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**Economic and Demographic Forces Affecting the Agri-Food  
System**

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## **Economic and Demographic Forces Affecting the Agri-Food System**

### **Introduction**

Two economic forces and three demographic forces are critically affecting the agri-food system. The economic forces are the slow but steady growing affluence of U.S. society, and the growing role of women as an economic power. More and more U.S. households now have increasing amounts of discretionary income, and increasingly women are the source that income. The three demographic forces are smaller households, an aging population, and a more ethnically diverse population. While these demographic forces are distinct, they often reinforce their impacts on the agri-food system. This is particularly true for smaller households and the aging population.

These societal changes have led to the development of several drivers in food demand. These demand drivers are as follows: an increased demand for wellness, an increased interest in ethnic foods, indulgence as an attribute, and an increased demand for convenience. The Green movement, a response to environmental concerns is another driver. Concern about global warming seems to be of increasing importance to some consumers. Another attribute of food products, value, is not a new trend but remains an important consideration for many consumers. These trends will be discussed below in further detail.

These societal changes create both opportunities and threats to the agri-food industry. Americans are well fed, as is increasingly the rest of the world. Future agri-food sector growth will primarily be the result of product innovations, new products, formulations, distribution methods, etc. that address consumer preferences especially as they relate to the demand drivers.

Each of the economic and demographic forces will be discussed in turn. Then the relationship between the forces and the demand drives will be addressed. This will include further analysis and definition of the demand drivers.

### **Increase in Income**

Over time, most households in the U.S. have seen their incomes increase. This has allowed them to increase their purchases. Table 1 shows the growth in incomes from 1970 to 2000. Of particular importance is the growth in the number of households that earn more than \$75,000 a year. It is at this level that many households begin to have discretionary income to spend. The growth in the number of these households has been referred to as the emergence of mass affluence (Nunes, Johnson and Breene, p. 96).

<b>Year</b>	<b>Under</b>	<b>\$5,000</b>	<b>\$10,000</b>	<b>\$15,000</b>	<b>\$25,000 to</b>	<b>\$35,000</b>	<b>\$50,000 to</b>	<b>\$75,000</b>	<b>\$100,000</b>
	<b>\$5,000</b>	<b>to</b>	<b>to</b>	<b>to</b>	<b>\$34,999</b>	<b>to</b>	<b>\$74,999</b>	<b>to</b>	<b>and Over</b>
		<b>\$9,999</b>	<b>\$14,999</b>	<b>\$24,999</b>		<b>\$49,999</b>		<b>\$99,999</b>	
1970	3.8	7.9	6.9	13.4	14.0	20.5	20.7	7.7	5.2
1980	2.6	7.2	7.7	14.0	13.0	17.6	20.6	9.7	7.7
1990	2.7	6.4	6.8	12.8	12.2	16.4	19.7	10.9	12.0
2000	2.6	4.8	6.3	12.0	11.6	14.9	18.7	11.9	17.2
2005	3.3	5.0	6.4	12.4	11.4	14.9	18.4	11.1	17.2

Source: U.S. Census Bureau

These figures have been adjusted for inflation using the Consumer Price Index (CPI) and are in terms of 2005 dollars.

In 2005, those households that earned \$75,000 or more per year made up 23.3 percent of all households. That figure was only 8.8 percent in 1970. The number of households earning more than \$100,000 a year increased by almost 400 percent from 1970 to 2000, and increased by 54 percent from 1990 to 2000. Conversely, households

earning less than \$15,000 a year accounted for more than 18 percent of all households in 1970 and less than 15 percent of all households in 2005. This trend can also be seen in the increase in median income. Median income was \$33,746 in 1970 (in 2000 dollars), and was \$42,148 in 2000; an increase of almost 25 percent (U.S. Census Bureau, *Money Income in the United States: 2000*, p. 17). Clearly there has been a consistent increase in the level of disposable income over the past thirty years. This allows more and more consumers to purchase goods and services that have luxury attributes.

While it is true that affluence has been increasing over time, it is also true that many households have modest incomes. Also, from 2000 to 2005, the growth in income has stalled and in many cases declined. There is still a large market available for firms and products that focus on value.

### **Smaller Households**

While household incomes have increased the size of households has declined somewhat. This reinforces the trend for more discretionary income. Smaller households mean there are fewer household members who have needs to be met, and more income available for discretionary purchases.

The trend for smaller households has been consistent and will likely continue in the future. Table 2 gives the average size of households in the U.S. from 1970 to 2005.

<b>Year</b>	<b>Persons per Household</b>
1970	3.14
1980	2.76
1990	2.63
2000	2.59
2005	2.60

Source: U.S. Census Bureau

Since 1970, the size of the average household has declined by more than 17.1 percent. The average household size is projected to be 2.53 in 2010 (Day, p. 10). While the rate of decline is slowing down, the trend for smaller families will continue.

Smaller households have impacted the agri-food system in a number of ways. Smaller more affluent households have more discretionary income to spend in any way they please. It may be the case that smaller households will place more emphasis on convenience; it may be easier to justify time and effort spent on cooking for larger families than for smaller families. Smaller families also imply that a higher percentage of family members are working. This is reinforced by labor participation rates. Figure 3 shows the overall labor participation rates, those for men and those for women from 1970 to 2000.

<b>Year</b>	<b>Total</b>	<b>Men</b>	<b>Women</b>
1970	57.5	76.2	40.8
1980	59.2	72.0	47.7
1990	62.8	72.0	54.3
2000	64.8	71.9	57.5
2006	63.1	70.1	56.6

Source: U.S. Census Bureau

Table 3 shows that the labor force participation rates for men have been steady or declining slightly since 1980. The increase in the total labor participation rate is completely due to women entering the labor force. More people working means less time for other activities such as cooking. Households are more likely to substitute eating away from home and easy to make meals for traditional home cooked meals.

### **The Economic Power of Women**

One implication of the increase of women in the labor force is the growing economic power of women. On average, women still earn less than men but the gap is narrowing. In the 2006-07 school year, women earned 58 percent of the bachelor's degrees and 61 percent of the master's degrees (U.S. Census Newsroom, p.3). Furthermore, 32 percent of women 25 to 29 have at least a bachelor's degree compared to 25 percent of men (U.S. Census Newsroom, p.2). Women in their 20s earn more than men in their 20s. Also, women are postponing marriage which allows them to possess more disposable income.

The number of businesses owned by women is also increasing. There are 6.5 million businesses in the U.S. owned by women, which is 20 percent higher than in 1997. The rate of women owned businesses is increased at twice the rate of the national average. Women now own 28 percent of all non-farm businesses (U.S. Census, Newsroom, p.3).

While it may be a generality, women appear to be more health conscious than men. Women also tend to be more interested in the environment than men. Packaging locally produced and other product attributes may appeal to women. Single women, with or without children may place a premium on food products that save time.

