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THE CHANGING CONSUMER ENVIRONMENT

Moderator: Harry C. Krueckeburg, Professor
Colorado State University

Imaging the Future: The Demographic Role in Food Demand

by

Frank Panyko
Vice President
The Food Institute
Fair Lawn, NJ

U.S. population growth, that all-important driving force in food consumption, is slowing down. In the 1955-60 period, for example, at the height of the "baby boom," the U.S. population increased by some 14.7 million people; over the past twenty years or so, each five-year period has seen the addition of only about 11 million people. Yet population growth between 1990 and 1995 is projected to fall below ten million for the first time since the 1940s. The predominant demographic factor, then, is the slowdown in the overall rate of population growth. This affects the demand for food and all consumer products.

Today we see a significant aging trend, a phenomenon primarily attributable to the aging of the baby boom generation, born between 1946 and 1964. This group makes up one-third of the U.S. population today, approximately 76 million people. (We use the word "group" here rather loosely; it is difficult and potentially misleading to generalize about this vast assortment of people.) Also affecting this aging trend is an extension of life expectancy; there are more elderly among us than ever before.

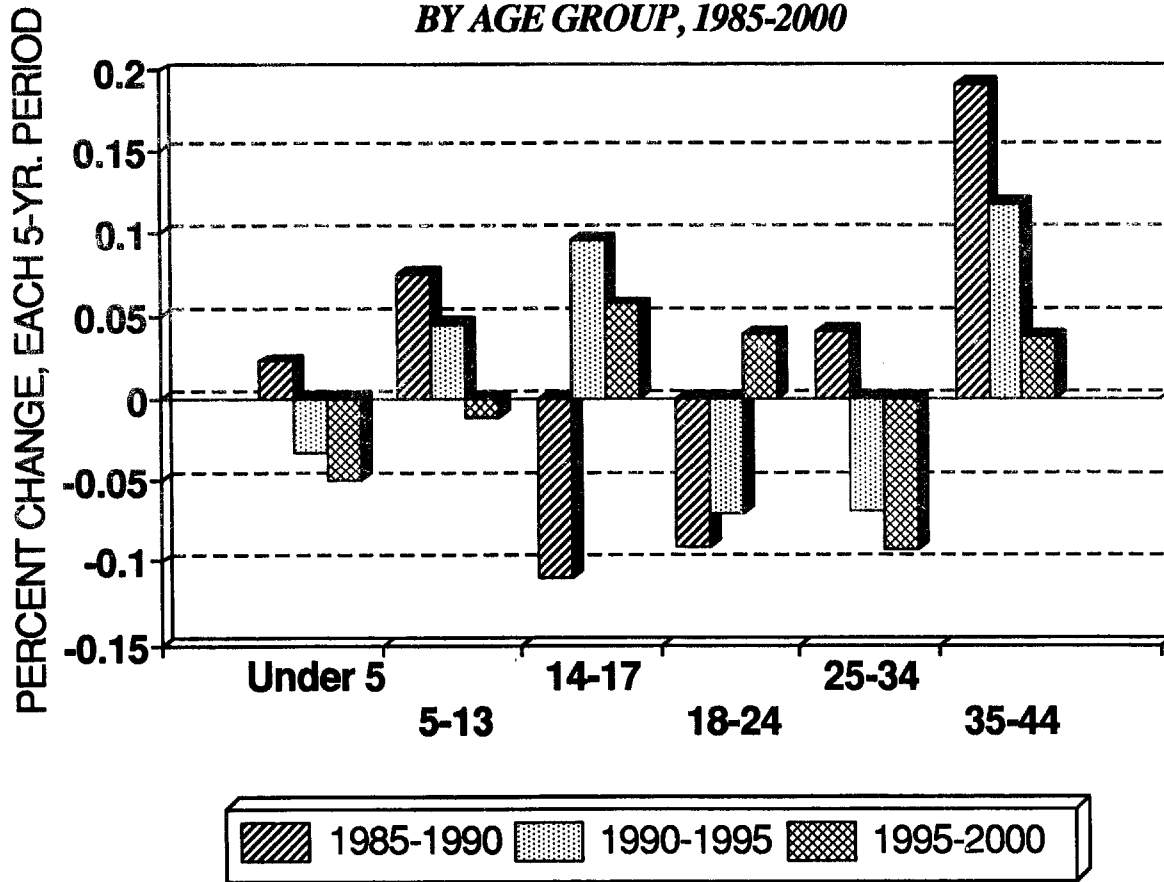
Census Bureau projections tell us that both the 35-44 and 45-54 age groups are expected to increase by about 12 percent in the first five years of the coming decade, as more baby boomers enter this group. In the same period, the 65-and-over group will grow by 7 percent. At the other end of the age scale, the rolls of the 18-to-34 group will decline some 7 percent (Chart No. 1, based on Census Bureau projections).

