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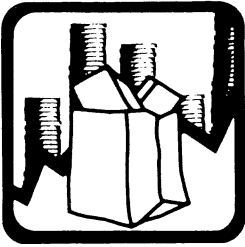
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# Consumer Research

## FOOD EXPENDITURES BY INCOME GROUP

By Anthony E. Gallo and William T. Boehm

The portion of income spent on food by income group is an important measure of the consumer's standard of living. It is also a useful tool in assessing the impact of family food programs on the food buying patterns of low-income recipients.

There are three common measures of the percent of income spent on food. The first is from the Department of Commerce, which simply divides household expenditures for food by national income. This measure, however, does not give the portion of income spent on food by income group. Nor does the measure tell us anything about the spending patterns of consumers. The other two measures are developed from surveys and do provide data by income group (in addition to region, race, urbanization, size of family, and age of family head).

The first of these is USDA's Household Food Consumption Survey which provides data on both a poundage and expenditure basis. These surveys are conducted about every 10 years. The last survey for which data are available was conducted in 1965. Data from the 1977 survey will not be available until 1979. The second is the Consumer Expenditure Survey (CES) which is conducted periodically by the Department of Labor, Bureau of Labor Statistics. The most recent data are from 45,000 households and cover a 2-year period (July 1972-June 1974).

**TABLE 1. RELATIONSHIP BETWEEN INCOME AND EXPENDITURES FOR FOOD, 1973-74<sup>1</sup>**

Income class	Total population	Total reported income	Total food expenditures	Food as percent of income	Food expenditures as percent of Thrifty Food Plan <sup>2</sup>
<i>Dollars</i>			<i>Percent</i>		
Under 5,000	18.19	6.47	15.39	38.88	1.09
5,000-8,000	14.14	9.31	13.09	23.01	1.19
8,000-12,000	21.17	17.79	20.35	18.72	1.23
12,000-15,000	14.47	14.65	14.08	15.75	1.26
15,000-20,000	16.07	19.86	17.29	14.26	1.39
Over 20,000	15.96	31.92	19.80	10.17	1.60

<sup>1</sup> Data from 1973-74 Consumer Expenditure Survey, Bureau of Labor Statistics.

<sup>2</sup> Adjusted for a family of four (1.00 = \$150 per month).

**TABLE 2. WEEKLY PER CAPITA EXPENDITURES FOR FOOD BY INCOME CATEGORY**

Income class	Food at home	Food away from home	Total food
<i>Dollars</i>			
Under 5,000	8.42	1.81	10.23
5,000-8,000	8.71	2.49	11.20
8,000-12,000	8.68	2.94	11.62
12,000-15,000	8.55	3.23	11.78
15,000-20,000	9.31	3.71	13.63
20,000 and over	9.91	5.10	15.02

Source: 1973-74 Consumer Expenditure Survey, Bureau of Labor Statistics.

## Food Spending and Income

The CES data, although now over 5 years old, can be used to highlight the food expenditure characteristics of lower income groups relative to moderate and higher income groups. The data are useful for answering several fundamental questions on food spending behavior:

- What percent of total food expenditures are accounted for by the poor relative to their percent of the total population and earned income?

- What percent of earned income is spent on food by each household income group, and what are the differences in actual per capita weekly food spending?

- How does each group allocate its food dollar to at-home and away-from-home eating?

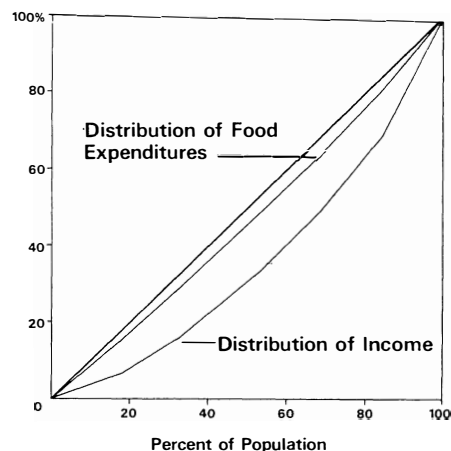
Table 1 summarizes the proportion of total income spent for food for all U.S. households by income group during the June 1973 to July 1974 phase of the CES. The income group reporting less than \$5,000 pre-tax money income per year earned 6.47 percent of all reported money income, accounting for 15.38 percent of all food expenditures and totaling 18.17 percent of the population. The importance of food in the budget is evident. Except for the highest and lowest income groups, the percent of the population in that group is roughly equivalent to the percent of the total food expenditures made by that group.

As expected, lower income families spend a much higher portion of their weekly money income on food than do the higher income households. When put on a per-capita basis, those earning under \$5,000 (the poverty guideline as suggested by the Department of Health, Education and Welfare was about \$4,500 in 1973) spent about 39 percent of their income on food. Within the next income category (\$5,000 to \$8,000) the portion of income spent on food dropped to less than a fourth (23 percent). At the higher end, those earning over \$20,000 spent only a tenth of their income on food. The average for all reporting families was about 16½ percent of before-tax money income.

### Food At Home and Away From Home

Actual food expenditures per week on a per-capita basis for both at-home and away-from-home eating ranged from \$10.24 for the lowest income group to about \$15 for the highest income group (table 2). The per-capita weekly expenditure for food at home for the lowest income group was \$8.42, as opposed to \$9.91 for the highest income group. Thus, the actual food at-home spending difference between the highest and lowest group was less than 18 percent, although the median income was more than 550 percent greater for the high-income group (from \$26.36 to \$147.61).