## An Aging Population

Another demographic change affecting the U.S. agri-food system is the fact that the U.S. population is aging. At the beginning of the 20<sup>th</sup> Century only 4.1 percent of the population was aged 65 or older (Hobbs and Stoops, p. A-19). The trend towards an older population is outlined in table 4.

**Table 4: Percentage of the Population 65 Years and Older: 1970-2020**

<b>Year</b>	<b>Percentage of the Population 65 Years and Older</b>
1970	9.9
1980	11.3
1990	12.6
2000	12.4
2010*	13.2
2020*	16.5

\* Estimate

Source: U.S. Census

While the percentage of the population aged 65 and older declined in relative terms from 1990 to 2000, it actually increased in total numbers. In 2000, there were 34,991,753 persons 65 or older (Hobbs and Stoops, p. A-17), an increase of 12 percent over 1990. The increase in the level of immigration (which tends to be younger people), has moderated the relative increase in age for the nation as a whole. Nonetheless the number of older residents of the U.S. is increasing.

Furthermore, it is expected to increase in the future. A large population cohort (the baby boomers) will soon be adding to the numbers of persons over 65. Table 4 shows the middle series estimate for the number of persons 65 and older in 2010 and 2020. It is estimated that the number of person 65 and older will account for 16.5 percent of the population in 2020. If this is the case, almost one person in 6 in the U.S. will be in this age group.

A potential market of 35 million people, and expected to increase is large. Older residents have different nutritional issues than younger members of society. Wellness will be an issue for some of these consumers. Convenience and packaging designed for single serve meals will also be important for a large number of older consumers. Some older consumers are on limited and fixed incomes. Consumers in this situation will be value conscious.

### **Ethnic Diversity**

The U.S. is becoming more ethnically diverse. Partially this is due to higher birthrates among some ethnic groups, but to a great extent the increased diversity is due to increased immigration from other countries. Two of the major areas of growth are in the number of Asian and Hispanic residents. Of the 33.5 million foreign born persons living in America 17.9 million are from Latin America (including the Caribbean) and 8.4 million are from Asia (including the Pacific Islands) (Larsen, p.1). Table 5 shows the growth in the population of the Asian and Hispanic populations over time.

**Table 5: Percentage of the U.S. Population of Asian and Hispanic Origin: 1970-2004**

<b>Year</b>	<b>Percent Asian</b>	<b>Percent Hispanic</b>
1970	0.7	NA
1980	1.5	6.4
1990	2.9	9.0
2000	4.4*	12.5
2004	4.7	14.2

\* figure is for 2002.

Source: U.S. Census Bureau

The 1980 census was the first that included Hispanics (regardless of race), as a separate group. In 2002, there were 12.5 million Asian and Pacific Islanders living in the U.S. (Reeves and Bennett, p. 1); in 1990, that figure was 7.3 million (Hobbs and Stoops, p. A-23). From 1990 to 2002, the number of Asians and Pacific Islanders living in the U.S. increased by 5.2 million or 71.2 percent.

The increase in the number of Hispanics has been well documented. Hispanics either are or soon will be the largest ethnic or racial group (after non-Hispanic whites) in the U.S. In 1980, there were 14.6 million people of Hispanic origin the U.S., that figure stood at 35.3 million in 2000 (Hobbs and Stoops, p. A-37); the number of Hispanics increased by 141.2 percent in 20 years. It is expected that there will be 43.7 million Hispanics in 2010, which is estimated to be 14.6 percent of the population. While this growth is spread throughout the country, it is concentrated in the Southwest.

However, it is important to note that this level of aggregation does not tell the whole story. The tastes and preferences of many Indians are different than those of many Chinese. The same is true in the Hispanic community; the tastes and preferences of Puerto Ricans and Cubans are going to be different than those of Mexicans and

Guatemalans. This creates a number of opportunities for firms interested in meeting the needs of these groups of consumers.

The most obvious impact the increased diversity of U.S. society has on the agri-food industry is in the market driver of ethnicity. This impact is felt to two ways; first the immigrants will likely want authentic food from their native societies. This desire may decline in second and succeeding generations. It may be the case that the desire for convenience may drive the market for ethnic foods towards mass produced homogenized products, similar to what has happened with much of Italian and Chinese food, and perhaps what is currently happening with Mexican food. However, it should be noted that many members of these groups have limited incomes. This is particularly true of immigrants and those with a Hispanic background. Value will continue to be an important attribute for many of these consumers.

The other ethnic trend is for increased consumption of foreign influenced foods by other ethnic and racial groups. The desire to try something different and to diversify their menu choices has also increased the demand for ethnic and ethnically influenced foods. For example, most customers in many Mexican and Thai restaurants are not Mexicans and Thais respectively.

### **The Demand Drivers Affecting the Agri-Food System**

#### **Wellness**

In this context, wellness reflects food attributes that have perceived impacts on consumers' health and wellbeing. One aspect is the desire for food products that do not cause harm as a result of pathogens and carcinogens. Examples are foods that are free of e-coli, hepatitis A and other pathogens that cause food poisoning. BSE remains a

concern for some consumers. Pesticide residues remain a concern for some, not for their impact on the environment as much as its safety in food products. The growth in the organic market is driven more by the desire to consume safe foods than it is by environmental concerns (Mintel, *Organic Foods and Beverages*, p. 11).

Obesity is a major health issue facing U.S. society. Table 6 shows the percentage of Americans 18 and over who are overweight or obese.

**Table 6: Percentage of Overweight and Obese Adults  
1994-2004**

<b>Year</b>	<b>Percent Overweight</b>	<b>Percent Obese</b>
1994	35.4	14.4
1996	35.5	16.8
1998	36.3	18.3
2000	36.7	20.9
2002	37.0	22.1
2004	34.1	32.2

