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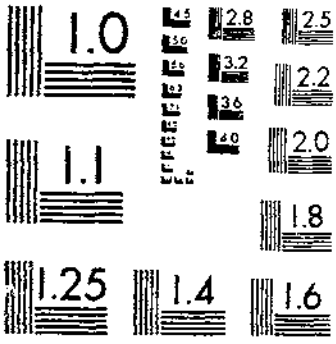

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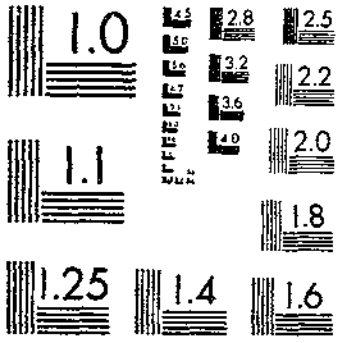

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HOUSEHOLD EXPENDITURE PATTERNS IN THE UNITED STATES

Larry E. Salathe

U.S. Department of Agriculture
Economics, Statistics, and Cooperatives Service

Technical Bulletin No. 1603

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ABSTRACT

Purchases of "away-from-home" food--such as in a restaurant--rise faster than "at-home" food purchases as household income rises. But, increases in household size cause away-from-home food purchases to decline while at-home food purchases increase. Expenditure elasticities, measuring these effects, are estimated for 109 food and 8 nonfood categories. Households allocate a greater share of their at-home food dollar to bakery products, beef and veal, and fruits and vegetables as income increases. Study is based on data from Bureau of Labor Statistics 1972-73 Consumer Expenditure Diary Survey.

KEYWORDS: Food, expenditures, household income, household size

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Washington, D.C. 20250 April 1979

SUMMARY

Increases in consumer income spur food spending, with expenditures for food eaten away from home rising faster than purchases of food to be prepared at home. At-home food expenditures climb as household size grows, but away-from-home food purchases decline. More than 70 percent of the average food budget is spent for food for home use.

This study measures the impacts of changes in income and household size on the purchases of 117 items, including 109 food groups. Each of these impacts is expressed in terms of an elasticity, which measures the percentage change in expenditures generated by a 1-percent change in either income or household size.

The expenditure elasticity associated with income for all types of food, whether eaten out or prepared at home, is about 0.36. This means that a 10-percent increase in household income produces a 3.6-percent increase in food expenditures. This breaks down to an 8.5-percent increase in spending for away-from-home food purchases, but only a 1.7-percent increase in at-home food purchases.

The household-size elasticity for food at home is about 0.66 compared to about -0.06 for away-from-home food purchases. This indicates that, given the same income, larger households spend much more for at-home food, but less on food away from home, than smaller households.

As income climbs, the proportion of the at-home food budget spent on such products as pork, cereals and cereal products, poultry, dairy products, and fats and oils declines. But, households allocate a greater share of their at-home food dollar to bakery products, beef and veal, and fruits and vegetables as income increases.

Expenditures for cereal and bakery products accounted for about 12 percent of all at-home food purchases during the study period. Beef and veal accounted for 14 percent; pork, 9 percent; dairy products, 14 percent; fruits and vegetables, 14 percent; and fats and oils, 3 percent. Nonalcoholic beverages accounted for 7 percent of the at-home food purchases.

Household Expenditure Patterns in the United States

Larry E. Salathe

INTRODUCTION

Contemporary economic literature contains a number of studies reporting demand or expenditure functions for a single commodity or for a few selected commodity groups. But few studies have reported expenditure functions--a measurement of buyers' response to changes in socioeconomic and demographic factors--for a large number of commodity groups. Expenditure functions, measuring the relationship between household purchases, income, and household size, are estimated in this report for 109 food commodity groups and 8 nonfood expenditure categories.

The expenditure functions isolate the effects of income and household size on household purchases. These effects are summarized by using the expenditure functions to calculate income and household-size elasticities. These elasticities measure the percentage change in household purchases associated with a 1-percent change in income or household size.

Such information can be used by economists and policymakers to evaluate the impact of Government policies and programs, especially those affecting household income such as food stamps and other welfare programs, on household purchasing patterns. Food marketers, commodity specialists, and Government policymakers can use this information in making projections of consumer food demand.

THE MODEL

Various functional forms have been suggested to describe household purchasing behavior. But, no single form has won general acceptance. In the current analysis, a quadratic function was selected as the hypothesized form of the expenditure function.

Many functional forms, including the quadratic, are capable of estimating the relationship between income and household food expenditures. When these other functional forms were compared with the quadratic, the quadratic form

more accurately described actual household food purchasing behavior (3). 1/ In addition, the quadratic form possesses properties suggested by demand theory (2).

This report hypothesizes that household purchases are related to income and household size. The influence of other socioeconomic and demographic factors, such as race, location of residence, age, and education, on household expenditure behavior are not examined. Therefore, the expenditure functions and elasticities here represent national averages and may not accurately reflect spending behavior of specific socioeconomic or demographic groups within the U.S. population.

The mathematical form of the quadratic function is:

$$(1)\quad E_{ih} = A_{0i} + A_{1i}Y_h + A_{2i}Y_h^2 + A_{3i}N_h + A_{4i}N_h^2 + A_{5i}Y_hN_h$$

where E_{ih} is expenditure on the ith commodity by the h^{th} household, Y_h is h^{th} household's income, N_h is the h^{th} household's size, and the A_{0i}, A_{1i}, A_{2i}, A_{3i}, A_{4i}, and A_{5i} are coefficients that measure the response of household purchases to changes in household size and income. Elasticities implied by equation (1) can be computed to summarize the effects of changes in income and household size on household food purchases.

Income Elasticity

Income elasticity measures the percentage change in expenditure (E_{ih}) associated with a 1-percent change in income (Y_h). Based upon equation (1), the income elasticity (η_{ih}) is given by:

$$(2)\quad \eta_{ih} = \frac{\partial E_{ih}}{\partial Y_h} \cdot \frac{Y_h}{E_{ih}} = \frac{(A_{1i} + 2A_{2i}Y_h + A_{5i}N_h)Y_h}{E_{ih}}$$

where $\frac{\partial E_{ih}}{\partial Y_h}$ is the partial derivative of E_{ih} with respect to Y_h. This equation implies that the value of the income elasticity depends upon the expenditure level, income, and household size. In this study, the levels used for these variables in calculating the income (and household-size) elasticity are the sample means. A positive income elasticity indicates that an increase in household income is associated with an increase in household purchases for the item in question. A negative income elasticity indicates household purchases decline as household income increases. The larger the magnitude of the income elasticity, the more responsive--either negatively or positively--household purchases are to changes in household income.

Household-Size Elasticity

The household-size elasticity is defined as the rate of change in expenditure relative to the rate of change in family size. By applying this definition to equation (1), the household-size elasticity can be derived:

$$(3)\quad S_{ih} = \frac{\partial E_{ih}}{\partial N_h} \cdot \frac{N_h}{E_{ih}} = \frac{(A_{3i} + 2A_{4i}N_h + A_{5i}Y_h)N_h}{E_{ih}}$$

1/ Numbers in parentheses refer to items in References section.

A negative (positive) household-size elasticity indicates that an increase in household size is associated with lower (higher) household purchases of the item in question. The larger the magnitude of the household-size elasticity, the more responsive--either positively or negatively--household purchases are to changes in household size.

THE DATA

The 1972-73 Bureau of Labor Statistics (BLS) Consumer Expenditure Diary Survey (CEDS) is the source of data for this study. These data--gathered in two 12-month surveys--are the most current and comprehensive available on household purchases. 2/

Data from each survey provide a "snapshot" of an individual household's purchases at a point in time. In order to test whether rising prices have an effect on the income and household-size elasticities, each 12-month survey is used to estimate the income and household-size elasticities. Comparing the elasticities from each survey period provides an indication of the stability of these elasticities during periods of rapid price inflation. 3/

Before analyzing the CEDS data, individual household expenditure records were examined to determine if the CEDS-recorded, 2-week expenditures accurately reflected normal purchase patterns. Examination of individual household expenditure records revealed that about 60 households in each of the two 12-month survey periods had recorded large expenditures for food relative to their before-tax income. A detailed description of these households is presented in (1). These households were eliminated from the total sample since their expenditures did not seem to represent their normal purchasing patterns.

To protect identity of households participating in the CEDS, BLS did not release income information for households with before-tax incomes under $2,000, many of which represented food stamp participants. 4/ Therefore, such data are not available to help measure the impact of food stamp use on household purchase decisions. Excluding food stamp participants from the total reported sample should not bias results presented here, since food stamp households comprised less than 6 percent of all households in the CEDS. 5/

Table 1 gives average weekly household expenditures and the proportion of total at-home food purchases accounted for by each at-home food category. Data presented in the table relate to an average of 3.01 people in the household in the first 12-month survey period and 2.93 in the second; average

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2/ See (4) for an indepth discussion of how CEDS data were collected.

3/ During the two 12-month survey periods, the Consumer Price Index for all items increased by about 18 percent; the CPI for food increased by about 31 percent.

4/ At the time of the writing of this report, BLS was preparing to release these income data.

5/ Eliminating food stamp participants from the total first-year sample was impossible since BLS did not collect data on food stamp participation in the first survey year.

household before-tax income was $202.85 per week in the first period and $224.67 in the second. Principal findings are:

(1) In the first CEDS survey, at-home food purchases accounted for 73.3 percent of total weekly food purchases. This declined slightly to 73.1 in the second survey period.

(2) Cereal and bakery product purchases accounted for about 12 percent of at-home food purchases, the bulk of which went to bakery products.

(3) Beef and veal accounted for about 14 percent of at-home food expenditures; pork purchases averaged about 9 percent.

(4) Dairy purchases averaged about 14 percent of all weekly at-home food purchases; about 42 percent of dairy purchases were for fresh whole milk.

