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The Rich, the Poor, and the Money They Spend for Food

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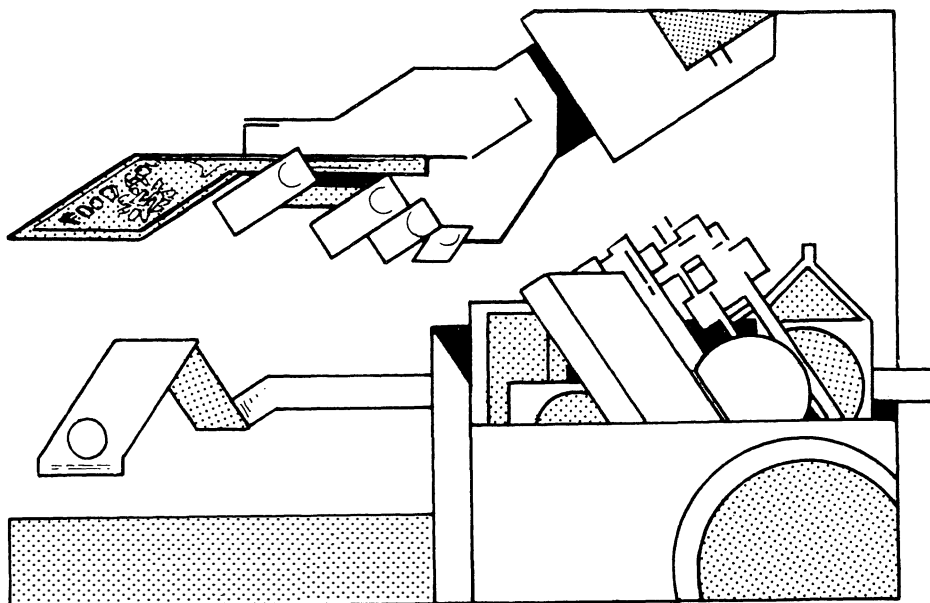
Several Economics, Statistics, and Cooperatives Service (ESCS) studies have examined the effects of such demographic factors as race, age of household head, family size, and geographic region on food spending and consumption habits. The Bureau of Labor Statistics' 1972-73 Consumer Expenditure Survey (CES) and USDA's 1965 and preliminary 1977-78 Nationwide Food Consumption Surveys (NFCS) have been the basis for the studies.

Since these surveys, important changes have taken place which may have affected the family food budget. Food prices have risen about 70 percent since 1973 and nearly 30 percent since 1977. Per capita disposable personal income has risen about 72 percent since 1973. And some major changes have taken place in Government assistance programs, making the Food Stamp Program more popular and accessible.

These changes have probably affected the expenditure patterns of various groups of consumers. But data to examine the changes have been available only at infrequent intervals. The Bureau of Labor Statistics' new continuing Consumer Expenditure Survey will provide quarterly data on expenditure patterns. This survey, which began last year, relies on survey methodology similar to that used for the 1972-73 CES. The first set of quarterly data is scheduled to be publicly available by early 1982.

In the interim, ESCS has obtained a survey of 2,000 households reporting exclusively on food expenditures. The same households were surveyed on a quarterly basis and reported via a 2-week diary on food-at-home and food-away-from-home expenditures. Alcoholic beverages were included as a part of food expenditures.

The limited ESCS survey is not a substitute for the CES or NFCS surveys which are important benchmarks for assessing detailed behavioral patterns and changes from previous surveys. But the ESCS survey supplements them by bridging the time gap between the major surveys and identifying important changes in behavior. Once the continuing CES becomes available, it will provide detailed information.



The ESCS report focuses only on food and alcoholic beverage expenditures by income class. Expenditures and incomes are compared for five family income groups (quintiles). Specific questions addressed are:

- What is the relationship between income and per person food spending? Food at home? Food away from home?
- What portion of pre-tax income is spent on food by each income group?
- What portion of total food expenditures is accounted for by each income group relative to its share of the total population and earned income?

Comparability to the Consumer Expenditure Survey

Preliminary ESCS data are not strictly comparable to the CES. Although average income (adjusted for inflation), and average age of family head are comparable, the family sizes of the income groups differ. Families in the lowest income quintile of the ESCS survey are noticeably larger than in the CES, while the higher income quintile families are smaller. The 1972-73 CES was based on 45,000 households, the ESCS sample included only 2,000 households. Low-income families are underrepresented in the ESCS survey because of difficulty finding families willing to participate; hence, expenditure and income estimates for this group are probably high. Thus, some differences are probably due to sample size and composition.

The CES covers a 2-year period, while the ESCS survey provides seasonally adjusted quarterly data reported at an annual rate. The ESCS survey includes only the 48 contiguous States; the CES also includes Hawaii and Alaska. Both surveys, for purposes of this analysis, include alcoholic beverages which typically are grossly underreported in surveys when compared with actual retail sales.