Source: Mintel, 2004 Center for Disease Control

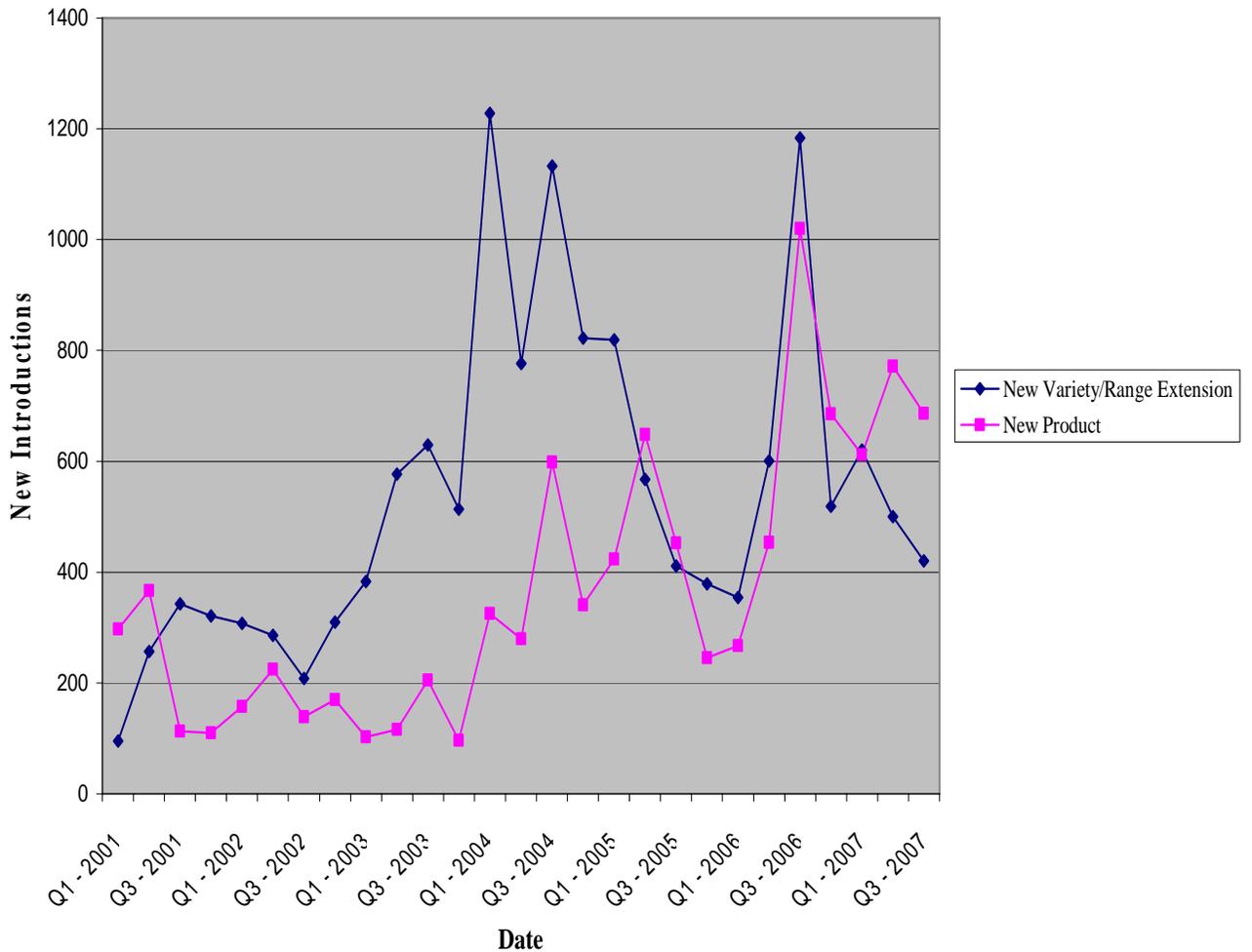
In 2002, 59.1 percent of the population was either overweight or obese. It is anticipated that the figures are even worse for 2004. This epidemic now includes children. According to the Centers for Disease Control, 15.6 percent of people between the ages of 6 and 19 are overweight (Mintel, *Sugar and Sweeteners*, p.11). The number of overweight and obese people has become a major health policy issue. Foods that address this issue may find a market provided that taste is not sacrificed.

Another aspect of wellness is avoidance of foods that contribute to chronic diseases and conditions such as hypertension, and heart disease. Many of these diseases are a result of obesity. The interest in low carbohydrate foods are an example of this consumer trend, as are foods and beverages that are promoted as being low in fat and

calories. It is likely that once trans fatty acids are added to food labels there will be a movement away from foods that possess this characteristic.

The interest in foods that do not possess negative characteristics appears to be a global phenomenon. The Mintel Group's Global New Product Database (gnpd) tracks new product introductions throughout the world. Figure 1 shows the new product introductions in the U.S. from 2001 through August of 2007 with what the gnpd refers to as "foods minus" claims; new food products that claim to have little or none of a negative product attribute, such as fat, sugar, preservatives, etc.

Figure 1: Food Minus Introductions 2001-2007



Source: Global New Products Database (GNPD)

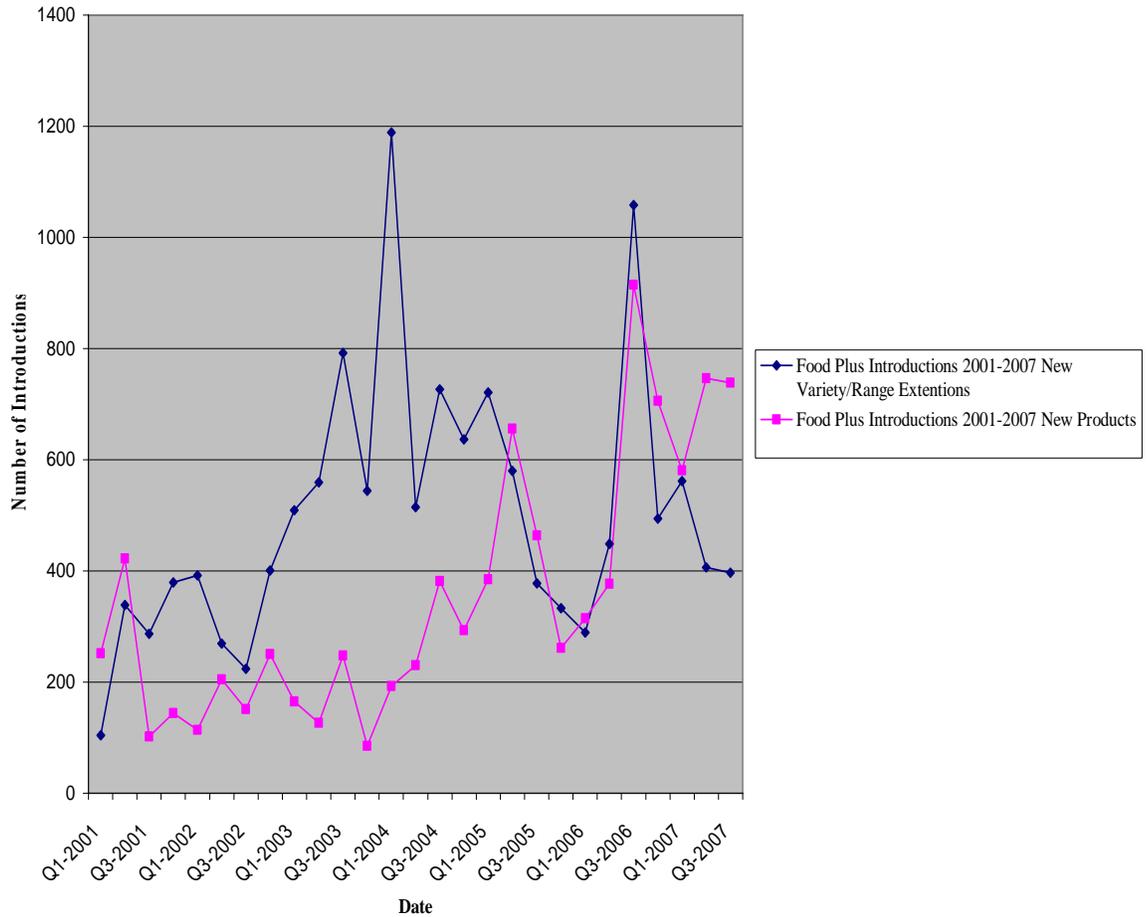
There was a dramatic increase in the number of introductions from 2001 through 2004, a reduction in the rate of introduction in 2005 and the first part of 2006 and another dramatic increase in 2006. Throughout most of this time period, the number of range extension, new flavors, packaging, etc. exceeded the number of truly new products. That trend appears to have reversed itself in 2007. Truly new products, new brands, companies etc. appear to be on the ascendancy with respect to this product attribute.