(5) Fruit and vegetable expenditures averaged about 14.5 percent of at-home food purchases; fresh products comprised 56 percent of these purchases.

(6) Nonalcoholic beverages accounted for about 7.5 percent of at-home food purchases, over half of it for carbonated drinks.

(7) Food away from home averaged about $9.13 per week. Lunch, dinner, and supper accounted for about 72 percent of food-away-from-home purchases, while snacks made up 18 percent of all such purchases.

(8) Households spent an average of about 15 percent of their before-tax income on food.

RESULTS

Estimated expenditure functions and household-size and income elasticities for the 109 food items and 8 nonfood groups are presented in tables 2 and 3. The expenditure functions were estimated by ordinary least squares regression.

Some differences exist between the estimated expenditure functions and elasticities between the two survey periods. However, for most food and nonfood groups, the income and household-size elasticities are quite similar, suggesting that these elasticities remain stable even during periods of high inflation.

Food Purchases

The estimated income elasticity for total food was about 0.36 (tables 2 and 3). This means that a 10-percent increase in household income was associated with a 3.6-percent increase in food expenditures, assuming no influence of

other factors. Similarly, a 10-percent increase in household income was associated with a 1.7-percent increase in at-home food purchases, but a much larger 8.5-percent increase in away-from-home food purchases.

The estimated household-size elasticity for food at home was between 0.66 and 0.67, while the same elasticity for food away from home ranged from -0.06 to -0.08. This indicates that, given the same income, larger households spend more for at-home food, but less on food away from home than smaller households.

Cereals and Cereal Products

For both survey periods, the income elasticity for cereals and cereal products was negative, indicating that high-income households spent less on these products than their low-income counterparts. Of the three food groups in this category, purchases of flour and prepared flour mixes declined the most on a percentage basis as household income increased. A 10-percent increase in household income was associated with a 1.5-percent decrease in household purchases of rice, pasta, and cornmeal. Household purchases of cereals and cereal products were very responsive to increases in household size. The household-size elasticity was greater than 0.93 in both survey years.

Bakery Products

The type of bakery products purchased changed with household income. For example, low-income households spent more on white bread, but less on other bakery products than their high-income counterparts. Except for bread, purchases of bakery products were quite responsive to income. For example, the income elasticity for fresh sweetrolls, coffeecake, and doughnuts in the first survey was 0.32, which means that a 10-percent increase in income was associated with a 3.2-percent increase in household purchases of these products.

Meats, Poultry, Eggs, and Fish

While the estimated income elasticity for total meats was 0.23, the elasticities for various types and cuts of meats differed substantially. Results generally indicate that the more expensive meat cuts had higher income elasticities, but lower household-size elasticities. Expenditures on beef and veal were more responsive to changes in household income than were expenditures for pork, poultry, or fish.

In both survey years, the income elasticity for poultry was positive, but less than 0.10, indicating that poultry purchases were quite unresponsive to changes in household income. High-income households spent less on fresh whole chickens and eggs, but more on chicken parts, turkey, and other poultry than their low-income counterparts.

Household purchases of fish were quite responsive to household income and size. In the first survey, a 10-percent increase in household income was associated with a 3.6-percent increase in fish purchases, while a 10-percent increase in household size was associated with a 4.3-percent increase in fish purchases.

Dairy Products

Household purchases of fresh milk products were only slightly responsive to changes in income, but very responsive to changes in household size. However, processed dairy product purchases were considerably more responsive to income. An increase in household income was associated with a slight decline in purchases of fresh whole milk in both survey years.

Fruits and Vegetables

Household purchases of fresh apples were more responsive to changes in income than were household purchases of bananas or oranges. High-income households spent less on white potatoes, but more on other fresh vegetables than low-income households. Purchases of frozen fruit juices were more responsive to changes in income and household size than purchases of other fruit juices and purchases of canned and dried fruits. Purchases of canned and dried vegetables were not responsive to income changes.

Sugar and Sweets

Households with high incomes spent less on sugar but more on candy, chewing gum, and other sweets than low-income households.

Fats and Oils

Purchases of foods in this group were generally unresponsive to changes in income. None of the commodities in this group had an income elasticity greater than 0.13 in the second survey. But, purchases of these foods were very responsive to changes in household size.

Nonalcoholic Beverages

Household purchases of cola drinks were more responsive to household size and less responsive to income than purchases of other carbonated drinks. High-income households spent less on instant coffee but more on roasted coffee than low-income households.

Miscellaneous Prepared Foods

The estimated income elasticity for items in this category--such as baby food, seasonings, and snack foods--was about 0.21. Snack foods had the highest income elasticity. The income elasticity for baby, junior, and toddler foods was negative.

Food-Away-From-Home

High-income households spent more on away-from-home food than low-income households. But when income was held constant, large households tended to spend less on away-from-home food than small households. However, expenditures on away-from-home snacks increased with household size. Expenditures on school lunch and breakfast were moderately responsive to changes in income and very responsive to changes in household size.

Nonfood Purchases

The income elasticities for alcoholic beverages, personal care products, housekeeping supplies, gasoline, motor oil, and coolants were higher than those for total food; however, their household size elasticities were lower. Gas, electricity, and other fuels; tobacco and smoking supplies; and nonprescription drugs and medical supplies had income elasticities only slightly different than for total food.

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Table 1--Weekly household expenditures recorded by CEDS 1/

Product category	Average expenditures, first survey 2/	Allocation of at-home food dollar, first survey 2/	Average expenditures, second survey 2/	Allocation of at-home food dollar, second survey 2/
	Dollars		Dollars	
Total food	32.24	--	35.86	--
Food at home	23.62	1.0000	26.22	1.0000
Cereals, bakery products	2.83	.1198	3.18	.1213
Cereals, cereal products	.70	.0295	.86	.0380
Flour, prepared flour mixes	.22	.0093	.27	.0103
Cereal	.30	.0127	.35	.0133
Rice, pasta, cornmeal	.19	.0080	.24	.0092
Bakery products	2.14	.0906	2.33	.0889
White bread	.53	.0224	.61	.0233
Other breads	.28	.0119	.33	.0126
Fresh biscuits, rolls, muffins	.22	.0093	.23	.0088
Fresh cakes, cupcakes	.23	.0097	.24	.0092
Cookies	.26	.0110	.27	.0103
Crackers, bread/cracker products	.13	.0055	.14	.0053
Fresh sweetrolls, coffeecake, doughnuts	.29	.0123	.31	.0118
Frozen/refrigerated and other bakery products	.19	.0080	.20	.0076
Meats, poultry, fish, eggs	8.79	.3721	9.94	.3791
Meats, poultry, fish	8.22	.3480	9.24	.3524
Meats	6.55	.2773	7.24	.2761
Beef and veal	3.34	.1414	3.70	.1411
Ground beef excluding canned	.89	.0377	1.02	.0389
Chuck roasts	.31	.0131	.37	.0141
Round and other roasts	.65	.0275	.73	.0278
Round steak	.21	.0089	.23	.0088
Sirloin and other steak	.95	.0402	1.00	.0381
Other beef and veal	.33	.0140	.36	.0137
Pork	2.13	.0902	2.29	.0873
Bacon	.41	.0174	.45	.0172
Pork chops	.44	.0186	.47	.0179
Ham, excluding canned	.39	.0165	.41	.0156

See footnotes at end of table.

Continued--

Table 1--Weekly household expenditures recorded by CEDS 1/--Continued

Product category	Average expenditures, first survey 2/	Allocation of at-home food dollar, first survey 2/	Average expenditures, second survey 2/	Allocation of at-home food dollar, second survey 2/
	Dollars		Dollars	
Sausage	0.30	0.0127	0.33	0.0126
Canned ham	.20	.0085	.21	.0080
Roasts	.12	.0051	.13	.0050
Other meats	.28	.0119	.29	.0111
Other meats	1.07	.0453	1.25	.0476
Frankfurters	.25	.0106	.29	.0111
Luncheon meats, cold cuts	.63	.0267	.76	.0290
Lamb, game	.11	.0047	.12	.0046
Organ meats	.07	.0030	.09	.0034
Poultry	1.01	.0428	1.28	.0488
Fresh whole chicken	.44	.0186	.58	.0221
Fresh/frozen chicken parts	.33	.0140	.38	.0145
Turkey, other poultry	.24	.0102	.32	.0122
Fish, seafood	.66	.0279	.73	.0278
Canned fish, seafood	.26	.0110	.27	.0103
Fresh/frozen fish, seafood	.41	.0176	.46	.0175
Eggs	.57	.0241	.70	.0267
Dairy products	3.27	.1384	3.66	.1400
Fresh milk products	1.96	.0830	2.17	.0828
Fresh whole milk	1.42	.0601	1.53	.0584
Other fresh milk, cream	.54	.0229	.63	.0240
Processed dairy products	1.32	.0559	1.50	.0572
Butter	.15	.0064	.17	.0065
Cheese	.64	.0271	.78	.0297
Ice cream, related products	.35	.0148	.34	.0130
Yogurt	.03	.0013	.04	.0015
Other dairy products	.14	.0059	.17	.0065
Fruits, vegetables	3.50	.1482	3.78	.1442
Fresh fruits, vegetables	1.93	.0817	2.19	.0835
Fresh fruits	.88	.0373	.98	.0374
Apples	.19	.0080	.22	.0084
Bananas	.13	.0055	.14	.0053
Oranges	.16	.0068	.16	.0061

See footnotes at end of table.

