphasis on healthy dining. Betty Crocker, a General Mills brand, is also a big hit on campuses. Sig Muller, foodservice marketing manager for GM, indicated “Since the Betty Crocker Kitchen opened in October at the University of Southern California, sales of baked goods on campus have jumped more than 20 percent in volume and 30 percent in revenue” (Mueller, 1999). Another popular item is a freestanding or tabletop display provided for deli operators by Otis Spunkmeyer, the popular cookie maker. Do it yourself establishments such as

that formed by Frito-Lay in its FritoLay Café are becoming prominent in supermarkets as a form of Home Meal Replacement. They offer temporary or permanent “destination centers” to retailers featuring Frito-Lay Chips and dips together with all the necessary ingredients – sour cream, meat, beans, rice, etc.

One of the reasons small food businesses expand rapidly, is that they are much more cost effective for the midsize foodservice establishments to incorporate into their existing operations. Colleges and universities that only have enrollments of 5,000-10,000 students aren’t large enough to draw the larger chain names such as Pizza Hut or Arby’s because the cost of the franchise fee and the percentage of revenue that has to be paid back to the chain do not make them cost-effective. It is much less expensive to bring in a manufacturer’s brand when the only requirement that they enforce is that you use their products and their recipes and display their brand name.

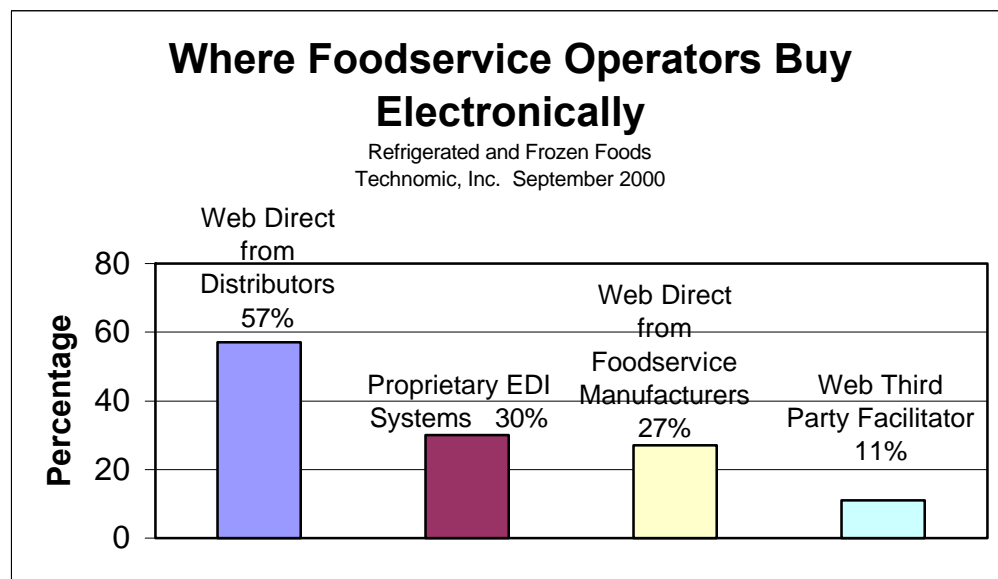
It is also becoming more common to see restaurants displaying recognizable brand names of products on their menus. Foodservice “branding” is a major growth area, according to Pepperidge Farm’s President, David Albright. “KFC recently ran ads introducing its new chicken strip sandwiches emphasizing that the sandwiches were made with Pepperidge Farm buns,” said Albright (Mueller, 1999). Foodservice operators are turning to bakers and other manufacturers in order to differentiate their products. If the manufacturer has a good reputation and high regard for quality, the establishment is increasing its image by letting the customer know that they are using only the “highest” quality of products.

Manufacturers and the Internet

Many food manufacturers are realizing the power of the fairly recent introduction of Business-to-Business (B2B) e-commerce. About 44 percent of food manufacturers post

foodservice websites within their company's main website to compliment other marketing approaches. However, only 12 percent of manufacturers believe that they are utilizing e-commerce effectively. Web-direct and Electronic Data Interchange (EDI) systems are the most commonly used. Figure 16 (Refrigerated and Frozen Foods, September 2000) shows how foodservice operators use electronic services in their buying.