New introductions whether in terms of new varieties and range extensions of existing products or in terms of new products has been great during this time period. Even when introductions were comparatively low such as the fourth quarter of 2005, there were more than 500 introductions in the U.S. Quarters in which more than 1,000 introductions were common during this time period.

An additional aspect of the demand for wellness is the creation of foods and beverages that actually promote or improve wellness. Examples are the promotion of foods that are high in vitamins and anti-oxidants. There is a growing trend toward foods that promote themselves are actually burning fat. There are also a growing number of food and beverage products that have pharmaceutical benefits. Food and beverage products that are high in probiotics, prebiotics and Omega 3-fatty acids are examples.

The gnps also tracks foods that have “food plus” positioning claims; food products that have positive product attributes as opposed to the absence of negative product attributes. Figure 2 shows the number of new food product introductions that claim to have such attributes.

Figure 2: Food Plus Introductions 2001-2007



Source: GNPD

There has been an explosion of food items geared for people with diabetes. There has also been an increase in the number of food items that claim to be all natural. However, the “food plus” market does not seem to be as well developed as the “food minus” market; the number of introductions are not as great. One implication of this is that there may be more room for growth and new product development in the area of “food plus” products. From 2001 through 2004 new variety and range extensions were the dominant form of new introductions, since that time, new products have been the focus of new products.

When taken together new food products or extension of existing food products that make some type of health claim number in the hundreds every month. Of all the demand drivers wellness is the most active in terms of new product introductions.

There are a number of economic and demographic factors that have made wellness a demand driver. An older and more sedentary population is more interested in food and beverage items that either improve health or do not adversely affect health. Chronic problems such as diabetes and osteoporosis are also driving the demand for products that are low in sugar and carbohydrates as well as the demand for food and beverages with added calcium. Food as medicine or “nutraceuticals” is becoming more common. Some consumers now have the income to afford to pay for products that impact health in a positive way.

### **Ethnicity**

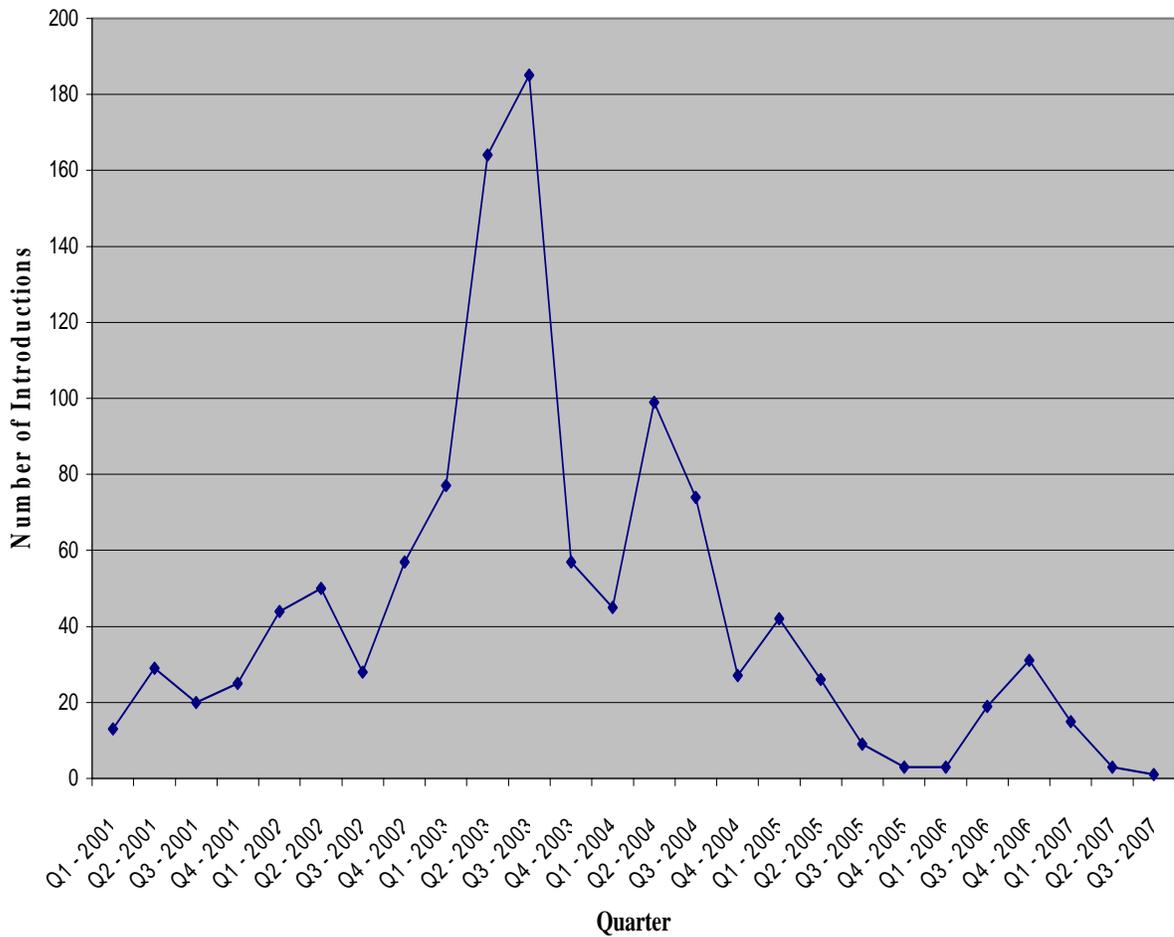
Ethnic products can be defined as those that have food and beverage traits that appeal to specific ethnic groups. This driver has two sub-categories: foods with an authentic appeal to the ethnic group itself; and foods marketed to the wider U.S. population that has been influenced by ethnic tastes and ingredients.