### Distribution of Total Money Income and Total Food Expenditures by Percent of Population, 1973-74



As shown in table 2, low-income families spent a lot less on food eaten away from home. Spending for away-from-home eating was almost three times greater for those earning over \$20,000 as opposed to those earning less than \$5,000 (\$5.10 versus \$1.81). The highest income families spent over a third of their total food budget on away-from-home eating. The lowest income group spent about a sixth of their food budget on food eaten away from home.

### Qualifying Statements

The disparity in food expenditures between low income and higher income groups might be narrower than the money income data indicate. Three differentials—progressive taxes, food stamps, and home-produced foods—could be expected to benefit lower income persons relatively more.

First, those in lower income groups would pay lower taxes, so that when food expenditures are compared to after-tax income, the disparity would be expected to narrow.

Second, bonus food stamps which are only available to those in the lower income groups would also be a net addition to earned income. In 1973, this program was still in its relatively early stages. Therefore, the data in table 1 may not be reflecting the contributions

TABLE 3. HOME-PRODUCED FOOD BY INCOME CLASSES

Income	Value of food used at home	Value of home produced food	Home produced as a percent of food at home
	Dollars per year	Dollars per week	
Under 3,000	17.48	2.00	11.5
3,000-4,999	25.59	1.71	6.7
5,000-6,999	30.46	1.32	3.9
7,000-9,999	34.52	0.99	2.8
10,000-14,999	37.68	0.89	2.3
15,000 and over	43.11	0.92	2.1

Source: 1965 Household Food Consumption Survey, USDA.

of the present program.

Third, home-produced food appears to be relatively more important for lower income groups. As shown in table 3, home-produced foods constituted as much as 11 percent of the food at-home budget among very low-income groups in the 1965 Household Food Consumption Survey as opposed to 2 percent for high income groups.

## HAS FOOD ASSISTANCE HELPED?

By William T. Boehm  
and Anthony E. Gallo

Family food programs have expanded sharply since 1969. Federal expenditures between 1969 and 1976 for all food programs increased from \$1 billion to \$8 billion (table 1). The value of bonus stamps increased from about \$200 million in 1969 to almost \$5 billion in 1976, while Federal contributions to child nutrition programs rose from about \$2,100 million to almost \$2 billion.

In addition, today there is a food program for pregnant and lactating women, infants, and children, a feeding program for the elderly, a commodity distribution program, a special child feeding

program, and an array of nutrition educational programs designed for low-income shoppers and children in order to improve their ability to select and use nutritious foods.

The prime objective of these family food programs is to eliminate hunger and malnutrition. The key question is whether these programs have been successful in reaching that objective. A study now underway in the Food Economics Program Area of ESCS is attempting to answer this question.

Answering the question really has two parts. First, if Federal food programs are going to work, then the food assistance dollars must go to those areas where hungry people live. Second, even if the dollars of aid reach the poor, it must be shown that these assistance programs have influenced increases in food consumption and improved the nutritional level of the diet.

In 1968, the "Citizen's Board of Inquiry into Hunger and Malnutrition in the United States" (CBHM) published its now famous report *Hunger USA*. The authors reported that one-half of all households in the U.S. had poor diets, and that only a fifth of these, or about 5 million people, were

reached by food programs.

Today, while more than 15 million persons each month participate in the Food Stamp Program alone, we still are not able to conclude that the hunger problem has been eradicated.

Meaningful, measurable definitions of hunger imply the need for data. While the CBHM pointed out the *existence* of hunger in America, it was unable to measure the *incidence* of hunger. New data to more fully accomplish that task have not been made available since 1968. This new USDA study, therefore, is hampered by the same lack of basic data with which to determine the magnitude of the hunger problem as was the CBHM.

*Hunger USA* identified three groups of U.S. counties in an effort to determine the relationship between hunger, income, and post-neonatal mortality (a major indicator of infant malnutrition). These county groups were: (a) a single county in each of 47 States, within the continental United States, which, for the State, had the lowest post-neonatal mortality rate (PMR), (b) a single county in each of 50 States, within the continental United States, which for the State, had the highest PMR,

TABLE 1. FEDERAL EXPENDITURES FOR USDA FOOD AND NUTRITION PROGRAMS, FISCAL YEAR 1969-76

Program	Fiscal year							
	1969	1970	1971	1972	1973	1974	1975	1976*
<i>Million Dollars</i>								
Food stamps								
Total	603.4	1090.0	2713.3	3308.6	3884.0	4724.3	7265.6	8700.2
Bonus	228.8	549.7	1522.7	1797.3	2131.4	2714.1	4385.5	5326.5
Child nutrition								
School lunch	203.8	300.3	532.2	738.8	882.2	1068.3	1289.0	1489.4
School breakfast	5.4	10.8	19.4	24.9	34.6	55.5	86.1	113.9
Special food	1.5	7.7	20.8	37.1	44.9	62.1	96.5	148.8
Special milk	101.3	101.2	91.1	90.3	90.8	52.4	122.9	144.1
Food distribution								
Schools	272.1	265.8	279.2	314.8	331.0	319.4	423.5	417.8
Needy families	223.9	281.6	308.4	298.6	241.4	189.4	36.9	12.0
Supplemental food	1.0	7.8	12.8	12.9	13.3	15.1	17.3	17.2
Institutions	25.4	22.5	24.5	25.8	27.4	25.0	20.2	11.8
Food certificate	0.0	0.1	1.0	1.1	0.9	0.8	0.7	0.7
WIC	0.0	0.0	0.0	0.0	0.0	11.1	89.3	142.7
Total	1063.1	1547.5	2812.9	3341.6	3797.9	4513.2	6567.9	7824.9