Figure 16



EDI systems are now being modified for use over the Internet, which is making them less costly and more available to use in the distribution channel. Most large manufacturers already have EDI systems set up within their network, however with Internet adaptation these systems are more accessible to smaller companies. The cost of gathering and sharing data is much less over the Internet than over dedicated EDI systems. Most operators (57 %) who purchase from the Internet buy web-direct from distributors, however more and more operators are finding

manufacturer websites and ordering systems to be just as easy and economical as those through the distributors.

Manufacturers are also trying to secure their niche into the e-business world by offering even more amenities to operators by forming “one-stop” shopping alliances with other manufacturers. Several companies have joined forces and formed alliances to create websites where buyers and sellers can come together and eliminate the “middleman” to conduct business. Almost every major manufacturer has an e-business alliance with at least one other manufacturer and several are involved in more than a dozen other manufacturers.

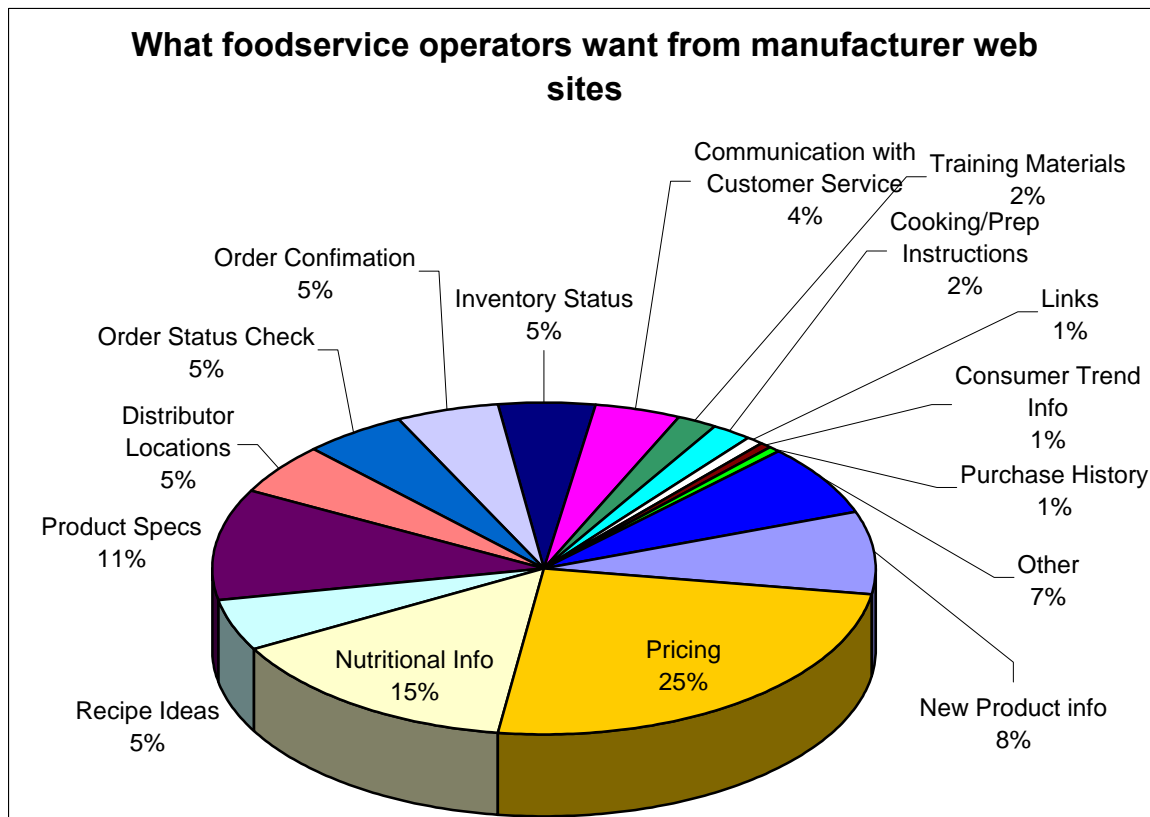
However, few purchasing websites of the big name companies or private alliances have actually become operational. A few smaller, more regional websites have appeared, but their impact has yet to be determined. In early April 2000, the major protein suppliers of Cargill, Tyson Foods, Smithfield Foods, Gold Kist, IBP Inc., and Farmland Industries allied themselves in an agreement to form a neutral B2B marketplace for meat and poultry products, services, and information. These companies combined have over \$40 billion in annual sales in the protein sector. Although each has invested \$20 million into this website which is to be a non-partisan location for all buyers of “meat, pork and poultry” products and information, as of March 2001 it had yet to appear on the market.