Obviously, a major source of this demand driver is the growing ethnic diversity of the U.S. This has impacted the demand for number of ethnic foods and markets. Food retailing firms that are geared towards Asian products have become common. Restaurant establishments that specialize in Indian, Thai, and Middle Eastern cuisines are also becoming more common. Table 3 shows the level of new product introductions in the area of ethnicity.

The influence of ethnic food will likely become more widespread. Americanized versions of foreign foods have developed. This has happened with Italian food, and may be happening with Mexican food. These foods will be a combination of foreign and American tastes. Flavors typically thought of foreign, such as curry, might work their way into foods traditionally thought of as American.

Figure 3 shows the new product introductions for ethnic foods. Compared to foods with wellness claims, foods with ethnic claims are quite small, and have been trending downward since 2003.

Figure 3: Ethnic Introductions 2001-2007



Source: GNPD

This may be due to several reasons. These numbers are based on self reporting by the food firms themselves, and ethnic may not be considered by the food manufacturers. Also, major food manufacturers may have difficulty in successfully launching products. If this is the case, smaller firms with a true understanding of ethnic markets, or develop relationships with members of the targeted ethnic group have a potential to develop successful products.

Another major factor influencing the ethnicity is increasing affluence. This has allowed some members of society to travel widely and experience different cultures. It has also allowed increased experimentation with foreign foods, particularly in a restaurant setting. Most foreign restaurants depend on the patronage of other ethnic groups to stay in business.

Ethnic foods appeal to some consumers' sense of adventure. These consumers are looking for new flavors, tastes and food experiences. In this respect, the ethnic food driver is very similar to the indulgence driver.

### **Indulgence**

Indulgence is a broad category that covers many product attributes and characteristics. Products that appeal to indulgence are those designed to meet the consumer's deeply felt desires as opposed to their needs. However, these desires also may include the consumer's belief system and other very important aspects of the consumer's life. Indulgence in this sense does not necessarily mean unimportant or frivolous, but rather food and beverage items need to possess characteristics above and beyond the simple ability to maintain life or to provide minimum quality at a minimum price.

As a result, indulgence can cover a wide range of products. One such characteristic is luxury. Examples include beer from a microbrewery, expensive wines and chocolates, gourmet coffees and cheeses. According to a survey, 45 percent of the respondents stated they enjoyed eating foreign foods (Mintel, *Edible Fats and Oils*, p.11) which also interacts with the demand driver of ethnicity. Another aspect of indulgence is cooking as a hobby, cooking gourmet meals as a lifestyle choice. According to one survey, 20 percent of respondents like to cook for fun and 49 percent “really enjoy” cooking (Mintel, *Edible Fats and Oils*, p.11). For some, cooking and preparing food is a basis for social connectedness, an opportunity to interact with others. Fine dining at a restaurant is another example of using luxury appealing to the sense of indulgence. The experience of the food and atmosphere meeting the desire of the consumer is the primary indulgence attribute. This includes the desire to experience new foods, tastes and varieties.

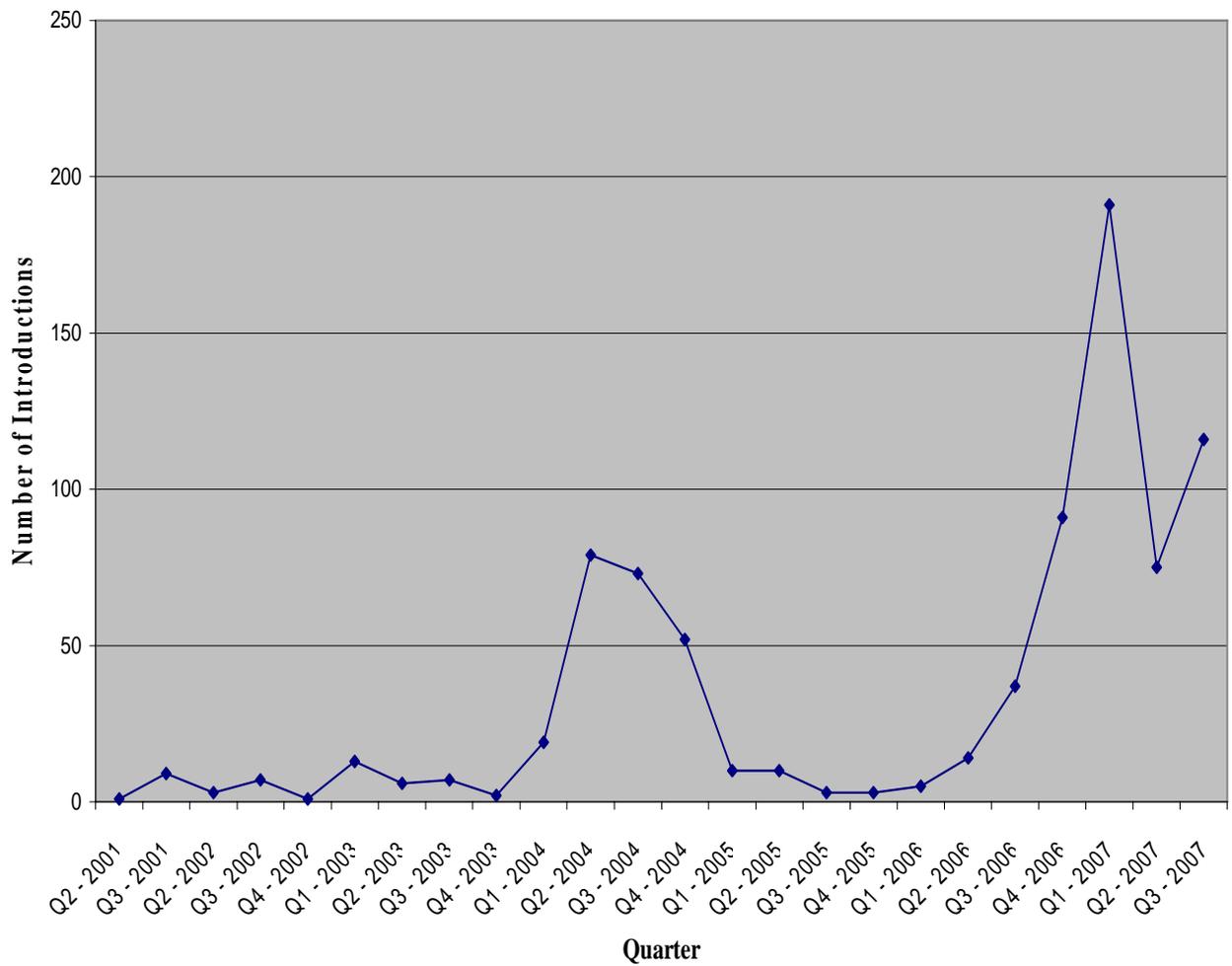
Emotional connectedness is also an attribute of indulgence. Some foods appeal to a consumer’s sense of nostalgia. The phrase “comfort food” points this out. Meat loaf and homemade chocolate chip cookies are examples of foods that appeal to emotional connectedness.