In the 1995-2000 period, the rate of increase in the 35-44 group will slow to about 4 percent; the over-65s will increase by only 3 percent, while the 45-54 group will gain by a big 17 percent. The same period will see another decline in the number of 25-to-34 year olds, this time by around 9 percent. As we can see, the age shift is away from youth, to an older population.

The economic and social impact of the baby boom generation started in the crib and the playpen, and continued into over-crowded classrooms and college campuses. Yet, as great as this impact has been, the past is merely prelude since

CHART NO. 1:

**PROJECTIONS OF THE U.S. POPULATION
BY AGE GROUP, 1985-2000**



this generation approaches the years of peak earning power.

In the 1980s, economic power has been reordered in the sense that there has been considerable movement of national household income from younger groups to middle-aged groups. In specific terms, we find that households headed by persons under age 25 today account for a smaller percentage of aggregate income than was true a decade ago. At the same time, the 35-to-44 age group has increased share, growing from around a 21-to-22 percent share of aggregate household income in the last decade to 26 percent by 1987 (Chart No. 2, based on Census Bureau data).

We have seen decreasing shares of household income in the 45-to-64 group, while the 65-and-over household group has gained. Cash, we might say, is flowing through different hands--more mature hands--than in the recent past.

The best way of gauging the scope of this economic development is in actual "dollar and cents" terms: between 1980 and 1987, for example, the aggregate income of households in the 35-to-44 group gained by \$387 billion, far more than any other age sector. This group alone accounted for almost one-third of the increase in household income in the 1980s.

This realignment of buying power evolved as the number of households in each age sector changed. Additional transformations stemmed from the growth in average income of each household group. Just since 1984, for instance, households in both the 35-to-44 group, and the 45-to-54 group, have posted a 31 percent gain in average household dollars, far above the rate of increase for any other age groups. Demographic change, then, can result in important economic shifts.

For the food industry, this carries tremendous importance, because food expenditures rise with income. This affects spending for food away from home more than food consumed at home; yet it is still important. When we overlay onto economic shifts other factors characteristic of a mature populace, such as higher levels of education, varied lifestyles, perhaps a greater degree of sophistication, and so on, the synergistic effects become rather powerful.

We began to study these types of changes in earnest at The Food Institute a few years ago, because it seemed to us that without a better understanding of change in "dollar-and-cents" terms, something was sorely missing. Having some understanding of the upward age shift, for

instance, is extremely useful, but augmenting that with estimates of the share of food expenditures accounted for by various age groups would bring a new focus to the picture. And this is exactly the type of question we set out to answer. We also sought to determine the direction of movement of market shares among various household age groups. Our research culminated in the publication of a study, "Demographic Directions for Food Marketing," in September 1987, updated and expanded to two volumes in July 1989.