Despite the current high profile of e-business, few restaurant operators actually access the websites of their suppliers. In a survey conducted by Technomic, Inc. only 18 percent of respondents to the survey reported having visited a foodservice related website in the previous month. Food manufacturer sites rated even less with only 8 percent having paid a visit. When restaurant operators spend time online, they spend about 26 percent of their time at distributors’

websites and manufacturers get about 18 percent of their attention (Refrigerated and Frozen Foods, September 2000).

When a foodservice operator visits a food manufacturer website, they are usually looking for specific information, not products. Information on pricing is the feature they want to see. In the same survey, 92 percent of respondents said that they look for price information with 25 percent indicating that it was the most important information that they wanted to be able to find. Nutritional information was second with 15 percent rating. Direct sales through the Internet ranked as a very low priority overall for manufacturers. Only 44 percent of operators said they even looked for direct selling opportunities and only 3 percent ranked it the most important feature. Figure 17 illustrates what foodservice operators want from a food manufacturer's website.

Figure 17



Refrigerated and Frozen Foods, September 2000

The International Food Manufacturer

With the U.S. boasting about 25 percent of the world's foodservice market, there is still 75 percent left into which manufacturers can place their products outside the U.S. Fast food is rapidly globalizing its business. For companies like McDonald's, the international market makes up almost half of its sales. Thirty percent of sales for the top 100 U.S. based restaurant chains, (up from only 8 percent in 1980) will come from business done outside of the U.S. This is definitely an expanding scene for market opportunities, however strict regulations and challenges come into play for manufacturers who enter into the market on the international scene. Suppliers exporting products to international locations must be aware of all of the labeling requirements, restricted ingredients, cultural "catches" such as word translations and numerous other factors that are often routine or not applicable to domestic products. Processors must know their foreign consumers just as well as their domestic ones in order to be invaluable to the international foodservice industry. "Make a mistake domestically, and you can still survive; Make a mistake abroad and you can create an international incident," stated Mike Riley, VP. Sales of Smithfield Food, Inc. (Riley, 2000).

Conclusion

As described in this overview, the foodservice industry is a very complex segment of the U.S. economy and in the next decade will become the leading site for food expenditures for Americans. The demographics are favorable for continued growth within this industry because of the growing number of baby boomers who are coming into their high income years and the reduced cooking skills of the younger generations. The upcoming generations are generally more traveled and have had more encounters with diversity and the outside world than their

parents. They have come to appreciate the cultures and cuisines of others and therefore want to be able to indulge in them. Time and convenience are essentials of today's and tomorrow's lifestyles and cooking, which was once necessary for survival is now an activity of choice or an activity one chooses to have someone else do for you. No matter who you are or what you do, you still have to eat, but you don't have to cook it yourself or eat it at home anymore. Restaurants and other foodservice venues are adapting to meet the evolving demands of today's consumer and are changing practices in almost every aspect of the food business in order to meet these demands.

One of the macro trends is the merging of foodservice and grocery under one roof and one business enterprise. This reflects how consumers select and assemble food. They mix and match ready-to-eat foods with fresh produce, beverages, and some original ingredients to customize their diets. They spend a larger portion of their food budget on services and experiences and less on edible products. They substitute their capital for their labor (time) in procuring food. Over decades, as personal disposable income has risen, the percent of that income spent on foodservice has been almost constant, while the percent spent on food to cook at home has fallen in tandem with total food expenditures. What history predicts is that as incomes continue to rise, foodservice expenditures will almost certainly keep pace and expenditures on basic ingredients to cook will decline.

Taking the liberty to speculate about the future of foodservice distribution channels leads one to ask the following questions: As consumers choose ready-to-eat foods from a wide variety of places, will grocery stores and foodservice places blend their offerings and become indistinguishable from one another? Will the distribution channels merge and allow the same wholesaler to deliver food to both grocery stores and restaurants? What role will wholesalers

play? Will consumer tastes become more, or less, homogeneous? If consumers turn most of the cooking tasks over to others in the food chain, what will be the outcome in terms of their diets, health, and nutritional status? Will the overall food delivery system be safer, more productive, less costly, and more innovative? For some, these ponderables might be fodder for research and investigation; for some they might sound like improbable scenarios. The challenge will be to track food from farm to factory to fork as the food system evolves to meet consumers' needs and lifestyles. As we wonder what is in our food and who prepared it we may well paraphrase an old movie title and ask, "Guess Who Cooked My Dinner?"