Another aspect of indulgence foods is its ability to reflect the values of consumers. Examples of this are dairy and meat products from animals raised in a manner perceived as being humane, such as free range chicken and milk from cows that are not treated with hormones. Consumers who purchase organic foods or foods grown in the area they live primarily because of their minimal effects on the environment are another example. Increasing ethnicity is also reflected in the values of consumers. A

growing Muslim population will increase the demand for foods processed in a manner that conforms to Muslim dietary laws.

Figure 4 shows the number of product introductions with indulgence as a product claim. Compared to foods with wellness claims the number of introductions is very small. However, there is an upward trend in the number of introductions.

**Figure 4: Indulgence Introductions 2001-2007**



Source: GNPD

The primary source of the growth of indulgence products is rising affluence, although this demand driver also interacts somewhat with the wellness driver. A

consumer may buy fewer candy bars to keep the weight off but the candy bars he or she buys are more expensive, and are of higher quality or more exciting taste and variety. Affluent, less price conscious consumers will look for products that satisfy more than their needs, they will look for products that enhance their lifestyle, their values and their beliefs. Smaller households also allow consumers with few or no children to experiment and seek out new experiences. The growing economic power of women also plays a role in indulgence. Single women, especially younger women with disposable income may be another potential market segment.

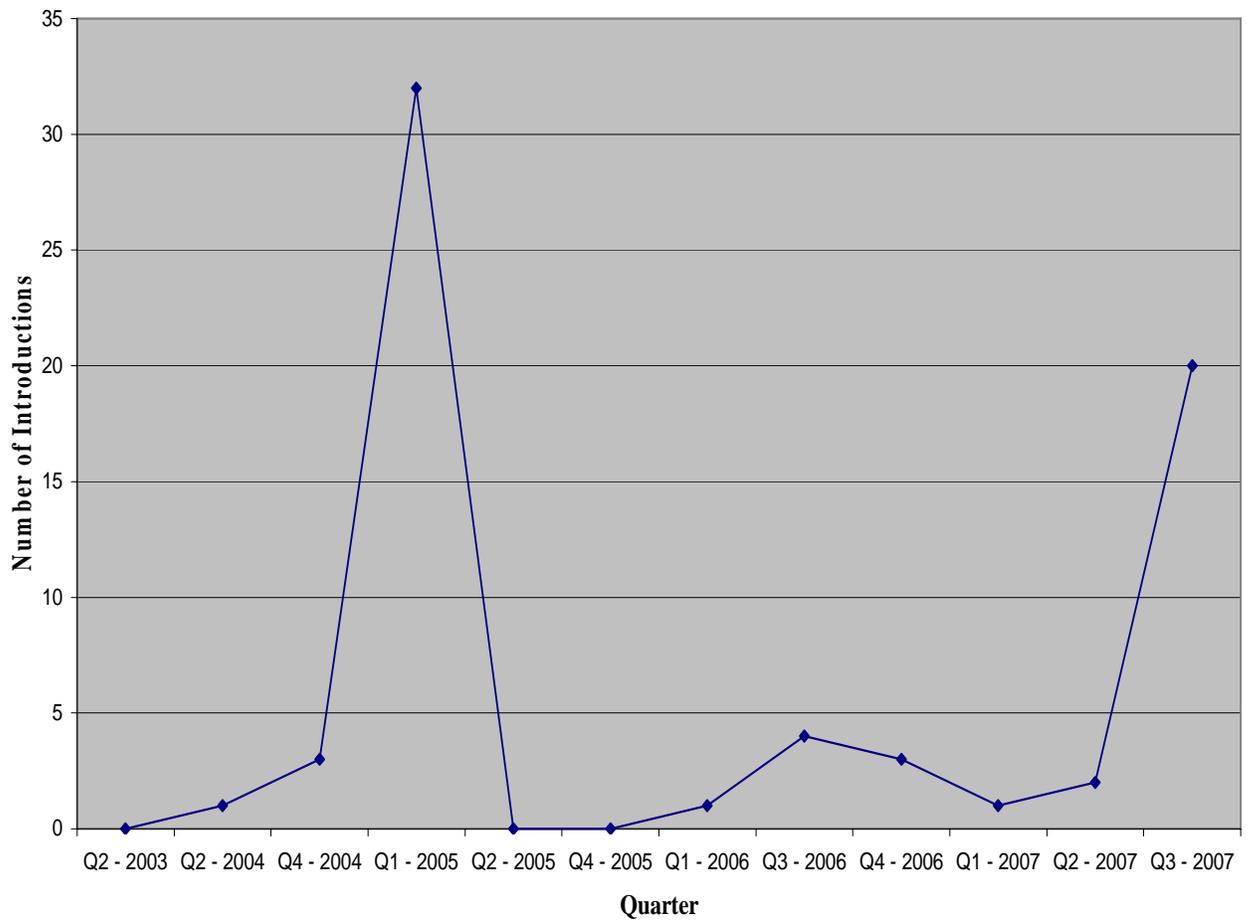
A secondary source of the growth of indulgence is an aging population. Households with the income and the time are better able to pursue hobbies and develop new interests. This includes new experiences with food and beverages.

### **“Green”**

There has also been an increased interest on the part of some consumers in products that either improve the environment or minimize environmental impacts; this interest is often considered part of the “green movement”. In some respects this is an aspect of indulgence. Some consumers buy “green” products because it appeals to the consumer’s value system. The Global New Product Data Base tracks two types of environmental product introductions, those that have environmental packaging and those with some type of environmental claim.

Figure 5 shows the number of environmental packaging introductions from 2003 to the third quarter of 2007.