Continued--

Table 1--Weekly household expenditures recorded by CEDS 1/--Continued

Product category	Average expenditures, first survey 2/	Allocation of at-home food dollar, first survey 2/	Average expenditures, second survey 2/	Allocation of at-home food dollar, second survey 2/
	Dollars		Dollars	
Other fresh fruits	0.40	0.0169	0.47	0.0179
Fresh vegetables	1.05	.0445	1.21	.0461
White potatoes	.21	.0089	.29	.0111
Lettuce	.17	.0072	.18	.0069
Tomatoes	.16	.0068	.18	.0069
Other fresh vegetables	.51	.0216	.56	.0214
Processed fruits, vegetables	1.59	.0673	1.61	.0614
Processed fruits	.74	.0313	.76	.0290
Frozen fruit juices	.19	.0080	.21	.0080
Other fruit juices	.26	.0110	.26	.0099
Canned, dried fruits	.30	.0127	.29	.0111
Processed vegetables	.84	.0356	.85	.0324
Frozen vegetables	.21	.0089	.21	.0080
Canned, dried vegetables	.59	.0250	.59	.0225
Vegetable juices	.04	.0017	.04	.0015
Other food at home	5.25	.2223	5.67	.2162
Sugar, sweets	.76	.0322	.79	.0301
Candy, chewing gum	.37	.0157	.35	.0133
Sugar	.18	.0076	.24	.0092
Other sweets	.21	.0089	.21	.0080
Fats, oils	.62	.0262	.79	.0301
Margarine	.18	.0076	.23	.0088
Other fats, oils, salad dressings	.31	.0131	.41	.0156
Nondairy substitutes	.05	.0021	.06	.0023
Peanut butter, excluding nuts	.08	.0034	.09	.0034
Nonalcoholic beverages	1.82	.0771	1.92	.0732
Cola drinks, excluding diet	.67	.0284	.69	.0263
Other carbonated drinks	.35	.0148	.35	.0133
Roasted coffee	.29	.0123	.32	.0122
Instant coffee	.22	.0093	.22	.0084
Other noncarbonated drinks	.29	.0123	.34	.0130
Miscellaneous prepared foods	2.05	.0868	2.16	.0824
Canned packaged soups	.21	.0089	.23	.0088
Frozen prepared foods	.31	.0131	.33	.0126

See footnotes at end of table.

Continued--

Table 1--Weekly household expenditures recorded by CEDS 1/--Continued

Product category	Average expenditures, first survey 2/	Allocation of at-home food dollar, first survey 2/	Average expenditures, second survey 2/	Allocation of at-home food dollar, second survey 2/
	Dollars		Dollars	
Snack foods	0.36	0.0152	0.40	0.0153
Seasonings, olives, pickles, relish	.41	.0176	.42	.0160
Other condiments	.12	.0051	.13	.0050
Baby, junior, toddler foods	.13	.0055	.14	.0053
Other prepared foods	.51	.0216	.52	.0198
Food away from home	8.62	--	9.64	--
Breakfast, excluding school	.34	--	.39	--
Lunch, excluding school	2.69	--	3.10	--
Dinner, supper	3.50	--	3.84	--
School lunch, breakfast	.42	--	.43	--
Board, other meals away from home	.07	--	.09	--
Snacks	1.61	--	1.79	--
Alcoholic beverages	2.39	--	2.49	--
Tobacco, smoking supplies	2.29	--	2.35	--
Personal care	3.06	--	3.08	--
Nonprescription drugs, medical supplies	1.21	--	1.31	--
Housekeeping supplies	2.76	--	2.89	--
Gas, electricity, other fuels	6.77	--	7.33	--
Gasoline, motor oil, coolants	6.94	--	8.10	--
Miscellaneous items	2.63	--	2.78	--

-- = Not applicable.

1/ These data differ from those published in (4) because households that had large expenditures relative to their income (suggesting that expenditures were incorrectly reported and/or not representative of normal purchasing patterns) are not included, and in the second year Food Stamp Program participants are not included. The number of individual household records used in the analysis was 9,264 the first year and 9,630 the second year.

This table is based on an average household size of 3.01 people in the first year and 2.93 in the second. Weekly before tax income averaged $202.85 in the first survey period and $224.67 in the second.

2/ See text discussion in section titled "The Data" for explanation of the two CEDS surveys.

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Total food	4.52614151	0.06531758	-0.00003406	6.31356340	-0.29254793	0.00217511	0.39	0.3652	0.4658
	2/ (7.65)	(21.85)	(-11.50)	(19.19)	(-8.20)	(3.87)			
Food at home	2.51497172	.02089752	-.00001424	7.02043417	-.36891054	.00199048	.37	.1812	.6632
	(5.56)	(9.15)	(-6.29)	(27.94)	(-13.50)	(4.64)			
Cereals, bakery products	.29051738	.00089133	-.00000125	.88204335	-.04140618	.00045174	.31	.1248	.7696
	(4.19)	(2.54)	(-3.59)	(22.88)	(-9.90)	(6.86)			
Cereals, cereal products	.07010103	-.00045902	.00000032	.26745836	-.00841097	.00001118	.15	-.0852	.9357
	(2.29)	(-2.97)	(2.06)	(15.75)	(-4.56)	(0.39)			
Flour, prepared mixes	.03493632	-.00017976	.00000027	.08886867	-.00331719	-.00003694	.05	-.1700	.8540
	(2.23)	(-2.28)	(3.45)	(10.23)	(-3.52)	(-2.49)			
Cereal	.00072164	-.00019916	-.00000015	.11489936	-.00484436	.00009343	.13	.0141	1.0493
	(0.04)	(-2.42)	(-1.79)	(12.68)	(-4.93)	(6.03)			
Rice, pasta, cornmeal	.03444307	-.00008010	.00000019	.06369033	-.00024942	-.00004531	.04	-.1504	.8482
	(1.96)	(-0.90)	(2.18)	(6.52)	(-0.24)	(-2.72)			
Bakery products	.22264284	.00135723	-.00000158	.61848947	-.03331364	.00044294	.26	.1942	.7141
	(3.84)	(4.63)	(-5.42)	(19.18)	(-9.52)	(8.04)			
White bread	.07015724	-.00045183	.00000037	.19719251	-.00439501	-.00001386	.15	-.1311	.9503
	(2.89)	(-3.68)	(3.03)	(14.60)	(-3.00)	(-0.60)			
Other breads	.10033633	.00021227	-.00000025	.05105265	-.00325874	.00006279	.04	.2150	.4700
	(6.09)	(2.55)	(-3.02)	(5.58)	(-3.28)	(4.01)			
Fresh biscuits, rolls, muffins	-.02258372	.00034384	-.00000033	.07094359	-.00517515	.00007057	.08	.3853	.7325
	(-1.65)	(4.96)	(-4.73)	(9.30)	(-6.25)	(5.41)			
Fresh cakes, cupcakes	.00567257	.00042122	-.00000049	.05522076	-.00326933	.00006268	.03	.3688	.6422
	(0.26)	(3.86)	(-4.55)	(4.60)	(-2.51)	(3.05)			
Cookies	-.00087168	.00014577	-.00000031	.08309758	-.00547472	.00010411	.09	.2584	.8200
	(-0.05)	(1.79)	(-3.78)	(9.26)	(-5.62)	(6.79)			
Crackers, bread/cracker products	.03652831	.00008424	.00000003	.03085045	-.00134485	.00000095	.04	.1521	.5213
	(4.37)	(1.99)	(0.83)	(6.64)	(-2.67)	(0.12)			
Fresh sweetrolls, coffee-cake, doughnuts	.00094764	.00022067	-.00000029	.09088466	-.00740401	.00011837	.06	.3229	.7342
	(0.05)	(2.21)	(-2.98)	(8.28)	(-6.22)	(6.31)			
Frozen/refrigerated and other bakery products	.03246616	.00038104	-.00000031	.03924729	-.00299182	.00003733	.03	.3830	.4453
	(2.19)	(5.08)	(-4.21)	(4.76)	(-3.34)	(2.65)			
Meats, poultry, fish, eggs	.82946443	.01150183	-.00000553	2.47978337	-.10970076	-.00008244	.22	.2079	.6166
	(3.45)	(9.47)	(-4.59)	(18.55)	(-7.56)	(-0.36)			
Meats, poultry, fish	.72375438	.01165148	-.00000587	2.27040439	-.09990401	-.00003654	.21	.2261	.6080
	(3.12)	(9.93)	(-5.05)	(17.59)	(-7.13)	(-0.17)			
Meats	.40835403	.00937442	-.00000542	1.89086952	-.09135818	.00011619	.20	.2332	.6268
	(2.09)	(9.48)	(-5.53)	(17.38)	(-7.74)	(0.62)			

See footnotes at end of table.