Appendix 1: Industry Segments

2000 U.S. Foodservice Industry Segments						
(Excluding Alcoholic Beverages and Sales Tax)						
Source Technomic, INC.						
	Retail Sales Equivalent		Operator Food Purchases		Manufacturer Shipments	
	(\$ Billions)	% Share	(\$ Billions)	% Share	(\$ Billions)	% Share
Restaurants and Bars	\$ 240.804	61.5%	\$ 81.893	54.7%	\$ 70.624	54.8%
Limited Service	125.97	32.2%	39.444	26.4%	35.377	27.5%
Full Service	112.868	28.8%	41.761	27.9%	34.662	26.9%
Bars and Taverns	1.966	0.5%	0.688	0.5%	0.585	0.5%
Retail Hosts	\$ 29.434	7.5%	\$ 12.597	8.4%	\$ 11.290	8.8%
Supermarket Foodservice 1/	17.201	4.4%	8.162	5.5%	7.371	5.7%
Convenience Stores	8.556	2.2%	2.995	2.0%	2.695	2.1%
All Other Retailers 2/	3.677	0.9%	1.44	1.0%	1.224	0.9%
Travel and Leisure	\$ 28.801	7.4%	\$ 10.739	7.2%	\$ 8.912	6.9%
Recreation	13.231	3.4%	4.631	3.1%	3.797	2.9%
Lodging	12.723	3.3%	5.089	3.4%	4.198	3.3%
Airlines	2.847	0.7%	1.019	0.7%	0.917	0.7%
Business and Industry	\$ 25.199	6.4%	\$ 12.600	8.4%	\$ 10.710	8.3%
Education	\$ 21.238	5.4%	\$ 10.029	6.7%	\$ 8.827	6.8%
Primary/Secondary Schools	12.147	3.1%	6.074	4.1%	5.466	4.2%
College/University	9.091	2.3%	3.955	2.6%	3.361	2.6%
Healthcare	\$ 12.283	3.1%	\$ 6.141	4.1%	\$ 5.257	4.1%
Hospitals	6.892	1.8%	3.446	2.3%	3.033	2.4%
Nursing Homes	5.391	1.4%	2.695	1.8%	2.224	1.7%
All Other	\$ 33.605	8.6%	\$ 15.615	10.4%	\$ 13.253	10.3%
Vending	23.736	6.1%	10.681	7.1%	8.812	6.8%
Military	3.282	0.8%	1.641	1.1%	1.477	1.1%
Other Segments 3/	6.587	1.7%	3.293	2.2%	2.964	2.3%
Total Foodservice	\$ 391.364	100.0%	\$ 149.615	100.0%	\$ 128.875	100.0%
1/ Supermarket Delis, Supermarket Restaurants						
2/ General Merchandise, Drug Stores, Misc. Retailers (liquor, bakeries, etc.)						
3/ Penal Institutions, Child Care Centers, Continuous Care Retirement Centers, Miscellaneous Facilities (convents, seminaries, orphanages, railroads, etc.)						
All 2000 data preliminary. Figures may not add to total due to rounding. Operator food purchases are based on reported ratios for each segment. Manufacturer shipments are after deducting estimated average distributions margins which have been estimated for each segment by Technomic.						