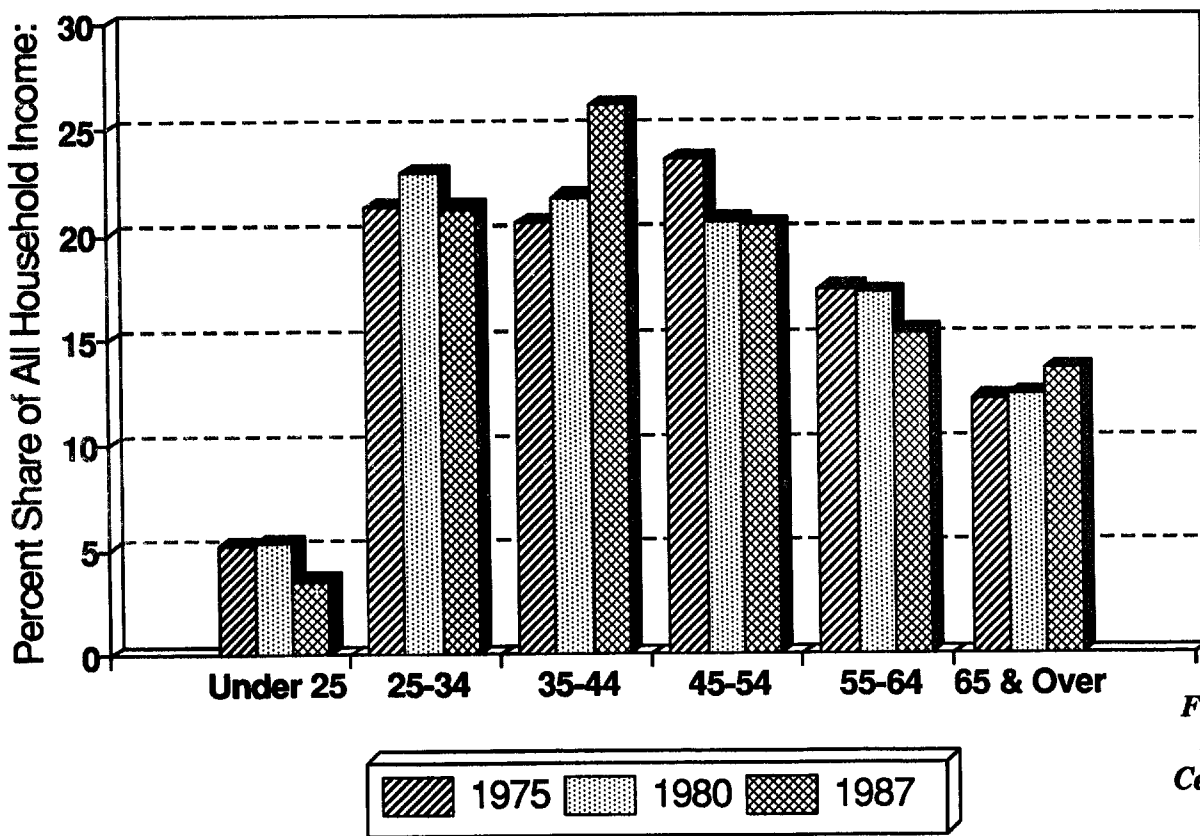
For analytical purposes, we used household spending data from the Consumer Expenditure Surveys of the Bureau of Labor Statistics (BLS), which reviews patterns of food spending at home and away from home for households in seven age groups (under 25, excluding students, 25-34, 35-44, 45-54, 55-64, 65-74, and 75-and-over). The variation in the level of food expenditures is, understandably, quite broad.

Total household expenditures represent the "bottom line," of course, but per capita spending is a major benchmark for food marketers. Reviewing BLS data, we found that per person expenditures for food at home in the 25-to-34 household group are 8 percent higher than in the under-25 group. Spending rises again in the 35-to-44 group, by a considerable 19 percent; in the 45-to-54 group we see another 8 percent gain above this (Chart No. 3, based on the 1986 BLS Consumer Expenditure Interview Survey).

And here is where things get really interesting: per person expenditures for food at home rise yet another 13 percent in the 55-to-64 group, and another one-half of one percent above that in the 65-to-74 household group. There is a minor decline in per capita expenditures among the 75-and-over household group (only 5%). This is a very strong demographic trend, then, suggesting that increased food expenditures accompany a maturing populace.

With away-from-home spending, patterns show something different. The under-25 group spends rather heavily for food outside the home, but then, as families start up, spending falls off by 16 percent per person in the 25-to-34 group. After this, we begin to see gains again: the 35-to-44 group spends 11 percent more per person for food away from home than does the 25-to-34 group. The 45-to-54 group boosts out-of-home spending by another 29 percent. The drop of 11 percent noted in the 55-64 group is not drastic, nor is the 4 percent decline for spending in the 65-to-74 group. The oldest household group, 75-and-over, spends the least for food outside of the