Continued--

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Beef, veal	0.09626138	0.00721806	-0.00000423	0.85157993	-0.04722073	0.00015637	0.12	0.3625	0.5391
	2/ (0.71)	(10.59)	(-6.27)	(11.35)	(-5.80)	(1.22)			
Ground, excluding canned	-.03157854	.00015379	-.00000046	.36318072	-.01720151	.00006827	.09	.0393	.9238
	(-0.63)	(0.60)	(-1.80)	(12.94)	-5.65)	(1.42)			
Chuck roasts	-.00315763	.0003 081	-.00000046	.09386471	-.00451665	.00006851	.02	.2473	.7771
	(-0.09)	(2.07)	(-2.65)	(4.90)	(-2.17)	(2.09)			
Round and other roasts	.08772798	.00194940	-.00000151	.06693136	-.00601521	.00020290	.04	.6099	.3339
	(1.55)	(6.81)	(-5.31)	(2.13)	(-1.76)	(3.77)			
Round steak	-.00633444	.00053390	-.00000015	.06105653	-.00209926	-.00005386	.01	.2995	.5350
	(-0.20)	(3.34)	(-0.95)	(3.47)	(-1.10)	(-1.79)			
Sirloin and other steak	-.00342557	.00390561	-.00000173	.17964821	-.01167405	-.00015956	.04	.5817	.2439
	(-0.05)	(11.13)	(-4.98)	(4.65)	(-2.79)	(-2.42)			
Other beef, veal	.05330517	.00031807	.00000006	.08748791	-.00576506	.00003023	.01	.2635	.5314
	(1.38)	(1.63)	(0.33)	(4.09)	(-2.48)	(0.83)			
Pork	.33755820	.00098339	-.00000061	.68472392	-.03209526	-.00001929	.08	.0645	.6873
	(3.53)	(2.04)	(-1.28)	(12.90)	(-5.57)	(-0.21)			
Bacon	.10074551	-.00015158	.00000014	.15735055	-.01102816	-.00000683	.02	-.0573	.6604
	(3.19)	(-0.95)	(0.87)	(8.95)	(-5.78)	(-0.23)			
Pork chops	.04443660	.00015820	-.00000026	.15614914	-.00666080	-.00000646	.03	.0154	.7855
	(1.27)	(0.89)	(-1.47)	(8.01)	(-3.15)	(-0.19)			
Ham, excluding canned	.02564954	.00064922	-.00000077	.10298174	-.00569755	.00006733	.02	.2810	.6361
	(0.57)	(2.87)	(-3.43)	(4.14)	(-2.11)	(1.58)			
Sausage	.07987832	-.00017590	.00000009	.08430111	-.00323095	.00004684	.03	.0010	.7563
	(3.01)	(-1.31)	(0.65)	(5.71)	(-2.02)	(1.86)			
Canned ham	.03769728	.00016512	.00000034	.05754108	-.00266402	-.00004813	.01	.1609	.4779
	(1.22)	(1.06)	(2.18)	(3.35)	(-1.43)	(-1.64)			
Roasts	.00750507	.00024046	-.00000026	.02522037	-.00077916	.00002527	.01	.3507	.6321
	(0.35)	(2.20)	(-2.41)	(2.09)	(-0.60)	(1.23)			
Other pork	.04199030	.00009999	.00000011	.10185852	-.00208427	-.00009751	.02	-.1071	.7431
	(1.36)	(0.64)	(0.73)	(5.93)	(-1.12)	(-3.32)			
Other meats	-.02546554	.00117297	-.00000057	.35456567	-.01204219	-.00002089	.11	.1664	.7795
	(-0.48)	(4.34)	(-2.15)	(11.93)	(-3.73)	(-0.41)			
Frankfurters	-.03908387	.00014654	.00000001	.10591199	-.00041841	-.00007011	.05	-.0479	1.0517
	(-1.57)	(1.17)	(0.05)	(7.66)	(-0.28)	(-2.97)			
Luncheon, cold cuts	-.04129623	.00065527	-.00000095	.22258519	-.01120141	.00011298	.09	.1952	.8455
	(-1.11)	(3.49)	(-5.08)	(10.78)	(-5.00)	(3.20)			
Lamb, game	.03492290	.00030179	.00000029	.00190665	.00023529	-.00002055	.01	.6577	-.0231
	(1.63)	(2.78)	(2.70)	(0.16)	(0.18)	(-1.01)			
Organ meats	.01989084	.00007021	.00000007	.02460375	-.00069115	-.00004321	.01	-.0856	.4743
	(1.60)	(1.12)	(1.18)	(3.56)	(-0.92)	(-3.66)			

See footnotes at end of table.

Continued--

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Poultry	0.22684567	0.00075054	0.00000027	0.24274993	-0.00220825	-0.00013248	0.06	0.0931	0.6050
	2/ (4.17)	(2.73)	(1.00)	(8.03)	(-0.67)	(-2.56)			
Fresh whole chicken	.11052474	-.00014547	.00000 :4	.14900683	-.00055683	-.00015297	.04	-.1947	.7748
	(3.22)	(-0.84)	(2.57)	(7.81)	(-0.27)	(-4.69)			
Fresh/froz. chicken parts	.08066668	.00053333	-.00000015	.06176154	-.00161003	-.00002588	.02	.2459	.4324
	(3.03)	(3.96)	(-1.13)	(4.17)	(-1.00)	(-1.02)			
Turkey, other poultry	.03577124	.00036241	-.00000002	.03212826	-.00005141	.00004637	.02	.4232	.5237
	(1.13)	(2.27)	(-0.11)	(1.83)	(-0.03)	(1.54)			
Fish, seafood	.08855467	.00152651	-.00000073	.13678494	-.00633757	-.00002025	.03	.3568	.4275
	(1.75)	(5.97)	(-2.87)	(4.86)	(-2.08)	(-0.42)			
Canned fish, seafood	.02116667	.00051607	-.00000044	.06570841	-.00404460	.00002430	.03	.3214	.5372
	(1.09)	(5.25)	(-4.50)	(6.07)	(-3.44)	(1.31)			
Fresh/froz. fish, seafood	.06744618	.00101142	-.00000029	.07128412	-.00231098	-.00004448	.01	.3793	.3577
	(1.51)	(4.48)	(-1.29)	(2.87)	(-0.86)	(-1.05)			
Eggs	.10571006	-.00014966	.00000035	.20937898	-.00979676	-.00004589	.09	-.0516	.7413
	(4.26)	(-1.19)	(2.80)	(15.16)	(-6.54)	(-1.94)			
Dairy products	.22177057	.00082016	-.00000190	1.07000480	-.05773423	.00075288	.32	.1433	.8042
	(2.71)	(1.99)	(-4.63)	(23.56)	(-11.71)	(9.70)			
Fresh milk products	-.03692556	-.00071152	-.00000044	.80647709	-.04183674	.00039417	.25	.0305	.9737
	(-0.58)	(-2.20)	(-1.39)	(22.69)	(-10.85)	(6.49)			
Fresh whole milk	-.08382758	-.00100390	.00000021	.65023202	-.02539207	.00008298	.19	-.0957	1.0900
	(-1.38)	(-3.27)	(0.69)	(19.27)	(-6.93)	(1.44)			
Other fresh milk, cream	.04690197	.00029237	-.00000066	.15624507	-.01644467	.00031119	.06	.3596	.6690
	(1.27)	(1.57)	(-3.54)	(7.61)	(-7.38)	(8.87)			
Processed dairy products	.26048529	.00153966	-.00000146	.26472941	-.01600826	.00035936	.15	.3120	.5503
	(5.44)	(6.36)	(-6.08)	(9.94)	(-5.54)	(7.90)			
Butter	.05266331	.00016192	-.00000006	.02741611	-.00247272	.00002568	.02	.2899	.3553
	(4.01)	(2.44)	(-0.98)	(3.75)	(-3.12)	(2.06)			
Cheese	.11758573	.00097576	-.00000070	.12035230	-.00895683	.00017659	.10	.3874	.4805
	(3.89)	(6.39)	(-4.61)	(7.16)	(-4.91)	(6.15)			
Ice cream, related prod.	.00122323	.00035648	-.00000066	.09989224	-.00674551	.00015268	.09	.3170	.7746
	(0.06)	(3.33)	(-6.22)	(8.48)	(-5.28)	(7.58)			
Yogurt	.00483452	.00013357	-.00000008	.00246264	-.00047722	.00000958	.01	.7590	.1331
	(0.63)	(3.44)	(-2.01)	(0.58)	(-1.03)	(1.31)			
Other dairy products	.08417849	-.00008806	.00000004	.01460613	.00264408	-.00000517	.01	-.1241	.6198
	(4.56)	(-0.94)	(0.44)	(1.42)	(2.37)	(-0.29)			
Fruits, vegetables	.88614008	.00377272	-.00000182	.78503269	-.04618117	.00027947	.16	.2247	.4847
	(9.25)	(7.80)	(-3.70)	(14.75)	(-7.99)	(3.07)			
Fresh fruits, vegetables	.53221317	.00191253	-.00000083	.42740305	-.02795670	.00019136	.11	.2262	.4647
	(8.07)	(5.74)	(-2.51)	(11.67)	(-7.03)	(3.06)			

See footnotes at end of table.