Appendix 2: Operator Food Purchases

Operator Food Purchases					
	(\$ Billions)		% Nominal Growth		Units 2000
Restaurants & Bars	2000	2001	2000	2001	
Limited Service	39.444	41.422	5.0	5.0	243,605
Hamburger	14.189	14.811	4.7	4.4	
Pizza	7.555	7.864	4.4	4.1	
Other Sandwich	3.935	4.197	5.9	6.6	
Chicken	3.497	3.694	5.0	5.6	
Mexican	2.301	2.442	5.7	6.1	
Cafeteria/Buffer	1.75	1.803	3.0	3.0	
Ice Cream/Yogurt	1.74	1.793	2.8	3.0	
Donut	0.954	0.985	4.3	3.3	
All Other	3.523	3.833	8.1	8.8	
Full Service	41.761	44.535	7.1	6.6	222,550
Family Style	10.446	10.873	4.3	4.1	
Varied Menu	8.36	9.172	10.4	9.7	
Italian	3.051	3.238	7.0	6.1	
Casual Steak	3.017	3.327	10.7	10.3	
Fish/Seafood	2.267	2.382	6.0	5.1	
Mexican	1.746	1.853	6.0	6.1	
Family Steak	1.026	1.052	2.8	2.5	
All Others	11.849	12.638	7.2	6.7	
Bars and Taverns	0.688	0.720	5.0	4.6	39,095
Total Restaurants and Bars	81.893	86.677	6.0	5.8	505,250
Beyond Restaurants					293,983
Business & Industry	12.6	13.178	5	4.6	16,765
Retail Hosts	12.597	13.211	5	4.9	122,490
Supermarket Foodservice	8.162	8.532	4.2	4.5	25,450
Convenience Stores	2.995	3.163	6.1	5.6	59,365
All Other Retailers	1.44	1.517	6.2	5.3	37,675
Travel & Leisure	10.739	11.373	6.3	5.9	53,558
Lodging	5.401	6.6	6.1		35,325
Recreation	4.631	4.9	6.4	5.8	18,205
Airlines	1.071	5	5.1		28
Education	10.311	3.2	2.9		18,820
Primary/Secondary Schools	6.074	6.216	2.3	2.3	15,050
College/University	3.955	4.096	4.5	3.6	3,770
Healthcare	6.18	0.6	0.6		24,015
Hospitals	3.422	-0.7	-0.7		5,860
Nursing Homes	2.695	2.758	2.3	2.3	18,155
All Other	16.348	4.5	4.6		58,335
Vending	11.117	4	4.1		8,645
Military	1.691	2.5	3.1		400
Other Locations	3.293	3.539	7.2	7.5	49,290
Total Foodservice	149.615	157.278	5.4	5.2	799,233

Source: Technomic

Appendix 3: Top 25 Limited Service Restaurant

2000's Quick Service Top Performers			
Rank	Chain	U.S. Systemwide Sales(\$000)	U.S. Systemwide Units
1	McDonald's	\$19,005,600	12,629
2	Burger King	8,652,232	8,139
3	Wendy's Old Fashioned Hamburgers	5,371,000	4,868
4	Taco Bell	5,200,000	6,879
5	Pizza Hut	5,000,000	8,084
6	KFC	4,300,000	5,321
7	Subway Sandwiches	3,200,000	12,008
8	Dairy Queen	2,831,000*	5,113
9	Domino's Pizza	2,660,000	4,629
10	Arby's Restaurants	2,266,386	3,069
11	Dunkin' Donuts	2,139,842	3,611
12	Hardee's	2,138,833	2,673
13	Jack in the Box	1,757,600	1,517
14	Sonic Drive-Ins	1,643,962	2,056
15	Little Caesar	1,465,000*	3700*
16	Starbucks	1,455,029	2,136
17	Papa John's	1,426,000	2,254
18	Popeyes Chicken & Biscuits	953,814	1,160
19	Chick-fil-A	945,470	894
20	Carl's Jr.	887,233	908
21	Boston Chicken	835,000	858
22	Long John Silver's	739,925	1,210
23	Church's Chicken	655,622	1,179
24	Baskin-Robbins	554,472	2,557
25	Chuck E. Cheese's	519,600	355
	Total	\$72,307,620	97,807

*Technomic, Inc. estimate

Source: Technomic Top 100

Appendix 4: Full Service Top 25 Operators

2000's Full Service/Cafeteria Top Performers

Rank	Chain	U.S. Systemwide Sales(\$000)	U.S. Systemwide Units
1	Applebee's Neighborhood Grill and Bar	\$ 2,316,747	1,142
2	Denny's	2,079,000	1,715
3	Red Lobster	1,931,726	618
4	Outback Steakhouse	1,759,000	571
5	The Olive Garden	1,519,767	458
6	Cracker Barrel Old Country Store	1,509,687	418
7	Chili's Grill and Bar	1,500,069	597
8	T.G.I. Friday's	1,329,952*	438
9	International House of Pancakes	1,080,624*	859
10	Golden Corral	896,752	455
11	Shoney's	868,837	525
12	Ruby Tuesday	779,067*	448
13	Perkins Family Restaurant	769,024	458
14	Bob Evans	739,646	431
15	Big Boy	710,000	600*
16	Ryan's Family Steakhouse	703,595	312
17	Friendly Ice Cream	670,909	678
18	Ponderosa/Bonanza	641,129	536
19	Old Country Buffet	632,354	271
20	Piccadilly'	578,013	245
21	Waffle House	537,000*	1,250
22	Luby's	500,000	226
23	Lone Star Steakhouse and Saloon	465,755*	246
24	Bennigan's	460,287	237
25	Hooters	444,000	234
	Total	\$25,422,940	13,968