Food Spending by Richest and Poorest

Household characteristics differ substantially among the five income groups. To adjust for differences in family size among the different income groups, annual per capita food expenditures and income are compared. Per capita annual income reported for the highest income group was four times greater than that reported by the lowest income group during the second half of 1979. In the 1972-73 survey, the disparity was slightly greater.

As in the 1973 survey, there was remarkably little difference in per capita food-at-home expenditures regardless of income group. In 1979, the poorest Americans spent about \$622 per person on food at home, while the wealthiest Americans spent a little over \$648, a difference of only about 4 percent.

A major disparity continued to exist in food-away-from-home spending. Per capita expenditures in 1972-73 were \$105 for the lowest income group and \$270 for the highest income group. The ESCS survey for the second half of 1979, showed that the disparity had narrowed significantly, but the data are inconclusive because of a significant underrepresentation of lower and upper income Americans.

Food as a Percent of Income

In the 1979 survey, the percent of before-tax income spent on food at home varied from about 25 percent for the poorest group to 6.5 percent for the wealthiest. Middle-income Americans averaged about 12 percent, while the average for all families was about 10.5 percent. About 4 percent of pre-tax income was allocated to food away

from home, ranging from 9.5 percent for the poorest Americans to about 3.25 percent for the wealthiest Americans. The percent of before-tax income spent on all food was around 15 percent. This ranged from 35 percent for the poorest Americans to about 9.5 percent for the wealthiest.

The lowest income group showed a noticeable drop in the percent of income spent on food at home while the other groups each showed a small decline. The lowest income group increased food-away-from-home spending from 6.8 percent to 9.5 percent of income.

Expenditure Shares

Despite the underrepresentation of low-income families in the ESCS survey, both surveys showed that the portion of food expenditures accounted for by each income group was roughly the same as that group's share of the population.

The proportion of total food expenditures accounted for by each income group was inverse to its share of income. The poorest families in 1979 accounted for about 6 percent of income, but 14.5 percent of food expenditures. The wealthiest group accounted for 41 percent of income, but only 27 percent of food expenditures. The proportion of food-at-home expenditures showed an even closer relationship to population share, and conversely, to income share.

Some Implications

Within the confines of data restrictions, several patterns emerge from the 1979 quarterly survey that reinforce findings of the 1972-73 survey. Income does not appear to influence per capita food-at-home expenditures. Regardless of income class, nearly all Americans spent about the same amount per capita on food at home in both the CES and ESCS surveys.

Income has a much larger influence on food-away-from-home expenditures. The two top income quintiles, on a per person basis, spent considerably more than the three lowest income family groups. The 1979 ESCS survey shows that lower income families were spending considerably more on food away from home than they did in 1972-73. This probably reflects underrepresentation of the lowest income Americans in the sample, and should be interpreted cautiously.

The percent of income spent on food at

Selected Family Characteristics by Income Group, 1973 and 1974

Family income group	Average income		Average age of family head		Family size	
	1972-1973 ¹	1979 ² Dollars	1973	1979	1973	1979
Lowest	2,413	4,925	57	56	1.6	2.0
Lower middle....	6,072	9,511	49	50	2.4	2.5
Middle	10,178	13,868	43	45	3.0	2.9
Upper middle....	14,791	19,948	43	43	3.5	3.1
Highest	25,860	33,785	46	45	3.8	3.4
Average	11,419	16,412	48	48	2.8	2.8

Source: ¹BLS—CES

²ESCS

Per Capita Annual Food Expenditures and Income¹

Family income group	Food expenditures ¹						Income	
	Total		At home		Away from home		1973	1979
	1973	1979	1973	1979	1973	1979		
	Dollars							
Lowest	549	860	445	622	105	238	1557	2468
Lower middle.	553	838	423	625	130	213	2478	3817
Middle	590	799	427	597	163	202	3393	4877
Upper middle.	623	945	438	647	184	298	4247	6511
Highest	763	964	492	648	270	316	6895	9994
Average	644	888	461	629	184	259	3948	5956

¹Includes alcoholic beverages

²Food expenditures for 1979 seasonally adjusted at an annual rate by ESCS

Food and Alcohol as a Percentage of Income

Family income group	All food		Food at home		Food away from home	
	1973	1979	1973	1979	1973	1979
Percent						
Lowest	35.4	34.8	28.6	25.2	6.8	9.6
Lower middle....	22.3	21.9	17.1	16.4	5.3	5.6
Middle	17.4	16.4	12.6	12.2	4.8	4.1
Upper middle....	14.7	14.5	10.4	9.9	4.4	4.6
Highest	11.1	9.6	7.1	6.5	3.9	3.2
Average	15.5	14.9	10.9	10.6	4.4	4.3

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home appears to have declined for all income groups, while the percent spent on food away from home appears to have risen for all but the wealthiest income groups.