Continued--

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Fresh fruits	0.28332625 2/ (7.06)	0.00102988 (5.08)	-0.00000070 (-3.50)	0.15650947 (7.01)	-0.01062497 (-4.39)	0.00014747 (3.87)	0.06	0.2730	0.4169
Apples	.04304041 (2.98)	.00011608 (1.59)	-.00000014 (-2.00)	.04580704 (5.71)	-.00304140 (-3.49)	.00004815 (3.51)	.03	.2181	.5908
Bananas	.03468610 (4.14)	-.00002035 (-0.48)	.00000001 (0.22)	.03820892 (8.20)	-.00221185 (-4.37)	.00001865 (2.34)	.04	.0615	.6575
Oranges	.04111592 (2.97)	.00007227 (1.03)	-.00000016 (-2.24)	.04113681 (5.34)	-.00239173 (-2.86)	.00002892 (2.20)	.02	.1204	.6174
Other fresh fruits	.16448384 (5.93)	.00086188 (6.15)	-.00000041 (-2.97)	.03135672 (2.03)	-.00298000 (-1.78)	.00005175 (1.96)	.03	.4274	.1782
Fresh vegetables	.24888691 (6.42)	.00088265 (4.50)	-.00000013 (-0.65)	.27089358 (12.56)	-.01733173 (-7.41)	.00004389 (1.19)	.09	.1867	.5051
White potatoes	.04402160 (3.31)	-.00014213 (-2.12)	.00000012 (1.73)	.07839455 (10.61)	-.00449356 (-5.60)	.00000728 (0.58)	.04	-.0701	.7675
Lettuce	.00549787 (0.60)	.00031890 (6.93)	-.00000021 (-4.62)	.04420651 (8.74)	-.00370970 (-6.75)	.00003595 (4.16)	.08	.4153	.5257
Tomatoes	.03881386 (3.38)	.00022197 (3.83)	-.00000012 (-2.17)	.03726613 (5.84)	-.00294343 (-4.25)	.00001889 (1.73)	.03	.2857	.4307
Other fresh vegetables	.16055358 (6.39)	.00048391 (3.81)	.00000009 (0.74)	.11102639 (7.95)	-.00618504 (-4.08)	-.00001823 (-0.76)	.04	.1860	.4152
Processed fruits, vegetables	.35818155 (6.60)	.00188959 (6.89)	-.00000101 (-3.73)	.36124130 (11.97)	-.01854619 (-5.66)	.00008991 (1.74)	.12	.2238	.5078
Processed fruits	.26021316 (7.79)	.00092513 (5.49)	-.00000068 (-4.07)	.11361221 (6.12)	-.00866454 (-4.30)	.00015644 (4.93)	.06	.3056	.3773
Frozen fruit juices	.02260658 (1.47)	.00035824 (4.62)	-.00000038 (-5.01)	.02216281 (2.60)	-.00185868 (-2.01)	.00010795 (7.40)	.06	.5708	.5263
Other fruit juices	.10795047 (5.88)	.00019176 (2.07)	-.00000006 (-0.61)	.05065207 (4.97)	-.00435508 (-3.94)	.00002299 (1.32)	.01	.1872	.3417
Canned, dried fruits	.12965611 (6.33)	.00037512 (3.63)	-.00000024 (-2.33)	.04079733 (3.58)	-.00245078 (-1.98)	.00002549 (1.31)	.02	.2405	.3141
Processed vegetables	.09796838 (2.70)	.00096446 (5.26)	-.00000033 (-1.84)	.24762909 (12.28)	-.00988164 (-4.52)	-.00006653 (-1.93)	.09	.1517	.6228
Frozen vegetables	.03078800 (1.85)	.00048813 (5.80)	-.00000029 (-3.51)	.03849385 (4.16)	-.00260272 (-2.59)	.00002391 (1.51)	.03	.4288	.3978
Canned, dried vegetables	.04751689 (1.61)	.00043642 (2.92)	.00000002 (0.12)	.20731712 (12.60)	-.00665972 (-3.73)	-.00011621 (-4.13)	.08	.0325	.7266
Vegetable juices	.01966349 (3.46)	.00003991 (1.39)	-.00000006 (-2.04)	.00181812 (0.58)	-.00061920 (-1.80)	.00002577 (4.77)	.01	.4776	.2529
Other food at home	.30043965 (2.41)	.00392239 (6.22)	-.00000375 (-6.01)	1.80747154 (26.06)	-.11330027 (-15.05)	.00058843 (4.96)	.28	.1611	.7130

See footnotes at end of table.

Continued--

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable: Constant term	Income	Income squared	Household size	Household size squared	Income times household size	Coefficient of determination 1/	Income elasticity	Household-size elasticity
Sugar, sweets	0.09002740	0.00042786	-0.00000069	0.22452189	-0.01416638	0.00019130	0.08	0.1930	0.7049
	2/ (2.25)	(2.12)	(-3.44)	(10.11)	(-5.88)	(5.04)			
Candy, chewing gum	.00152048	.00064105	-.00000083	.09633255	-.00741606	.00014056	.04	.3996	.6539
	(0.05)	(4.26)	(-5.57)	(5.81)	(-4.12)	(4.96)			
Sugar	.07722839	-.00034125	.00000027	.05474888	-.00148344	.00001744	.04	-.1961	.8051
	(5.85)	(-5.12)	(4.03)	(7.47)	(-1.86)	(1.42)			
Other sweets	.01114061	.00012890	-.00000013	.07430752	-.00532913	.00003369	.02	.1728	.7087
	(0.52)	(1.20)	(-1.18)	(6.26)	(-4.14)	(1.66)			
Fats, oils	.12047052	.00001429	-.00000009	.20113659	-.01108526	.00005490	.09	.0467	.7062
	(4.64)	(0.11)	(-0.72)	(13.94)	(-7.08)	(2.23)			
Margarine	.04735908	-.00001538	-.00000003	.05374974	-.00289408	.00001726	.05	.0275	.6679
	(4.72)	(-0.30)	(-0.57)	(9.64)	(-4.78)	(1.81)			
Other fats, oils, salad dressings	.05197777	.00001122	.00000003	.10775180	-.00633769	.00001115	.04	.0375	.7020
	(2.75)	(0.12)	(0.33)	(10.24)	(-5.55)	(0.62)			
Nondairy substitutes	.02509337	.00002528	-.00000005	.01017602	-.00096065	.00001226	.01	.1567	.3823
	(3.65)	(0.73)	(-1.32)	(2.66)	(-2.31)	(1.88)			
Peanut butter, excl. nuts	-.00386871	-.00000558	-.00000005	.03035603	-.00095530	.00001455	.04	-.0812	1.0253
	(-0.47)	(-0.13)	(-1.26)	(6.59)	(-1.91)	(1.85)			
Nonalcoholic beverages	.19236492	.00152553	-.00000113	.60496358	-.03669336	.00006297	.15	.1398	.6549
	(3.30)	(5.18)	(-3.87)	(18.69)	(-10.44)	(1.14)			
Cola drinks, excl. diet	-.07902291	.00053752	-.00000074	.30751848	-.01888718	.00001071	.08	.0814	.8774
	(-2.15)	(2.89)	(-4.03)	(15.04)	(-8.51)	(0.31)			
Other carbonated drinks	.03090118	.00088568	-.00000069	.06264338	-.00375453	.00006159	.04	.4622	.4552
	(1.23)	(6.97)	(-5.50)	(4.48)	(-2.47)	(2.58)			
Roasted coffee	.07583188	.00018417	-.00000007	.09701137	-.00835402	-.00000282	.01	.1022	.4750
	(3.64)	(1.75)	(-0.65)	(8.37)	(-6.64)	(-0.14)			
Instant coffee	.17490426	-.00007586	.00000027	.02538122	-.00009073	-.00004547	.01	.0944	.2121
	(10.46)	(-0.90)	(3.22)	(2.73)	(-0.09)	(-2.86)			
Other noncarbonated	-.01013352	-.00000391	.00000010	.11359434	-.00569084	.00003972	.07	.1079	.8959
	(-0.51)	(-0.04)	(1.01)	(10.22)	(-4.72)	(2.09)			
Miscellaneous prep. foods	-.10242319	.00195489	-.00000184	.77684947	-.05135527	.00027925	.18	.2027	.7698
	(-1.46)	(5.53)	(-5.27)	(19.97)	(-12.17)	(4.20)			
Canned packaged soups	.01520830	.00020852	-.00000020	.06145605	-.00338413	.00002845	.04	.2098	.6847
	(1.06)	(2.87)	(-2.75)	(7.69)	(-3.90)	(2.08)			
Frozen prepared foods	.08363042	.00025332	-.00000029	.06214798	-.00475613	.00010369	.02	.2885	.5217
	(2.98)	(1.79)	(-2.08)	(3.99)	(-2.81)	(3.89)			
Snack foods	-.05509118	.00072264	-.00000085	.11645200	-.00792144	.00011601	.10	.3992	.7616
	(-2.58)	(6.70)	(-7.94)	(9.81)	(-6.15)	(5.72)			
Seasonings, olives, pickles, relish	-.02806623	.00063517	-.00000048	.13858187	-.00795579	.00003422	.09	.2701	.7197
	(-1.31)	(5.86)	(-4.43)	(11.63)	(-6.15)	(1.68)			

Continued--

See footnotes at end of table.

Table 2--First survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable: Constant term	Income	Income squared	Household size	Household size squared	Income times household size	Coefficient of determination 1/	Income elasticity	Household-size elasticity
Other condiments	0.01682507	0.00020590	-0.00000020	0.02806063	-0.00194752	0.00002539	0.02	0.3330	0.5276
	2/ (1.29)	(3.13)	(-3.05)	(3.88)	(-2.48)	(2.05)			
Baby, junior, toddler foods	-.14682617	-.00013698	.00000023	.16126136	-.01136069	-.00007484	.02	-.4205	1.8043
	(-5.75)	(-1.06)	(1.80)	(11.36)	(-7.37)	(-3.08)			
Other prepared foods	.01105514	.00007933	-.00000008	.21208802	-.01428404	.00004751	.06	.0751	.7975
	(0.39)	(0.55)	(-0.54)	(13.40)	(-8.31)	(1.76)			
Food away from home	2.01214878	.04442420	-.00001982	-.70676451	.07545566	.00018459	.18	.8691	-.0752
	(5.52)	(24.10)	(-10.85)	(-3.49)	(3.43)	(0.53)			
Breakfast, excluding school	.27953126	.00230701	-.00000086	-.15373235	.01633220	-.00013643	.02	.9308	-.7415
	(5.86)	(9.58)	(-3.58)	(-5.80)	(5.68)	(-3.01)			
Lunch, excluding school	.27487896	.01647955	-.00000904	-.15623528	.01364281	-.00001605	.13	.9632	-.0866
	(1.92)	(22.80)	(-12.63)	(-1.96)	(1.58)	(-0.12)			
Dinner, supper	1.41545402	.02230046	-.00000424	-.81729516	.07959183	-.00098907	.09	1.0195	-.4628
	(5.36)	(16.70)	(-3.20)	(-5.56)	(4.99)	(-3.94)			
School lunch, breakfast	-.29332614	-.00038869	-.00000098	.20942568	-.00615305	.00043218	.14	.2502	1.8809
	(-6.66)	(-1.75)	(-4.46)	(8.56)	(-2.32)	(10.33)			
Board, other meals away from home	.16694447	-.00155118	.00000096	-.01457100	-.00537821	.00037945	.01	-.0592	1.2369
	(2.96)	(-5.44)	(3.40)	(-0.46)	(-1.58)	(7.08)			
Snacks	.16880800	.00529269	-.00000568	.22630416	-.02264897	.00051533	.07	.5723	.3639
	(1.88)	(11.65)	(-12.62)	(4.53)	(-4.18)	(6.03)			
Alcoholic beverages	1.18565166	.01538186	-.00000680	-.61637524	.06556923	-.00060747	.05	.9170	-.4347
	(6.22)	(15.98)	(-7.13)	(-5.82)	(5.70)	(-3.36)			
Tobacco, smoking supplies	.42036616	.00649438	-.00000438	.49568025	-.02408087	-.00047300	.04	.2920	.3346
	(3.65)	(11.18)	(-7.60)	(7.75)	(-3.47)	(-4.33)			
Personal care products	.51991160	.01183631	-.00000599	.28207246	-.02404300	.00000241	.09	.6250	.1358
	(3.56)	(16.04)	(-8.19)	(3.48)	(-2.73)	(0.02)			
Nonprescription drugs, medical supplies	.65311083	.00059916	.00000017	.08565739	-.01153493	.00043766	.01	.3339	.2621
	(4.21)	(0.76)	(0.21)	(0.99)	(-1.23)	(2.97)			
Housekeeping supplies	.27310684	.00572401	-.00000387	.61766748	-.05066281	.00053793	.10	.4238	.4595
	(2.21)	(9.18)	(-6.27)	(9.01)	(-6.81)	(4.59)			
Gas, electricity, other fuels	2.70777731	.00176618	-.00000172	1.55293325	-.13680595	.00125821	.02	.1453	.4377
	(5.98)	(0.77)	(-0.76)	(6.17)	(-5.01)	(2.92)			
Gasoline, motor oil, coolants	-.13820908	.02967178	-.00002171	1.21801496	-.09036564	.00004236	.11	.6138	.2961
	(-0.46)	(19.60)	(-14.47)	(7.31)	(-5.00)	(0.15)			
Miscellaneous items	-.23440084	.00684812	-.00000325	.73689590	-.06000248	.00034525	.04	.5066	.5100
	(-1.01)	(5.83)	(-2.79)	(5.70)	(-4.28)	(1.56)			