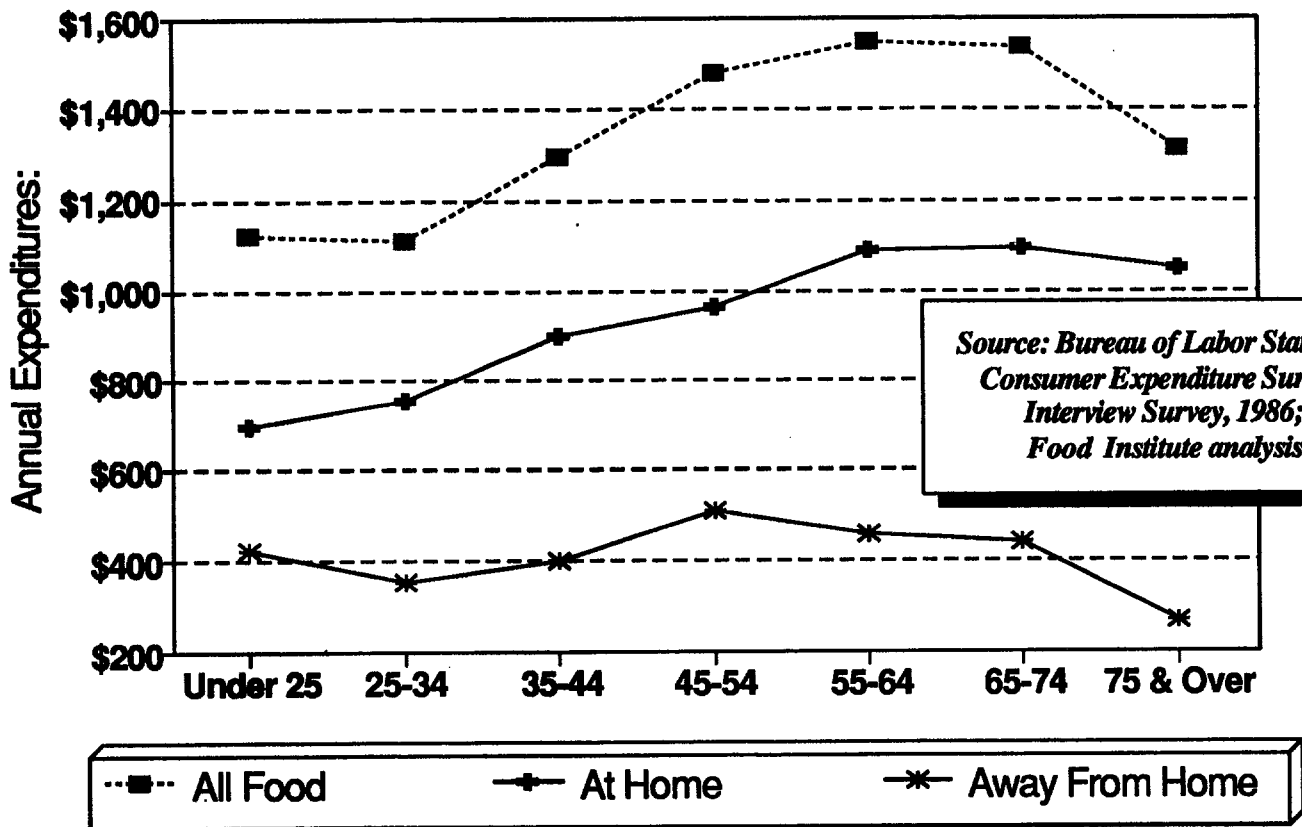
CHART NO. 2:
INCOME SHARE CHANGES, 1975-1980-1987
HOUSEHOLDS BY AGE GROUP



*Food Institute
analysis of
Census Bureau
data*

CHART NO. 3:

**PER CAPITA FOOD EXPENDITURE TRENDS
HOUSEHOLDS BY AGE OF HOUSEHOLDER**



home, on a per capita basis, with expenditures falling 39 percent from the 65-to-74 group.

Here, then, we have an "up and down" pattern suggesting very different markets for restaurant food: a relatively heavy-spending--but declining--youth market, along with a dominant--and growing--mature market.

Beyond the level of expenditures allowed for by higher incomes, of course, we have the factor of household size--the number of persons contained in each household unit--as an important determinant of food spending. What we find is that middle-aged households generally tend to be larger. Roughly seven out of ten households in the 35-to-54 group overall are married-couple families; six out of ten families in the 35-to-44 group have one or two children; about four out of ten families in the 45-to-54 group have one or two offspring.

In developing projections for the future, we studied Census Bureau projections of the number of households in each age group through the year 2000. We find that in the 1987-2000 period, the number of households in the under-35 group is seen as declining by some three million, while the number of households in the broad 35-to-54 group is likely to increase by over 15 million. The number of households in the over-65 group is projected as increasing as well, by around 3.6 million. The demographic trend, then, is toward an increasing number of households in age groups where food spending is relatively high.

To gauge the potential effects of the demographic shift in dollar-and-cents terms, we reviewed expenditure patterns based on CES data back in 1980, and those for 1986, the most recent year for which full BLS data was available. The 1986 expenditure patterns for households in the seven age groups were then extended using the Census Bureau projections of the change in the number of households in each age segment. This of necessity implies that the differences between the various age segments--income, household size, etc.--would remain about the same; there is no certainty of this; yet it represented a starting place, one through which we could give marketers some potential guidelines for the future. Such projections, however tentative, could demonstrate the direction of economic forces under way.