The implications of the survey results, when coupled with preliminary results of the 1977 NFCS and studies of the 1972-73 CES, suggest some fruitful areas for expanded research. Earlier studies have indicated that, after controlling for other factors (most notably race), all Americans now spend about the same amount of money for food and choose foods which are quite similar. This contrasts with the rather large differences in food spending between moderate- and low-income households found in surveys in the 1950's and 1960's. Major increases in food stamp assistance have occurred during the 1970's which may have accounted for part of the increased food spending of low-income households.

Portion of Total Food Expenditures by Family Income Group

Family income group	Food at home		Food away from home	
	1972-73	1979	1972-73	1979
	Percent			
Lowest	10.5	14.4	6.2	13.2
Lower middle	15.8	17.9	12.1	14.8
Middle	19.5	19.5	18.6	16.0
Upper middle	23.4	22.8	24.6	25.6
Highest	29.2	25.2	38.7	29.9
Total	100.0	100.0	100.0	100.0

Portion of Total Income, Population, and Food Expenditures

Family income group	Portion of income before tax		Portion of population reporting		Portion of food expenditures	
	1972-73	1979 ¹	1972-73	1979 ¹	1972-73	1979 ¹
	Percent					
Lowest	4.0	6.0	10.9	14.5	9.4	14.0
Lower middle	10.1	11.7	17.3	18.1	15.0	17.1
Middle	17.0	16.9	21.5	20.6	19.6	18.5
Upper middle	24.7	24.3	24.5	22.2	24.2	23.6
Highest	43.2	41.1	26.3	24.5	31.7	26.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

¹Second half, 1979.

Other demographic and economic changes have also occurred which may have had an effect.

Soon-to-be-released public use data from the NFCS supplemental survey of 5,000 low-income households conducted from November 1977 to March 1978 will provide some of the information needed to explain increases in food spending by low-income households. ■

References:

1. Boehm, William T., Paul E. Nelson and Kathryn A. Longen. *Progress Toward Eliminating Hunger in America*, ESCS, USDA, AER-446, January 1980.
2. Gallo, Anthony E., William T. Boehm, and Corrine LeBovit. *Changes in Food Expenditures by Income Group*, USDA, ESCS-57, July 1979.
3. Gallo, Anthony E. and William T. Boehm, "Nationwide Food Consumption Survey: Results on Spending," USDA, NFR-7, Summer 1979.
4. Gallo, Anthony E., Larry E. Salathe, and William T. Boehm. "Does Race Influence Food Purchasing?" USDA, NFR-5, December 1978.
5. Kotz, Nick. *Hunger In America: The Federal Response*, The Field Foundation, New York, 1979.
6. Nelson, Paul E. *Do Food Stamp and Other Customers Buy the Same Products in Supermarkets*, ESCS, USDA, AER-421, March 1979.
7. West, Donald A. "Food Expenditures by Food Stamp Participants and Nonparticipants," USDA, NFR-3, June 1978.

Open date labeling—applying calendar dates (as opposed to codes) to food packages—is used by many food retailers and processors. These dates help consumers assess the freshness of foods by revealing the date the product was packed or the date by which it should be sold or used. Retailers also use these dates to control inventory. Open dating of food products has become more widespread over the past 10 years, but so has concern over the difficulties it can pose.

Recent surveys illustrate consumer concerns about food freshness and the confusion and misunderstanding surrounding open date labeling. These problems stem from the absence of a nationwide uniform system of open dating. There are no Federal rules requiring open date labeling (only for the format, if a date appears) and State and local rules lack uniformity. Further, the Nation's largest food retail chains have different policies. Finally, there are technical complexities in determining appropriate types of dates and shelf lives for use on various food products.

USDA regulations do not require open dating of meat and poultry products sold at the consumer level. But if a date does appear, it must be labeled with a descriptive phrase and the label must be approved by USDA's Food Safety and Quality Service.

USDA shell egg regulations require only that the label be marked with the production code or lot, from which the pack date can be determined. A pull date does not have to appear on the carton, but if it does it may be no more than 30 days after the date graded, and it must be labeled "sell by" or "expiration." The Food and Drug Administration (FDA) currently has no open date labeling regulations. However, under the adulteration and misbranding provisions of the Food, Drug, and Cosmetic Act, FDA may require an expiration date when adulteration might occur if a product is not sold by a certain date and it is likely that a product will remain for sale beyond that date.

Open date labeling is required by 21 States, the District of Columbia, and some local governments. Open dating policies, including presentation method, maximum shelf life, monitoring, and enforcement, as