1/ Unadjusted R^2. 2/ Numbers in parentheses denote t-values.

Table 3---Second survey: Estimated coefficients and elasticities obtained from CEDS data

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Total food	5.27871898	0.06242778	-0.00003711	7.34718134	-0.39668131	0.00350462	0.39	0.3516	0.4754
	2/ (8.22)	(18.37)	(-9.92)	(20.54)	(-10.00)	(5.59)			
Food at home	3.56823568	.01581901	-.00001702	7.82810879	-.46478880	.00401383	.37	.1708	.6713
	(7.12)	(5.97)	(-5.83)	(28.06)	(-15.02)	(8.12)			
Cereals, bakery products	.51253138	.00055052	-.00000207	.91196318	-.03905464	.00066665	.29	.1110	.7663
	(6.21)	(1.26)	(-4.31)	(19.85)	(-7.66)	(8.19)			
Cereals, cereal products	.15285178	-.00068043	.00000040	.29206642	-.00436622	.00003844	.15	-.1008	.9323
	(3.87)	(-3.26)	(1.76)	(13.29)	(-1.79)	(0.99)			
Flour, prepared mixes	.05961404	-.00023236	.00000018	.09681520	-.00072683	-.00003456	.05	-.2100	.9190
	(2.83)	(-2.08)	(1.46)	(8.24)	(-0.56)	(-1.66)			
Cereal	.06995850	-.00028129	-.00000001	.09047947	-.00017492	.00010886	.11	.0213	.9501
	(3.31)	(-2.51)	(-0.11)	(7.68)	(-0.13)	(5.22)			
Rice, pasta, cornmeal	.02327924	-.00016678	.00000024	.10477175	-.00346447	-.00003586	.03	-.1516	.9213
	(1.10)	(-1.49)	(1.93)	(8.88)	(-2.65)	(-1.72)			
Bakery products	.36198376	.00123792	-.00000249	.62364187	-.03497407	.00063040	.23	.1895	.7040
	(5.38)	(3.48)	(-6.36)	(16.66)	(-8.42)	(9.51)			
White bread	.07091473	-.00047883	.00000016	.24767391	-.00820690	.00000890	.16	-.1639	.9674
	(2.80)	(-3.57)	(1.09)	(17.56)	(-5.25)	(0.36)			
Other breads	.15247035	00026067	-.00000031	.03374025	-.00028728	.00005856	.03	.2017	.4060
	(7.71)	(2.49)	(-2.70)	(3.06)	(-0.24)	(3.00)			
Fresh biscuits, rolls, muffins	-.00545270	.00022746	-.00000036	.06180822	-.00484242	.00011221	.08	.3929	.7616
	(-0.37)	(2.90)	(-4.19)	(7.50)	(-5.29)	(7.68)			
Fresh cakes, cupcakes	-.01469794	.00056972	-.00000068	.06149988	-.00460570	.00007312	.01	.4466	.6221
	(-0.43)	(3.10)	(-3.38)	(3.19)	(-2.16)	(2.14)			
Cookies	.04065776	.00012715	-.00000038	.05799808	-.00308612	.00012944	.08	.2785	.7464
	(2.42)	(1.43)	(-3.84)	(6.19)	(-2.97)	(7.80)			
Crackers, bread/cracker products	.05048281	.00004320	-.00000011	.02861610	-.00194406	.00004563	.03	.1953	.5488
	(4.97)	(0.80)	(-1.88)	(5.06)	(-3.10)	(4.56)			
Fresh sweetrolls, coffeecake, doughnuts	.02943727	.00038606	-.00000066	.07189421	-.00573238	.00013695	.05	.3550	.6515
	(1.34)	(3.32)	(-5.12)	(5.88)	(-4.22)	(6.32)			
Frozen/refrigerated and other bakery products	.03817148	.00010429	-.00000015	.06041122	-.00626920	.00006559	.02	.2556	.5587
	(2.39)	(1.23)	(-1.65)	(6.79)	(-6.35)	(4.16)			
Meats, poultry, fish, eggs	1.16017524	.00755820	-.00000540	3.08723529	-.19183366	.00099566	.20	.1818	.6443
	(4.21)	(5.19)	(-3.37)	(20.15)	(-11.28)	(3.67)			
Meats, poultry, fish	.93268272	.00805116	-.00000589	2.86467864	-.18118223	.00096473	.19	.2001	.6404
	(3.50)	(5.71)	(-3.79)	(19.31)	(-11.01)	(3.67)			
Meats	.63465864	.00755776	-.00000607	2.18725761	-.13856442	.00082901	.17	.2253	.6321
	(2.82)	(6.35)	(-4.63)	(17.46)	(-9.97)	(3.74)			

See footnotes at end of table

Continued--

Table 3--Second survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Beef, veal	0.22617168	0.00575830	-0.00000391	1.01118089	-0.06820086	0.00045135	0.10	0.3230	0.5642
	2/ (1.41)	(6.76)	(-4.18)	(11.29)	(-6.86)	(2.84)			
Ground, excluding canned	.07158685	-.00030649	-.00000046	.38712525	-.01970158	.00020024	.06	.0163	.9120
	(1.06)	(-0.85)	(-1.17)	(10.26)	(-4.71)	(3.00)			
Chuck roasts	-.02164726	.00083352	-.00000087	.10856619	-.00611792	.00003595	.02	.3332	.6407
	(-0.59)	(4.28)	(-4.05)	(5.30)	(-2.69)	(0.99)			
Round and other roasts	.07339708	.00108330	-.00000063	.18735778	-.02279978	.00024191	.02	.4661	.4354
	(0.89)	(2.50)	(-1.32)	(4.10)	(-4.50)	(2.99)			
Round steak	-.04691460	.00034059	-.00000026	.10683182	-.00735358	.00000051	.01	.2157	.7974
	(-1.18)	(1.62)	(-1.13)	(4.82)	(-2.99)	(0.01)			
Sirloin and other steak	.09862530	.00326493	-.00000160	.13532491	-.00527586	-.00005642	.03	.5363	.2696
	(1.29)	(8.10)	(-3.60)	(3.19)	(-1.12)	(-0.75)			
Other beef, veal	.05139564	.00054556	-.00000010	.08650218	-.00700568	.00002949	.01	.3680	.4257
	(1.17)	(2.34)	(-0.39)	(3.53)	(-2.58)	(0.68)			
Pork	.34265462	.00085473	-.00000011	.76980628	-.05025950	.00024434	.08	.1053	.6790
	(3.22)	(1.52)	(-1.80)	(12.99)	(-7.64)	(2.33)			
Bacon	.13403092	.00017278	-.00000023	.12978821	-.00822497	.00002275	.02	.0673	.5595
	(4.08)	(0.99)	(-1.20)	(7.10)	(-4.06)	(0.70)			
Pork chops	.10306078	.00014678	-.00000036	.13682402	-.00668780	.00005297	.03	.0672	.6845
	(2.71)	(0.73)	(-1.62)	(6.45)	(-2.84)	(1.41)			
Ham, excluding canned	.05616229	.00006719	-.00000007	.12964214	-.00893509	.00009302	.01	.1692	.7026
	(1.02)	(0.23)	(-0.22)	(4.24)	(-2.64)	(1.72)			
Sausage	.05070795	.00021108	-.00000036	.10456394	-.00513007	.00001661	.02	.0672	.6993
	(1.73)	(1.36)	(-2.09)	(6.42)	(-2.84)	(0.58)			
Canned ham	-.00738853	.00021052	-.00000032	.09154928	-.00904907	.00004597	.01	.2161	.6832
	(-0.21)	(1.15)	(-1.61)	(4.76)	(-4.24)	(1.35)			
Roasts	-.01888050	.00015533	-.00000001	.04654241	-.00335689	.00002471	.01	.3839	.8517
	(-0.83)	(1.28)	(-0.04)	(3.66)	(-2.38)	(1.10)			
Other pork	.02519079	-.00010720	.00000023	.13155051	-.00893835	-.00001151	.01	-.0292	.7756
	(0.77)	(-0.62)	(1.21)	(7.24)	(-4.43)	(-0.36)			
Other meats	.06583233	.00094473	-.00000104	.40627044	-.02010406	.00013332	.10	.1563	.7476
	(1.13)	(3.05)	(-3.04)	(12.47)	(-5.56)	(2.31)			
Frankfurters	-.00546423	.00013150	-.00000036	.09763383	-.00212293	.00003742	.07	.0622	.9621
	(-0.25)	(1.13)	(-2.80)	(8.00)	(-1.57)	(1.73)			
Luncheon, cold cuts	.01060819	.00084050	-.00000139	.23668712	-.01420632	.00018629	.08	.2267	.7578
	(0.25)	(3.76)	(-5.65)	(10.06)	(-5.44)	(4.47)			
Lamb, game	.03247719	.00011823	.00000046	.03075052	-.00258286	-.00004112	.01	.3719	.1512
	(1.18)	(0.81)	(2.87)	(2.00)	(-1.51)	(-1.51)			
Organ meats	.02809339	-.00014459	.00000025	.04163081	-.00122259	-.00004939	.01	-.4663	.8030
	(1.92)	(-1.87)	(2.95)	(5.12)	(-1.36)	(-3.43)			

See footnotes at end of table.