Figure 5: Green Packaging Introductions 2003-2007

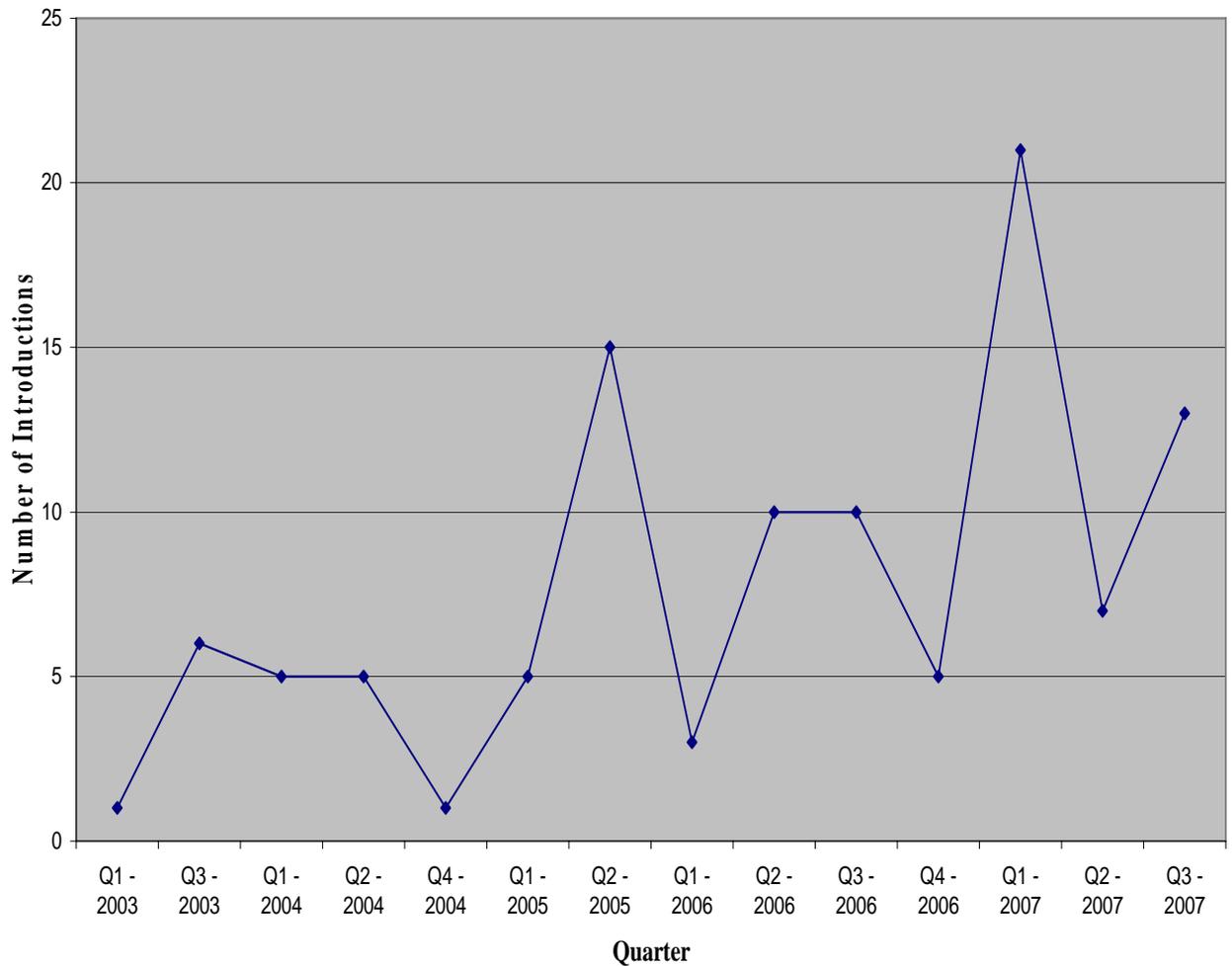


Source: GNPD

The number of green packaging introductions is very low compared to wellness introductions. There was a spike in 2005 but there has been a clear upward trend in 2007. This trend has the ability to not only increase the demand for the product, but if minimal or reduced packaging is used also has the potential to reduce costs for the firm.

Figure 6 shows the number of product introductions that have positive impacts on the environment as a product attribute as promoted by the firm.

Figure 6: Green Product Introductions



Source: GNPD

While there has not been a great deal of new product introductions, there has clearly been an upward trend since 2003. This trend is likely to continue especially if the interest in Global Warming is more than just a fad. Furthermore, there are many ways a product can be promoted as being good for the environment.

One way that a product can be promoted as good for the environment is locally produced. Locally produced products take less gasoline to deliver to market. Products that use alternative energy to be produced are another way to appeal to this demand

driver as is the use of fewer or no pesticides. The green movement is much stronger in Europe and to a lesser extent Canada than it is in the U.S. However, consumer trends in Europe often eventually reach the U.S. If this is the case, with products that appeal to the environment, green products will become a fairly large demand driver. Furthermore, give the relatively small number of product introductions this is a developing area, which gives smaller firms an opportunity to be successful.

### **Convenience**

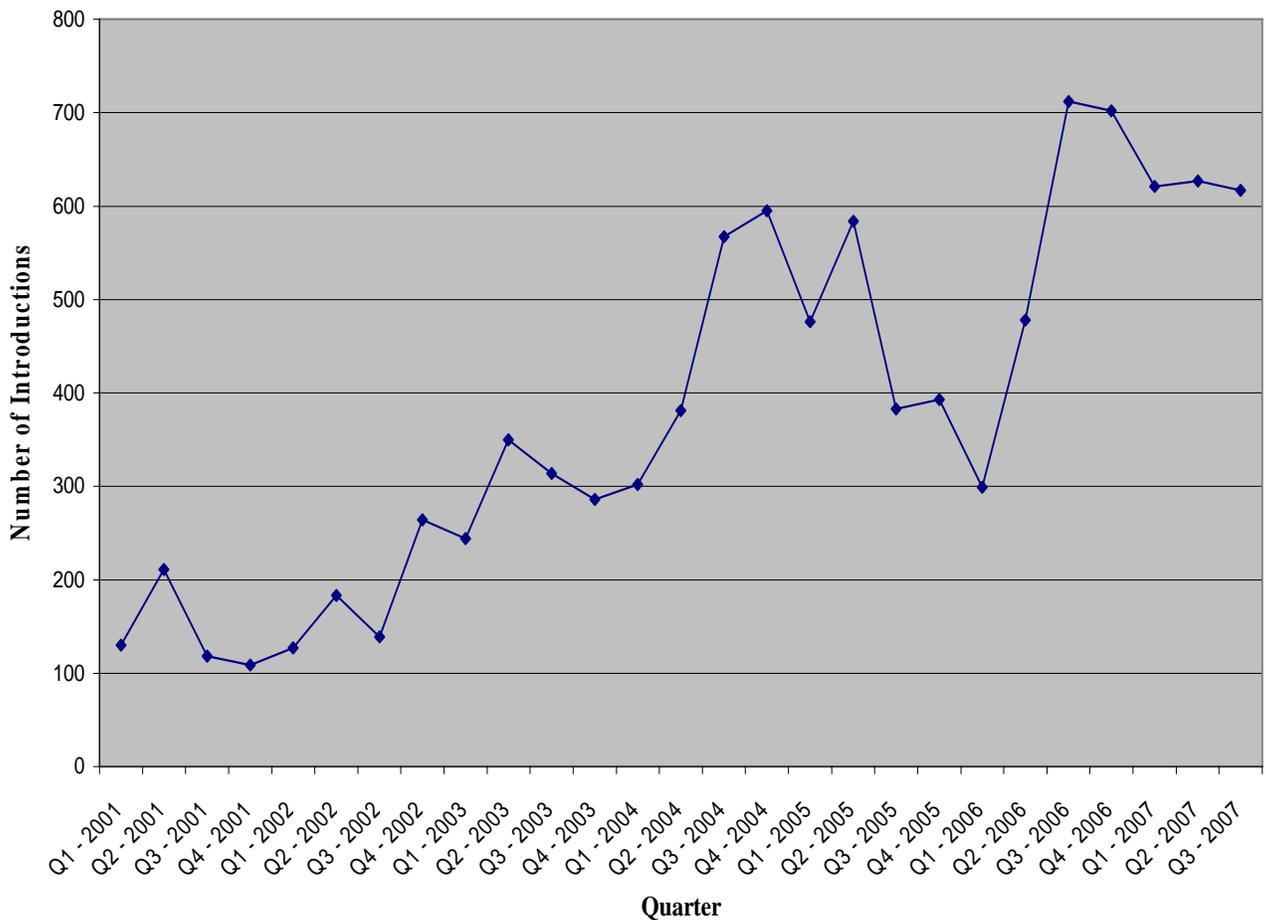
Of all the demand drivers shaping the agri-food system convenience may be the most important. Convenience can be defined as anything that makes life easier for the consumer such as: prepared foods that can be consumed “on the run” or at home; hand held foods that enable the consumer to do something else while eating such as driving; partially prepared foods that reduce or eliminate preparation time e.g. instant oatmeal, precut salads; foods in packaging that makes consumption easier such as microwavable popcorn, Lunchables, and single serve yogurts; or bundling of products such as hamburger helper, frozen dinners etc.