*Technomic, Inc. estimate

Note: Sales data include alcoholic beverages

Source: 2000 Technomic Top 100

Appendix 5: Top 20 International Chains Abroad

Top 20 U.S. Chains Abroad Ranked by 1998 International Sales					
Rank	Company	1998 Internat'l Sales (\$1000)	1998 Internat'l Share of Sales	1998 Internat'l Units	1998 Internat'l Share of Units
1	McDonald's	\$ 17,856,000	49.6%	12,328	49.7%
2	KFC	\$ 4,207,000*	50.0%	5,291	50.8%
3	Pizza Hut	\$ 2,250,000*	31.9%	3,814	31.0%
4	Burger King	\$ 2,237,499	20.7%	2,316	22.7%
5	Tim Horton's	\$ 835,000*	93.3%	1,567	94.0%
6	Domino's Pizza	\$ 700,000*	21.7%	1,730	27.8%
7	Wendy's	\$ 700,000*	12.6%	657	12.3%
8	Subway Sandwiches	\$ 530,000*	14.6%	2,006	14.8%
9	Dairy Queen	\$ 400,000*	12.7%	792	13.5%
10	Hard Rock Café	\$ 390,000*	58.6%	59	62.8%
11	Coco's	\$ 354,000	55.8%	300	61.2%
12	Dunkin' Donuts	\$ 278,613	12.3%	1,381	28.1%
13	Planet Hollywood	\$ 275,000*	50.9%	35*	52.2%
14	T.G.I.Friday's	\$ 258,739*	18.5%	115	22.9%
15	Starbucks	\$ 173,280	13.5%	357	17.6%
16	Church's Chicken	\$ 164,163	20.9%	209	15.9%
17	Taco Bell	\$ 150,000*	2.9%	175	2.5%
18	Popeye's Chicken & Biscuits	\$ 139,672	14.7%	310	22.5%
19	East Side Mario's	\$ 120,000*	7.4%	50*	52.6%
20	Big Boy	\$ 105,000*	12.0%	100*	12.5%
	Total Top 20	\$ 32,123,966	34.4%	33,592	30.8%
	All Other Top 100	\$ 1,423,588	2.5%	3,877	6.5%
	Total 100	\$ 33,547,554	22.4%	37,469	22.2%

* Technomic estimate

Source: Technomic Inc., Food Industry Review

Appendix 6: Top 10 Chain companies

Top 20 Chain Restaurant Companies				
(Source: Technomic)				
Rank	Company	1998 U.S. System Sales(\$000)	%Change from 1997	1998 Number of Units
1	McDonald's Corp	18,123,000	5.8%	12,472
	McDonald's	18,123,000	5.8%	12,473
2	Tricon Global Restaurants, Inc.	14,000,000	3.7%	20,483
	KFC	4,200,000	5.0%	5,132
	Pizza Hut	4,800,000	2.1%	8,471
	Taco Bell	5,000,000	4.2%	6,880
3	Diageo PLC	8,626,352*	8.7%	8,102*
	Burger King Corp.	8,549,352	8.8%	7,872
	Haagen-Dazs	77,000*	-1.3%	230*
4	Wendy's International, Inc.	4,915,000*	6.3%	4,776
	Tim Horton's	60,000*	171.5%	100
	Wendy's Old Fashioned Hamburgers	4,855,000*	5.5%	4,676
5	Darden Restaurants, Inc.	3,334,040*	8.5%	1,105
	Bahama Breeze	18,000*	62.2%	4
	Olive Garden, The	1,415,856*	8.3%	459
	Red Lobster	1,900,184	8.3%	642
6	CKE Restaurant, Inc.	3,274,928	-7.6%	3,678
	Carl's Jr.	786,000	14.9%	829
	Hardee's	2,394,000	-10.8%	2,713
	Taco Bueno	81,528	10.2%	111
	Rally's (CKE)	13,400	-1.5%	25
7	Doctor's Associates, Inc.	3,100,000	6.9%	11,540
	Subway	3,100,000	6.9%	11,540
8	International Dairy Queen, Inc.	2,842,500*	3.2%	5,498
	Dairy Queen	2,760,000*	2.8%	5,091
	KarmelKorn	6,500*	-7.1%	37
	Orange Julius of America	76,000*	20.6%	370
9	Advantica Restaurant Group	2,692,000	-21.3%	2,269
	Carrows	204,000	-5.1%	149
	Coco's	280,000	-2.8%	190*
	Denny's	1,963,000	3.2%	1,669
	El Pollo Loco	245,000	4.3%	261
10	Allied Domecq	2,687,169	9.2%	6,428
	Baskin-Robbins	584,199	2.4%	2,651
	Dunkin' Donuts	1,979,233	12.3%	3,537
	Togo's Eatery	123,737	4.0%	240
	*Technomic estimate			