Continued--

Table 3--Second survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Poultry	0.21059500	-0.00010713	0.00000013	0.45519793	-0.02665417	0.00008253	0.05	0.0340	0.7296
	2/ (2.89)	(-0.28)	(0.31)	(11.22)	(-5.92)	(1.15)			
Fresh whole chicken	.13295232	-.00045319	.00000071	.23446515	-.00662467	-.00015323	.04	-.2262	.8157
	(3.07)	(-1.98)	(2.83)	(9.72)	(-2.47)	(-3.58)			
Fresh/froz. chicken parts	.12608865	.00001595	.00000001	.11042843	-.00871005	.00003487	.01	.0732	.5235
	(4.16)	(0.10)	(0.03)	(6.54)	(-4.65)	(1.17)			
Turkey, other poultry	-.04831943	.00032977	-.00000059	.11046180	-.01133143	.00020089	.02	.4583	.8158
	(-0.99)	(1.28)	(-2.07)	(4.08)	(-3.77)	(4.18)			
Fish, seafood	.08742908	.00060052	.00000005	.22222309	-.01596364	.00005318	.03	.2407	.5668
	(1.71)	(2.22)	(0.16)	(7.82)	(-5.07)	(1.06)			
Canned fish, seafood	.05186216	.00028645	-.00000024	.05642499	-.00316599	.00006134	.04	.2969	.5582
	(2.57)	(2.69)	(-2.07)	(5.03)	(-2.54)	(3.09)			
Fresh/froz. fish, seafood	.03594269	.00031428	.00000029	.16587619	-.01281117	-.00000788	.02	.2074	.5714
	(0.80)	(1.32)	(1.10)	(6.62)	(-4.61)	(-0.18)			
Eggs	.22749253	-.00049296	.00000049	.22255665	-.01065144	.00003409	.09	-.0581	.6957
	(8.00)	(-3.28)	(2.96)	(14.07)	(-6.07)	(1.10)			
Dairy products	.29245882	.00138000	-.00000302	1.17192353	-.06783640	.00088484	.29	.1606	.7792
	(3.07)	(2.74)	(-5.45)	(22.12)	(-11.54)	(9.43)			
Fresh milk products	.03127807	-.00021413	-.00000166	.82961325	-.04780114	.00059841	.22	.0823	.9250
	(0.42)	(-0.54)	(-3.82)	(19.95)	(-10.36)	(8.12)			
Fresh whole milk	-.00722629	-.00083960	-.00000039	.66456514	-.03145689	.00024683	.15	-.0427	1.0244
	(-0.10)	(-2.27)	(-0.96)	(17.05)	(-7.27)	(3.57)			
Other fresh milk, cream	.03850436	.00062547	-.00000127	.16504811	-.01634425	.00035157	.06	.3844	.6848
	(0.85)	(2.61)	(-4.81)	(6.55)	(-5.85)	(7.88)			
Processed dairy products	.26290072	.00160030	-.00000137	.34349165	-.02013830	.00028713	.13	.2738	.5670
	(4.70)	(5.41)	(-4.20)	(11.04)	(-5.83)	(5.21)			
Butter	.05103650	-.00003836	.00000018	.04638778	-.00410288	.00003113	.02	.1794	.5132
	(3.43)	(-0.49)	(2.13)	(5.60)	(-4.46)	(2.12)			
Cheese	.15650267	.00136751	-.00000115	.13927008	-.00939659	.00014873	.07	.3699	.4410
	(4.19)	(6.93)	(-5.31)	(6.70)	(-4.08)	(4.04)			
Ice cream, related prod.	.00088140	.00029155	-.00000039	.09580257	-.00516745	.00011779	.08	.3016	.7840
	(0.04)	(2.45)	(-2.99)	(7.64)	(-3.71)	(5.30)			
Yogurt	.01668587	.00009150	-.00000008	.00124006	-.00078033	.00001360	.03	.6051	-.0230
	(2.33)	(2.41)	(-1.96)	(0.31)	(-1.76)	(1.92)			
Other dairy products	.03779428	-.00011191	.00000008	.06079056	-.00069112	-.00002412	.01	-.1933	.8826
	(1.58)	(-0.88)	(0.56)	(4.55)	(-0.47)	(-1.02)			
Fruits, vegetables	1.10241736	.00221069	-.00000095	.85609807	-.05534001	.00053628	.16	.1995	.5058
	(10.42)	(3.95)	(-1.53)	(14.53)	(-8.47)	(5.14)			
Fresh fruits, vegetables	.65953803	.00144283	-.00000037	.47097689	-.02918570	.00026820	.11	.2116	.4820
	(8.92)	(3.69)	(-0.85)	(11.44)	(-6.39)	(3.68)			

See footnotes at end of table.

Continued--

Table 3--Second survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Fresh fruits	0.38805368	0.00065682	-0.00000058	0.14809791	-0.01141629	0.00025859	0.06	0.2635	0.4149
	2/ (8.74)	(2.79)	(-2.24)	(5.99)	(-4.16)	(5.90)			
Apples	.07395196	.00001322	-.00000020	.04220816	-.00288467	.00008539	.03	.1812	.6056
	(4.64)	(0.16)	(-2.15)	(4.76)	(-2.93)	(5.44)			
Bananas	.04858354	.00001273	-.00000008	.03232894	-.00166011	.00002350	.03	.0745	.5935
	(5.47)	(0.27)	(-1.60)	(6.53)	(-3.02)	(2.68)			
Oranges	.06839505	-.00005616	.00000007	.03450835	-.00200370	.00003476	.02	.1054	.5448
	(5.09)	(-0.79)	(0.83)	(4.61)	(-2.41)	(2.62)			
Other fresh fruits	.19712313	.00068703	-.00000036	.03905246	-.00486780	.00011494	.03	.4153	.2284
	(6.14)	(4.04)	(-1.94)	(2.18)	(-2.45)	(3.63)			
Fresh vegetables	.27148435	.00078600	.00000021	.32287898	-.01776941	.00000961	.10	.1692	.5367
	(5.97)	(3.27)	(0.81)	(12.76)	(-6.33)	(0.21)			
White potatoes	.02344191	-.00004943	.00000017	.12535267	-.00577218	-.00003946	.05	-.0677	.8235
	(1.22)	(-0.49)	(1.51)	(11.72)	(-4.87)	(-2.08)			
Lettuce	.02470383	.00023018	-.00000011	.04305038	-.00318478	.00002595	.07	.3286	.5044
	(2.67)	(4.70)	(-2.04)	(8.36)	(-5.57)	(2.84)			
Tomatoes	.04399915	.00017302	.00000011	.04291374	-.00213961	-.00001606	.03	.2195	.4371
	(3.62)	(2.69)	(1.54)	(6.34)	(-2.85)	(-1.34)			
Other fresh vegetables	.17933946	.00043224	.00000005	.11156219	-.00667283	.00003919	.04	.2297	.4275
	(6.08)	(2.77)	(0.27)	(6.80)	(-3.66)	(1.35)			
Processed fruits, vegetables	.44771828	.00079358	-.00000060	.38861567	-.02647255	.00026973	.11	.1839	.5366
	(7.85)	(2.63)	(-1.82)	(12.24)	(-7.52)	(4.80)			
Processed fruits	.32196843	.00058428	-.00000063	.10124652	-.00912374	.00022067	.05	.2806	.3759
	(8.72)	(2.99)	(-2.92)	(4.93)	(-4.00)	(6.06)			
Frozen fruit juices	.06704074	.00024585	-.00000034	.01462454	-.00180806	.00011812	.04	.4779	.4338
	(3.74)	(2.59)	(-3.24)	(1.47)	(-1.63)	(6.69)			
Other fruit juices	.10988783	.00017814	-.00000002	.04281098	-.00290266	.00002998	.02	.2208	.3645
	(5.46)	(1.67)	(-0.21)	(3.82)	(-2.33)	(1.51)			
Canned, dried fruits	.14503986	.00016029	-.00000027	.04381100	-.00441302	.00007256	.01	.1944	.3451
	(6.70)	(1.40)	(-2.11)	(3.64)	(-3.30)	(3.40)			
Processed vegetables	.12574985	.00020930	.00000002	.28736915	-.01734882	.00004907	.09	.0960	.5807
	(3.48)	(1.09)	(0.12)	(14.27)	(-7.76)	(1.37)			
Frozen vegetables	.02150785	.00026292	-.00000018	.05789660	-.00497198	.00004819	.04	.3400	.5429
	(1.35)	(3.11)	(-1.88)	(6.52)	(-5.05)	(3.06)			
Canned, dried vegetables	.08656339	-.00017516	.00000027	.22984669	-.01230371	-.00000328	.07	-.0241	.7764
	(2.88)	(-1.10)	(1.53)	(13.73)	(-6.63)	(-0.11)			
Vegetable juices	.01767861	.00012154	-.00000007	-.00037414	-.00007313	.00000415	.01	.5641	.0093
	(3.34)	(4.34)	(-2.24)	(-0.13)	(-0.22)	(0.79)			
Other food at home	.51470638	.00413064	-.00000559	1.80442420	-.11098786	.00093014	.27	.1721	.7044
	(3.65)	(5.53)	(-6.80)	(22.97)	(-12.74)	(6.68)			

See footnotes at end of table.

