The average U.S. household spent about $2,037 per person on food in 1998, up 17 percent from the average expenditure in 1990 (table 1). Food purchased at supermarkets and other food stores (food at home) rose 18 percent from 1990 to 1998, while expenditures for eating out (food away from home) rose about 15 percent. Most of the increase for food at home was for cereal and bakery products (up 22 percent), fruits and vegetables (up 22 percent), sugar and sweets (up 34 percent), and miscellaneous foods (up 25 percent).

Looking at the increase in food expenditures between 1995 and 1998, at-home food expenditures increased by just 1 percent, whereas food-away-from-home expenditures increased by about 21 percent. The figures are reversed for the first half of the decade. Food-at-home spending rose about 17 percent between 1990 and 1995, while food-away-from-home spending declined.

How consumers allocate their food spending between at home and away from home is closely related to changes in disposable income (income after taxes). The first few years of the decade, U.S. consumers coped with a mild recession. Our data indicate that during 1990-92 per capita disposable income rose a modest 6 percent. Consumers increased their food-at-home expenditures by 7 percent while decreasing food-away-from-home expenditures by approximately 9 percent.

Between 1995 and 1998, per person disposable income was up about 18 percent ($20,033 in 1998 versus $14,667 in 1995), which accounts for the 21-percent increase in expenditures on food away from home.

Food expenditures did not generally rise as fast as the general inflation rate between 1990 and 1998, indicating that Americans changed their eating habits so as to spend less money. For example, inflation as measured by the Consumer Price Index (CPI) increased by about 22 percent over this 9-year time span whereas total food expenditures increased by 17 percent. In inflation-adjusted dollars, consumers spent less on food in 1998 than they did in 1990.

If food spending is adjusted for inflation, the average per capita expenditure on food in 1990 was $1,335, which included $785 on food at home and $550 on food away from home. Total per capita real (inflation-adjusted) food expenditures declined to $1,233 in 1995, and increased to $1,265 in 1998, with $752 spent on food at home and $513 on food away from home that year.

Looking again at 1995-98, the CPI increased by 8 percent, whereas total food spending also increased...
by about 8 percent. Hence, from the mid-1990's, Americans increased their expenditures on food equal to the increase in the cost of living. Americans increased their spending on items that offer time-savings and convenience, such as prepared foods, cereal and bakery goods, and food away from home.

Although average food expenditures in inflation-adjusted dollars declined by about 5 percent between 1990 and 1998, some demographic groups increased their food expenditures. For instance, unadjusted food expenditures by households headed by a single woman increased by about 32 percent, well above the increase in inflation, while food spending by households headed by 55- to 64-year-olds, and those 64 and older, increased by about 24 and 25 percent, respectively, slightly above the increase in inflation.

These findings are compiled from information contained in the Consumer Expenditure Survey (CES) released by the Bureau of Labor Statistics from 1990 through 1998. The CES data allow us to link consumer expenditures with demographic characteristics. The statistics and analysis presented here are based on the urban portion of the sample which represents about 87 percent of the noninstitutionalized population.

### Low-Income Households Continue To Spend Less Per Person

Income and household size continue to be the most influential factors affecting where and how Americans spend their food dollars (table 2). Households tend to spend more money for food as incomes rise, because they buy higher quality food items, more convenience foods, and more food away from home. In 1998, low-income households (with before-tax incomes averaging $7,306) spent about $1,754 per person, about 37 percent less than the $2,768 per person that the wealthiest households spent (incomes averaging $98,310), and about 16 percent less than the $2,088 spent by middle-income households (incomes averaging $31,571). In 1990, low-income households spent about 34 percent less than the high-income households, but only 11 percent less than middle-income households.

While the amount spent on food increases with household income, the proportion of income spent on food decreases as income rises. In 1998, low-income households spent about 48 percent of their income on food, while middle-income households spent about 13 percent, and the wealthiest households spent approximately 8 percent, figures fairly constant over the 1990's.

Not unexpectedly, wealthier households spent more money and a larger share of their food expenditures on food away from home. In 1998, the wealthiest households spent 47 percent ($1,301) of their food budget on food away from home, while the poorest group spent about 36 percent ($638). These same two groups spent 49 percent ($1,123) and 38 percent ($577), respectively, in 1990. The middle-income group increased the proportion of their food dollars for away-from-home food, from 41 percent in...
1990 ($709) to 42 percent in 1998 ($881).