References

- Benda, Chuck. "The Secret to a Secret Recipe." *World Food: A Resource for Business*. 1st Quarter 2000. Cargill Foods. 2000. (www.worldfood.cargillfoods.com/1Q00/1Q00secr.htm).
- Benda, Chuck. "Beef is Back." *World Food: A Resource for Business*. 2nd Quarter 2000. Cargill Foods. 2000. (www.worldfood.cargillfoods.com/2Q00/2Q00beef.htm).
- Bond, Richard L. "Realigning for Results." *Visions*. IBP, Inc. Spring 2000.
- Brand, Karen. "Cobranding Feeds a One-Stop Shopping World." *NPN-National Petroleum News*. February 2000. Vol. 92, No. 2; Pg. 14. Lexis Nexis Academic Universe.
- Computer Science Corporation (CSC) in association with the Stanford Global Supply Chain Forum. *Efficient Food Response (EFR): Enabling Profitable Growth in the Food~Prepared~Away~From~Home Industries*. January 1997.
- Credit Suisse First Boston Corporation, Equity Research. *The Rise of the Power Provisioner*. Rajan A. Chaudhry, Paul L. Westra, CFA and David C. Nelson. May 12, 1999.
- De Marco, Donna. "Food Companies Prepare for Major Round of Consolidations." *The Washington Times*. August 28, 2000.
- Demetrakakes, Pan. "Tangled Web." *Refrigerated and Frozen Foods*. September 2000.
- Ennen, Steve. "The 2000 Top 100 Food Companies." *Food Processing*. May 2000. Pgs. 21-28.
- FSPronet. "Millenium 2000 Food Trends." (www.fspronet.com/business/y2ktrends.html).
- Food Distributors International. "New EFR Study Reveals Foodservice Industry Progress in Voluntary Standard Coding." *Efficient Foodservice Response Official Website*. Press Release, September 7, 2000. (www.efr-central.com/barcode/000925barprog.htm).
- Food Institute Report. May 22, 2000. Newsletter; The Food Institute, Fair Lawn, NJ.
- H. J. Heinz Company. "Heinz Acquires Leading U.S. Foodservice Company to Supply Frozen Soups, Entrees and Sauces." *Press Release PRNewswire*. Oct. 19, 1999. (www.prnewswire.com).
- IBM Global Services. *EFR Roadmap for Small and Medium Foodservice Businesses*. Food Distributors Association. March 1999. Pgs. Vii-X, 3-28.