Continued--

Table 3--Second survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Sugar, sweets	0.10870108	0.00052640	-0.00000089	0.21530131	-0.00987365	0.00015630	0.09	0.1666	0.7158
	2/ (2.74)	(2.51)	(-3.86)	(9.76)	(-4.03)	(4.00)			
Candy, chewing gum	-.00153728	.00065370	-.00000096	.08717853	-.00638356	.00013102	.04	.3908	.6659
	(-0.06)	(4.45)	(-5.92)	(5.64)	(-3.72)	(4.78)			
Sugar	.07558142	-.00024179	.00000023	.07625944	-.00109268	-.00001872	.04	-.1842	.8163
	(4.12)	(-2.49)	(2.16)	(7.47)	(-0.96)	(-1.03)			
Other sweets	.03435564	.00011667	-.00000017	.05264288	-.00244228	.00004443	.03	.1859	.6871
	(1.77)	(1.14)	(-1.50)	(4.88)	(-2.04)	(2.32)			
Fats, oils	.16990264	.00009181	-.00000039	.23688747	-.01263830	.00011903	.09	.0752	.7002
	(4.89)	(1.50)	(-1.93)	(12.26)	(-5.89)	(3.48)			
Margarine	.07540348	.00011445	-.00000032	.04946361	-.00235135	.00005401	.05	.1239	.5993
	(5.55)	(1.59)	(-4.03)	(6.54)	(-2.80)	(4.03)			
Other fats, oils, salad dressings	.05158615	.00003097	-.00000001	.15070984	- 00885732	.00002010	.04	.0470	.7411
	(1.98)	(0.22)	(-0.10)	(10.40)	(-5.51)	(0.78)			
Nondairy substitutes	.03456571	-.00008535	.00000010	.01329423	-.00143120	.00001859	.01	.0535	.4500
	(3.84)	(-1.79)	(1.88)	(2.65)	(-2.57)	(2.09)			
Peanut butter, excl. nuts	.00846955	.00003544	-.00000016	.02421155	-.00005705	.00002670	.04	.0995	.9276
	(0.88)	(0.69)	(-2.84)	(4.51)	(-0.10)	(2.81)			
Nonalcoholic beverages	.19833506	.00141821	-.00000171	.64436299	-.04320525	.00022451	.14	.1526	.6723
	(3.10)	(4.19)	(-4.59)	(18.07)	(-10.92)	(3.55)			
Cola drinks, excl. diet	-.10351345	.00020225	-.00000053	.33675101	-.02262306	.00009816	.08	.0818	.9585
	(-2.44)	(0.90)	(-2.14)	(14.28)	(-8.65)	(2.35)			
Other carbonated drinks	.04109099	.00081218	-.00000073	.07260320	-.00582355	.00005697	.03	.4149	.4261
	(1.58)	(5.90)	(-4.81)	(5.02)	(-3.63)	(2.22)			
Roasted coffee	.05358365	.00044272	-.00000048	.09826885	-.00844157	.0002739	.02	.2138	.4987
	(2.29)	(3.58)	(-3.56)	(7.55)	(-5.85)	(1.19)			
Instant coffee	.20095482	-.00017575	.00000019	.02210413	-.00198948	.00000948	.01	-.0625	.1639
	(10.91)	(-1.80)	(1.80)	(2.15)	(-1.75)	(0.52)			
Other noncarbonated	.00630995	.00013917	-.00000017	.11600985	-.00443767	.00003302	.07	.1066	.8488
	(0.28)	(1.18)	(-1.30)	(9.37)	(-3.23)	(1.50)			
Miscellaneous prep. foods	.03776759	.00209422	-.00000260	.70787242	-.04527065	.00043031	.16	.2271	.7302
	(0.47)	(4.97)	(-5.60)	(15.96)	(-9.20)	(5.48)			
Canned packaged soups	.04448626	.00010046	-.00000023	.06734816	-.00534428	.00006401	.03	.1794	.6385
	(2.53)	(1.08)	(-2.21)	(6.88)	(-4.92)	(3.69)			
Frozen prepared foods	.11336987	.00037004	-.00000053	.04954313	-.00362104	.00009704	.02	.2833	.4450
	(3.74)	(2.31)	(-3.02)	(2.94)	(-1.93)	(3.25)			
Snack foods	-.09079335	.00091592	-.00000099	.12314461	-.00700167	.00011576	.07	.4530	.7884
	(-2.91)	(5.55)	(-5.46)	(7.09)	(-3.63)	(3.76)			
Seasonings, olives, pickles, relish	.02852792	.00046585	-.00000042	.11528001	-.00730254	.00009265	.09	.2930	.6499
	(1.31)	(4.05)	(-3.35)	(9.52)	(-5.43)	(4.32)			

Continued--

See footnotes at end of table.

Table 3--Second survey: Estimated coefficients and elasticities obtained from CEDS data--Continued

Product category	Independent variable						Coefficient of determination 1/	Income elasticity	Household-size elasticity
	Constant term	Income	Income squared	Household size	Household size squared	Income times household size			
Other condiments	0.00870048	0.00016903	-0.00000021	-0.03402788	-0.00318317	0.00004408	0.01	0.3663	0.5924
	2/ (0.52)	(1.92)	(-2.21)	(3.68)	(-3.10)	(2.69)			
Baby, junior, toddler foods	-.13478676	-.00019489	.00000012	.16239473	-.01153618	-.00003904	.02	-.4120	1.8097
	(-4.67)	(-1.28)	(0.70)	(10.11)	(-6.47)	(-1.37)			
Other prepared foods	.06791454	.00028095	-.00000034	.15882176	-.00749869	.00005715	.06	.1269	.7152
	(2.13)	(1.67)	(-1.85)	(8.96)	(-3.81)	(1.82)			
Food away from home	1.71133480	.04661235	-.00002009	-.48072274	.06808981	-.00047320	.18	.8431	-.0571
	(4.52)	(23.26)	(-9.11)	(-2.28)	(2.91)	(-1.27)			
Breakfast, excluding school	.33675749	.00271929	-.00000144	-.19740335	.01675601	-.00008101	.02	1.0460	-.8730
	(6.19)	(9.44)	(-4.55)	(-6.51)	(4.98)	(-1.51)			
Lunch, excluding school	.45875593	.01645942	-.00000631	-.21243134	.03117897	-.00041346	.12	.9008	-.1160
	(2.81)	(19.04)	(-6.63)	(-2.33)	(3.09)	(-2.56)			
Dinner, supper	1.06609773	.02139315	-.00000415	-.53247499	.04157699	-.00083999	.11	.9975	-.3641
	(4.23)	(16.04)	(-2.83)	(-3.79)	(2.67)	(-3.38)			
School lunch, breakfast	-.22315776	-.00036784	-.00000084	.16384271	.00379325	.00036295	.14	.1669	1.8297
	(-4.61)	(-1.44)	(-2.99)	(6.08)	(1.27)	(7.60)			
Board, other meals away from home	.0458321	.00009449	-.00000040	.00799766	-.00399149	.00010697	.01	.5548	.2737
	(0.59)	(0.23)	(-0.88)	(0.18)	(-0.83)	(1.39)			
Snacks	.02749870	.00633047	-.00000696	.29016403	-.02125578	.00039163	.07	.5446	.4140
	(0.28)	(11.97)	(-11.96)	(5.21)	(-3.44)	(3.97)			
Alcoholic beverages	1.04983790	.01205380	-.00000333	-.41355132	.04504815	-.00043338	.05	.8369	-.2899
	(5.13)	(11.14)	(-2.80)	(-3.63)	(3.57)	(-2.15)			
Tobacco, smoking supplies	.44897679	.00511063	-.00000344	.61485268	-.04280588	-.00034551	.03	.2435	.3564
	(3.61)	(7.77)	(-4.76)	(8.89)	(-5.58)	(-2.82)			
Personal care products	.62340851	.01101305	-.00000723	.17395322	-.02296127	.00042265	.08	.6558	.1276
	(3.97)	(13.27)	(-7.91)	(1.99)	(-2.37)	(2.73)			
Nonprescription drugs, medical supplies	.76971722	.00150773	-.00000186	.09616692	-.01391756	.00030353	.01	.2682	.1855
	(4.15)	(1.54)	(-1.72)	(0.93)	(-1.22)	(1.66)			
Housekeeping supplies	.21102283	.00558010	-.00000528	.65434925	-.05887091	.00082992	.10	.4380	.5022
	(1.54)	(7.70)	(-6.62)	(8.58)	(-6.96)	(6.14)			
Gas, electricity, other fuels	2.82190468	.00573529	- 00000759	1.36176918	-.14280753	.00201455	.02	.2524	.3910
	(5.92)	(2.27)	(-2.73)	(5.13)	(-4.85)	(4.28)			
Gasoline, motor oil, coolants	.25395268	.02617018	-.00002229	1.66718186	-.13485046	.00058579	.08	.4958	.3650
	(0.68)	(13.20)	(-10.21)	(7.99)	(-5.82)	(1.58)			
Miscellaneous items	-.52641996	.00707785	-.00000438	1.01658733	-.08094548	.00006111	.02	.4277	.5864
	(-1.78)	(4.51)	(-2.54)	(6.16)	(-4.42)	(0.21)			

1/ Unadjusted R^2.
2/ Numbers in parentheses denote t-values.

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