We were able to make some very interesting estimates. For instance, households headed by persons under age 35 accounted for some 26 percent of the aggregate expenditures for food at home back in 1980; by 1987, that had fallen to an estimated 24 percent. Food Institute projec-

tions put that market share at just under 20 percent by 1995, and around 17 percent by the turn of the century, or a nine-point share loss in the last two decades of the twentieth century.

The household segments in the over-54 groups taken as a whole will not encounter this degree of change in terms of market share; these groups accounted for about a 31 percent share of at-home food spending in 1980, rising a bit to just over 31 percent by 1987; from 1995 on, the market share is projected at a slightly lower 29 percent.

The major shift, then, as the younger segments lose share, will likely be posted in the 35-to-54 sector, where the share of total at-home food expenditures is seen as rising from 43 percent at the start of this decade, to around 45 percent seven years later. This percentage share is growing very quickly, and is estimated as reaching about 52 percent by 1995, and approximately 54 percent by the year 2000.

The expenditure patterns for food away from home will be somewhat different. The projected falloff in share by under-35 households could be steeper, declining from around 30 percent in 1980, to only 18 percent by 2000. The households in the over-54 group are also seen as taking a declining share, based on the high growth projections for the over-75 component, where a smaller allocation has traditionally been found for food outside of the home. We estimate the over-54 age segment market share at 27 percent in 1980, falling to 24 percent by 2000. The growth in share of spending for food outside the home for the 35-to-54 group is seen as quite high, moving from about 43 percent in 1980, to some 58 percent by the year 2000.

Basing our dollar projections on a model for the combined effects of demographic change and moderate economic growth developed by U.S. Department of Agriculture economists, The Food Institute projects that the under-35 household segment could account for a \$4 billion drop in at-home food spending in the 1987-1995 period, in constant-dollar terms. According to this model, the 35-44 group would post about a \$16 billion increase in expenditures, while the 45-54 group would register a gain of some \$15 billion.

Additionally, the at-home food market is projected as recording almost a \$3 billion drop on a constant-dollar basis among the 55-to-64 household segment, while the 65-and-over group could gain by almost \$5 billion, with around three-

quarters of that emanating from the over-74 group.

For food away from home, virtually all the gain in the 1987-1995 period is projected as coming from the middle-aged segment. Putting some of the effects of demographic shifts into economic terms dramatically illustrates the tremendous changes soon to take place in the food marketplace.

To put this into the context of some common product categories--commodity categories, at best--we applied some of the net changes in the number of households by age group as projected by the Census Bureau, to household usage and expenditure patterns, based on USDA analysis of CES data. These are best treated as useful potential guides to the direction of change.

This analysis tells us, as an example, that the 21 percent share of expenditures for all fresh fruit accounted for by households in the under-35 group in 1980 apparently held steady through 1987. In the remainder of the twentieth century, however, that share could dwindle, to around 17 percent by 1995, falling below 15 percent by the year 2000 (Chart No. 6).

Meanwhile, fresh fruit marketers have seen the market share accounted for by the 35-to-44 household segment rising--from an estimated 21 percent in 1980, to around 23 percent in 1987; this is projected as exceeding 25 percent in the 1995-2000 period. The 45-to-54 household segment, which held an estimated share of around 19 percent of expenditures for fresh produce in 1980, appears to have declined a bit to about 18 percent, but this is projected as jumping to 21 percent by the middle of the next decade, and exceed 24 percent by 2000. This vision of the future forecasts a potential major realignment of the market; the customer mix will change dramatically.

We looked into these changes in another way, viewing usage patterns in terms of the percentage of households using various product categories (87 in our complete study). Here we attempted to project the number of households likely to purchase a product regularly in the year 2000. Such projections again imply that incidence of purchase would be the same in the future as in the present, which is no certainty, to be sure. But again, these are guides to the potential dimension of change.

This analysis tells us, for instance, that the number of households using, say, poultry products will increase 20 percent, or slightly above

the Census-projected 18 percent overall gain in households over the 1987-2000 period. This adds a base of some 6.1 million households to the poultry market. Among major age groups, based on current usage patterns, and projected changes in number, we determined that the number of households in the 35-to-44 group using poultry could increase by almost 2.5 million; the number in the 45-to-54 category could grow by over 3 million; the number of user households in the 65-and-over group could increase by one million (Chart No. 7). Meanwhile, the number of users in the under-35 group could decline by one million.