Between 1990 and 1998, the poorest households increased food-at-home spending by 18 percent, while the wealthiest households increased their spending 23 percent. However, the wealthiest households spent $1,467 per person compared with $1,117 per person for the poorest households (fig. 1). Over the same time, the middle-income group increased food-at-home expenditures by about 20 percent, to $1,207 per person.

While expenditures on total food increased by about 17 percent for the total population between 1990 and 1998, spending on major food groups varied by income level (fig. 2). For example, the poorest households increased their spending on cereal and bakery products by 25 percent to $177, whereas the middle and highest income households increased expenditures by 33 percent and 19 percent to $194 and $221, respectively, as contrasted to increases in expenditures for dairy products. The poorest households increased expenditures for dairy by just 6 percent to $117, whereas the middle and highest income households increased their expenditures by 14 percent and 19 percent, respectively, to $138 and $162.

All income groups increased their expenditures on meat, poultry, fish, and eggs between 1990 and 1998. Low-income households increased their spending by about 15 percent while the middle-income and wealthy households increased their spending by 10 percent and 21 percent, respectively. In dollars, the poor households again spent the least, about $297 per person on meat, poultry, fish, and eggs, whereas the wealthy households spent about $368 per person in 1998.

**Household Size Affects Food Spending**

The amount a household spends on food increases as household size increases, but the rate slows with
each additional member. That is, if the size of the household doubles, food spending typically does not double. Larger households tend to spend less per person, because the householders purchase more economical packages of food and eat more home-cooked meals than do smaller households. Also, many larger households have children, who eat less food than adults do.

In 1998, single-person households paid $2,522 for food, about 20 percent above 1990, while households of six or more spent $1,125 per person, about 25 percent greater than 1990. Three-person households spent about $1,813 per person in 1998, about 17 percent greater than 1990 spending levels. Households with five members increased their food expenditures by approximately 21 percent between 1990 and 1998.

Single-person households used about 45 percent of their food budget to eat out in 1998, while three-person households spent about 39 percent. Households with six or more members spent only 27 percent of their food budget at eating places in 1998. This mix of budget allocations makes sense because store-bought foods come mostly in family-sized portions and eating out reduces waste. In addition, single-person households may eat out more often to socialize, while larger households probably eat at less expensive restaurants to lessen the total bill or eat out only as a treat or on special occasions.

Interestingly, the percentage of the food budget spent eating out was lower in 1998 than in 1990 for single-person households and about the same for three-person households. In 1990, single-person households spent about 48 percent of their food budget on food away from home, whereas households with three persons spent about 38 percent. In contrast, households with six or more people spent 22 percent of their food budget on food away from home in 1990—a smaller portion than they spent in 1998.

Household size also affects the mix of food spending for a household. For example, larger households tend to spend a larger share of their at-home food dollar on basic ingredients, such as flour and sugar, and lower priced items such as ground meat. Smaller households spend a larger share of their home food budget on foods such as fresh fruits and vegetables, steak, and frozen dinners.

Older and Female-Headed Households Increased Food Spending the Most

Households whose head was between 55 and 64 years old increased their food spending during 1990-98 by about 24 percent to $2,349 per person, while households whose head was over 64 increased their food spending by about 25 percent to $2,060. Undoubtedly, both these groups enjoy income levels at or above average. In fact, the $2,349 spent per person by the 55 to 64 year-olds is well above the $2,088 spent by the middle-income group. Heads of households 55 to 64 years old should be in their prime earning years.

Households that are headed by a female posted the largest increase in total food spending of any demo-
Figure 2  
Spending for Individual Food Groups Varies With Income

<table>
<thead>
<tr>
<th>Food Group</th>
<th>Low Income</th>
<th>Middle Income</th>
<th>High Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal &amp; bakery</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Meat, poultry, fish, &amp; eggs</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Fruit &amp; vegetables</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Sugar &amp; sweets</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Beverages</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Fats &amp; oils</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
<tr>
<td>Misc. foods</td>
<td>1990</td>
<td>1998</td>
<td></td>
</tr>
</tbody>
</table>

graphic subgroup—about 32 percent between 1990 and 1998. However, these households tend to be among the poorest U.S. households, and their 32-percent boost was up from an average per person food expenditure of $1,097 in 1990. Female-headed households' average per person food spending of $1,451 in 1998 was below the $1,754 spent by the average poor household.

**Food Expenditures Likely To Follow Income Trends**

If disposable income continues growing in the next decade, based on historical analysis, we would expect a steady gain in food expenditures, at approximately one-third to one-half the rate that disposable income is growing. As incomes increase, expenditures for convenience foods and food away from home also might increase as long as disposable income increases at a rate higher than the rate of inflation.