Several factors have led to the demand for convenience. Smaller families increase the per person time and effort cost of cooking. It also makes packaging for smaller households more important. More women in the workforce and daily commutes also reduce the amount of time many households have for food preparation. Women traditionally have been the preparers of meals, and their growing economic power makes the tradeoff between paid work and house work more difficult. The longer work week of many households has increased also reducing the time available for preparing meals.

For many households that earn \$75,000 or more, time has become more valuable than money. As a result, these households are willing to pay a price premium for foods that are convenient. Additional packaging, ease of use etc. in exchange for a higher price is considered a good trade-off for these consumers.

The importance of convenience is shown in figure 5 which shows the number of product introductions with convenience as an attribute.

**Figure 7: Convenience Introductions 2001-2007**



There has clearly been an upward trend in the number of product introductions that feature convenience from 2001 to the present. Currently, more than 700 new products a month are introduced that feature convenience as a product attribute.

While time is one important aspect of convenience it is not the only one. Another important aspect of convenience is ease of preparation. Pre-cut salads are an example. Another example is the growth of foods that can be prepared in one dish, such as premixed crock pot dishes. These meals are very easy to prepare but may actually take several hours to cook. However, there is little oversight or thought involved in the actual cooking of the meal.

Another consideration of convenience is the development of meal solutions. Packaged or pre-prepared food items that provide an entire meal. Meal solutions not only save time and effort, but also reduce time shopping and planning meals.

## **Value**

The final demand driver is the best understood. Food and beverages that meet the consumer's needs at the lowest price fulfill the consumer's preference for value. Price coupled with a basic level of performance is the hallmark of value. The role of price is also the best understood product attribute in economics.

There are a number of examples that appeal to value. Private label brands that sell at a price discount are an example, as are canned fruits and vegetables. Certain restaurant chains that sell pre-made standardized products are another example.

While perhaps less exciting than the other demand drivers, value will continue to be important with many consumers. The 71.7 percent of households that earn less than \$75,000 will likely remain price conscious for many, if not most products. This is particularly true for those households that earn less than \$50,000 which is still more than 50 percent of all households. Immigrants with limited incomes may also be value

oriented. In some respects this limits the ability to charge price premiums for ethnic foods.

An aging population may also place more emphasis on value. Many retired people have fixed incomes. Policy issues such as rising health care and the future viability of social security may also affect the purchasing choices of older consumers, with the result being a greater emphasis on value being placed by these consumers.

### **Implications for Firms in the Agri-Food System**

The number of drivers has increased the opportunities for firms in the agri-food system. Controlling costs will continue to be the most important aspect for firms interested in providing products that offer value to consumers. To be successful providing value, a firm will need to be the low cost producer.

Costs are less important in providing products that address the other drivers. Increased ethnicity will increase the demand for authentic foreign foods and foods that are influenced by foreign flavors and characteristics. This increases the range of products that can be offered to consumers, and creates additional markets available to firms in the agri-food industry. This transcends beyond the Mexican market and includes markets such as the Indian and Middle Eastern market.

Convenience remains a very important demand driver. More affluent households and more working women facing time constraints place a higher value on foods that are easy to prepare and can be consumed on while doing something else. Smaller households increase the demand for packaging that reflects servings for one or two individuals. This demand driver is well understood, but opportunities remain.

Wellness is a driver that presents a great deal of potential for firms willing to meet this driver. An aging and affluent society is becoming more interested in healthy foods, both those foods that are free of “bads” such as fat and sodium and have more “goods” such as antioxidants and vitamins and other attributes. This demand driver also has a great deal of potential in the area of nutraceuticals and other functional foods. In many ways, the wellness market is just developing as the science and consumer awareness continues to grow. This is an area that may have a great deal of potential for firms and new product introductions.

Of all the demand drivers, indulgence perhaps provides the most options for firms in the agri-food sector. Indulgence covers many submarkets including luxury, social interaction, and religious concerns to name a few. Also there are many consumer segments that agri-food firms may wish to pursue. Insofar as indulgence appeals to the most deeply held preferences and beliefs of these consumers the potential to obtain price premiums may be the highest. Rising affluence and the growing economic power of women means that products that appeal to indulgence will have good potential for success.

Interest in food products that enhance the environment or minimize adverse effects on the environment is growing. While in some respects this demand driver is similar to indulgence it is becoming large enough to be treated separately. Concern about global warming may provide additional impetus to this demand driver.

One way firms in the agri-food industry can capture higher profits is by developing products and markets that address one or more of these drivers. Examples include prepared ethnic foods that would appeal to ethnicity, convenience and perhaps

indulgence. Another would be prepared organic foods in single serve containers; this would appeal to wellness and convenience while taking into account smaller household size. Products that appeal to a number of drivers simultaneously have the greatest potential to be successful.

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