Looking at the beverage market, where many products are aimed at younger age segments, we find a projected decline in the number of households using fruit juices in the under-35 category of over 900,000 in the 1987-2000 period. The loss in the younger group is countered by an increase of over one million user households in the 65-and-over group. The 35-44 purchaser group is seen as increasing by 2.3 million, while the number of fruit juice-purchasing households in the 45-to-54 segment could grow by almost 2.9 million. Clearly, products will have to be reformulated, repackaged, repositioned to capitalize on the new consumer marketplace.

These types of projections might well be factored in along with findings of other research, allowing assessment of the dimension of potential market gains or losses. Additional study will be required, since our measurements studied only the sheer number of user households, prior to the introduction of economic and other factors accounting for "heavy" versus "light" users. Yet, a better understanding of the economics involved for food marketers in the age shift process should provide a rather compelling "dollars-and-cents" imperative.

Many of the future developments in food marketing resulting from demographic change will remain outside the realm of reasonable estimation. Product perceptions change over time. The creation of "positive" images, such as oat bran's role in lowering cholesterol, or broccoli's role in cancer prevention, can lead to the redevelopment of a product category. Yet the insinuation of other issues, such as studies questioning the validity of the cholesterol issue, or the controversy over pesticide/herbicide residues on produce, can create long-term negative images in the popular perception. These lead to questions, the answers to which will be shaped in the coming decade and beyond.

CHART NO. 4:

**FOOD AT HOME EXPENDITURES:
HOUSEHOLD SHARES, 1980-2000, BY AGE**

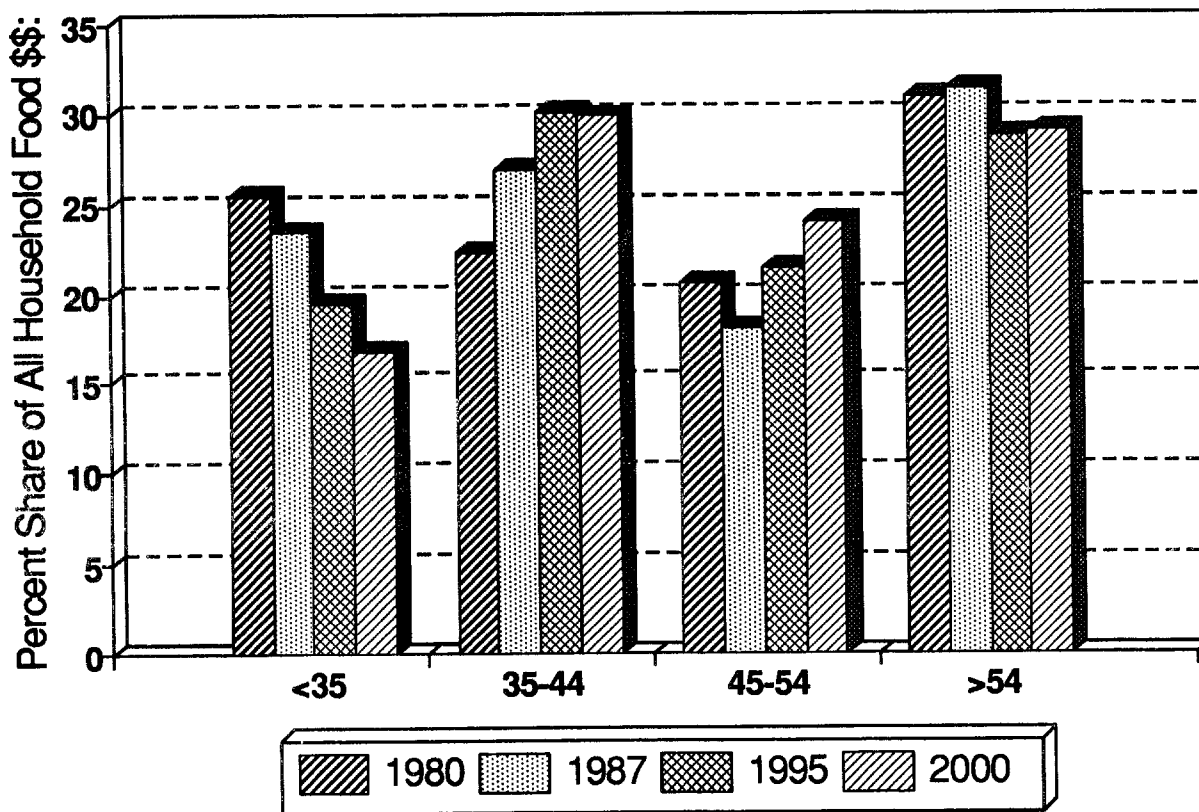
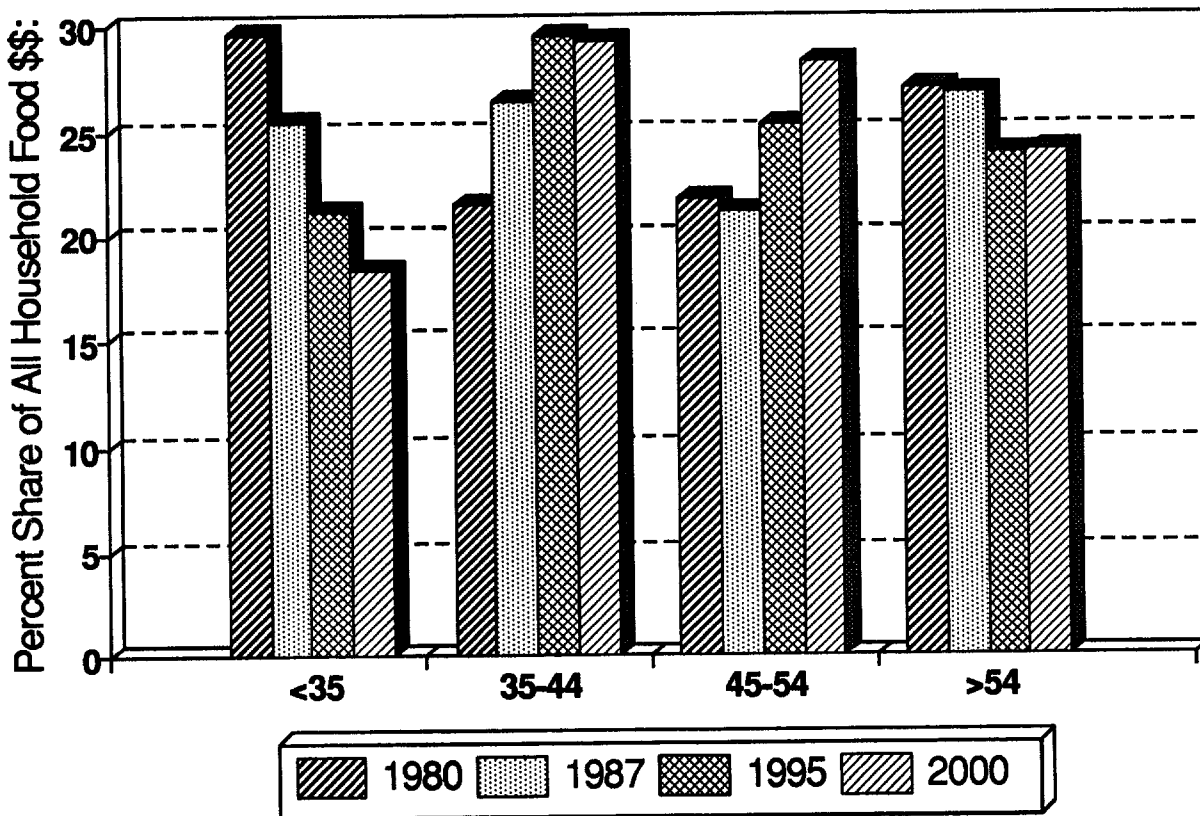


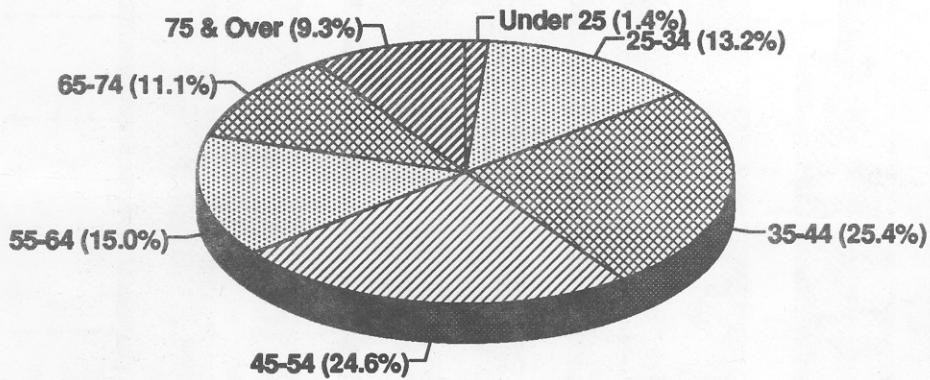
CHART NO. 5:
FOOD AWAY FROM HOME EXPENDITURES:
HOUSEHOLD SHARES, 1980-2000, BY AGE