- Klein, Mark. "IBP, Cargill, Smithfield, Tyson, Gold Kist, Farmland plan e-commerce system for meat and poultry." Cargill Foods. Press Release. April 4, 2000, (www.cargill.com/today/releases/00_4_11tyson.htm).
- Lazar, Virginia. "Taking Back the Customers." *Meat Processing*. February 1999. Pgs. 22-24.
- Luningham, Nanette. Personal Interview. Tyson Foods Inc. Foodservice Department. October 2000.
- McKinsey & Company Research Department. *Foodservice 2005*. McKinsey & Company, Inc. United States and Food Distributors International. 1996. pgs. 47-48, 68-70.
- McKinsey & Company Research Department. *Foodservice 2005: 1997 Year in Review*. International Foodservice Distributors Association and Food Distributors International. June 1998.
- Muller, Sig. "Extending Your Brand." *World Food: A Resource for Business*. 3rd Quarter 1999. Cargill Foods. 1999. (www.worldfood.cargillfoods.com/3Q99/3Q99tabl.htm).
- National Restaurant Association Research Department. *2000 Restaurant Industry Forecast: Blueprint for the Future*. National Restaurant Association. December 1999. pgs: 3-21.
- National Restaurant Association Research Department. *Restaurant Industry 2010: The Road Ahead*. National Restaurant Association. 1999.
- National Restaurant Association Research Department. *Restaurant Economic Trends*. National Restaurant Association. October 2000.
- Neff, Jack. "Feeding Frenzy Recharges Dormant Food Stock Prices." *Food Processing*. August 2000. Pgs. 29-33.
- Neff, Jack. "Will Bigger Be Better." *Food Processing*. September 2000. Pgs. 23-26.
- Partin, Sonja. "Satisfaction is a Guide to Excellence." *World Food*. 1st Quarter 2000. Cargill Foods. (www.worldfood.cargillfoods.com/1Q00/1Q00tabl.htm).
- Porter, Michael E. *Competitive Strategy: Techniques for Analyzing Industries and Competitors*. New York. Free Press. 1980.
- Responsive Database Service, Inc. "Stand Alone Concepts." *National Restaurant News Brands in Foodservice Supplement*. April 26, 1999. Vol. 3, No. 1; Pg. 39-40. Lexis-Nexis Academic Universe.

Responsive Database Service, Inc. "Kitchen Helpers." *National Restaurant News Brands in Foodservice Supplement*. April 24, 2000. Vol. 4, No. 1; Pg. 24. Lexis-Nexis Academic Universe.

Responsive Database Service, Inc. "When Vegetables Add Value." *Refrigerated & Frozen Foods*. June 2000. Vol. 11, No. 6; Pg 25. Lexis-Nexis Academic Universe.

Responsive Database Service, Inc. "Serving Up New Products,Support." *Refrigerated & Frozen Foods*. June 2000. Vol. 11, No. 6; Pg 21. Lexis-Nexis Academic Universe.

Responsive Database Service, Inc. "Big Game Hunting." *Snack Food and Wholesale Bakery*. June 2000. Vol. 89, No. 6; Pg. 134. Lexis Nexis Academic Universe.

Responsive Database Service, Inc. "Special Spuds." *Refrigerated & Frozen Foods*. June 2000. Vol. 11, No. 6; Pg 26. Lexis-Nexis Academic Universe.

Responsive Database Service, Inc. "Going Mainstream." *Brandmarketing*. May 2000. Vol. VII, No. 5; Pg. 22. Lexis Nexis Academic Universe.

Responsive Database Service, Inc. "Help Wanted: Processor Partners, Fully Cooked Foods." *Refrigerated & Frozen Foods*. June 2000. Vol. 11, No. 6; Pg. 47. Lexis Nexis Academic Universe.

Renters Limited. "McDonald's moves to enforce Mad Cow Standards."
[Http://biz.yahoo.com/rf/010313/n13481018_2.html](http://biz.yahoo.com/rf/010313/n13481018_2.html), 3/13/2001

Riley, Mike. Personal Survey. V.P. Foodservice, Smithfield Foods.

Senauer, Benjamin, Elaine Asp and Jean Kinsey, *Food Trends and the Changing Consumer*, Eagan, MN: Eagan Press, 1991.

Talerico, Shonda. "Big Business." *Dairy Field*. September 1999. Vol. 182, No. 9, Pg. 36. Lexis-Nexis Academic Universe.

Team Canada Market Research Centre and the Canadian Trade Commissioner Service. "The U.S. Foodservice Market." Department of Foreign Affairs and International Trade. April 2000. (<http://ats-sea.agr.ca/public/htmldocs/e3037.htm>).

Technomic, Inc. *Foodservice Fundamentals*. International Foodservice Manufacturers Association. December 2000.

Technomic, Inc. "Manufacturers' Foodservice Sales By Product Category 1999." *The Food Institute Report*. July 24, 2000. Pg. 3.

The Food Institute Research Department. *Food Industry Review – 2000 Edition*. The Food Institute. December 2000. Pgs. 253-258.

The Food Institute Research Department. “Rating Distributors.” *Food Institute Report*. May 22, 2000. Pg. 4.

USDA, *Agricultural Outlook*, Washington D.C.: USDA, ERS, Jan-Feb., 2001, p. 51.