*Food
 Institute
 estimates*

CHART NO. 6:

FRESH FRUIT:
Projected Household Dollar Shares, 2000



*Food
Institute
estimates*

CHART NO. 7:

POULTRY: HOUSEHOLD USAGE PROJECTIONS
NET CHGE. IN USER HOUSEHOLDS, 1987-2000

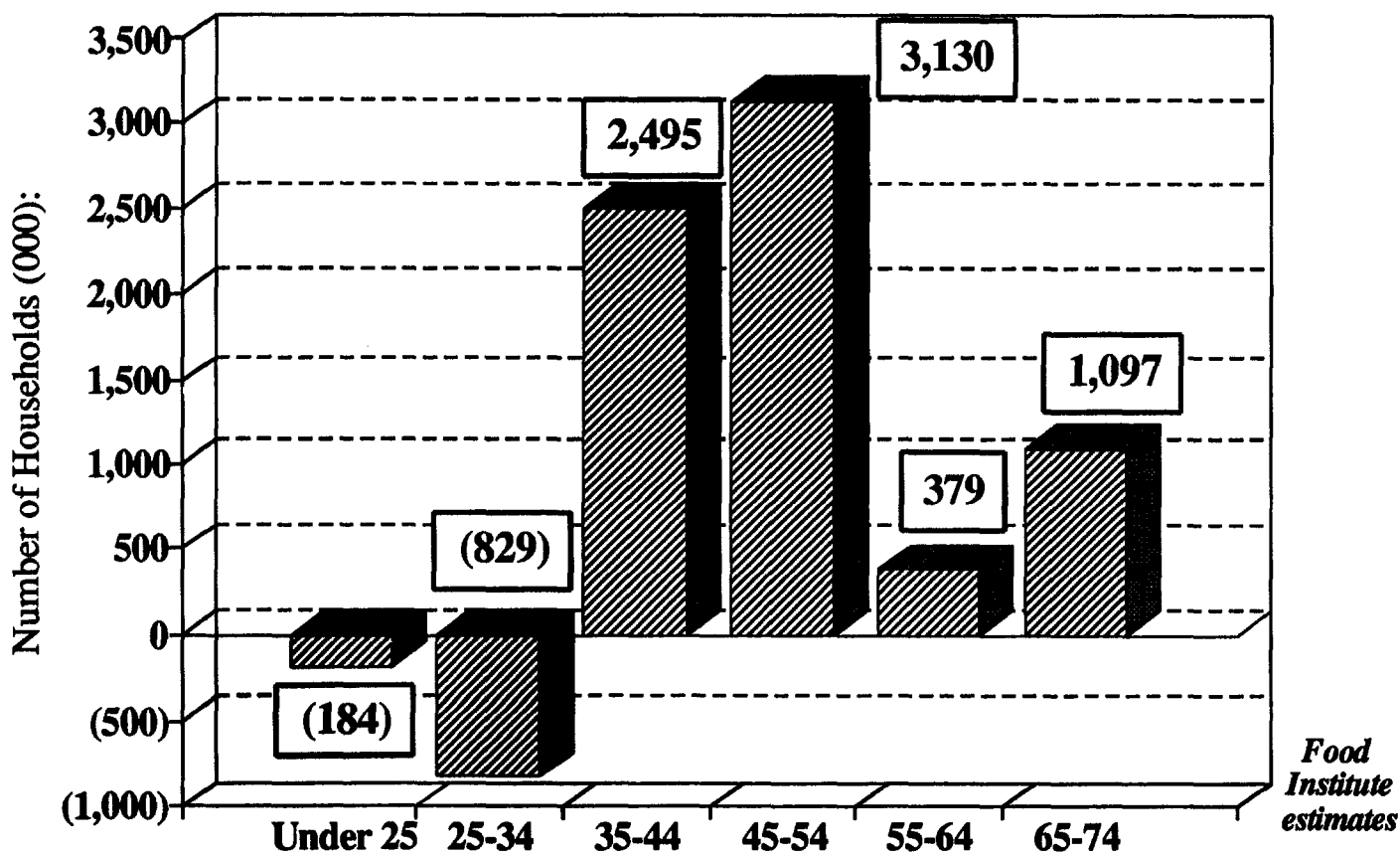


CHART NO. 8:

FRUIT JUICES: H'HOLD USAGE PROJECTIONS
NET CHGE. IN USER HOUSEHOLDS, 1987-2000

