

Text table 11. Comparison of aggregate expenditures for food: Consumer Expenditure (CE) Diary Survey and Personal Consumption Expenditures (PCE), and trade association data, 1994-95

Food category	CE Diary survey (In billions)		Ratio of CE to PCE		Ratio of CE to <i>Supermarket Business</i>		Ratio of CE to <i>Progressive Grocer</i>	
	1994	1995	1994	1995	1994	1995	1994	1995
Total	\$274.0	\$282.6	.72	.72	1.09	1.10	1.17	1.19
Cereals and cereal products	16.0	17.0	.73	.74	1.11	1.15	1.19	1.24
Bakery products	27.2	28.4	.72	.72	.99	1.01	1.14	1.16
Beef, pork, other meat, poultry	62.5	64.2	.77	.77	1.11	1.14	1.14	1.14
Fish and seafood	12.1	12.7	1.16	1.21	1.37	1.49	3.22	3.52
Eggs	3.1	3.1	1.18	1.17	2.20	2.12	1.57	1.51
Fresh milk and cream	13.0	12.6	.97	.88	1.68	1.66	1.40	1.38
Other dairy products	16.5	17.8	.88	.90	1.28	1.35	1.11	1.16
Fresh fruits and vegetables	27.3	28.9	.92	.94	.74	.74	.90	.92
Processed fruits and vegetables	16.5	14.5	.62	.52	1.09	1.12	1.42	1.42
Sugar and other sweets	10.7	11.5	.37	.39	1.39	1.46	2.10	2.19
Fats and oils	8.1	8.5	.79	.81	1.23	1.24	1.54	1.60
Nonalcoholic beverages	23.7	24.7	.55	.56	1.00	.97	1.13	1.10
Miscellaneous prepared foods	36.9	38.7	.67	.66	1.13	1.15	1.01	1.03

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics, Consumer Expenditure Survey, annual. PCE estimates are shown in U.S. Department of Commerce, Bureau of Economic Analysis, "National Income and Product Accounts," *Survey of Current Business*, August 1996. Supermarket

Business, Inc., "Consumer Expenditure Study," *Supermarket Business*, FM Business Publications, Inc., September issues, 1995, 1996. *Progressive Grocer* Company, "The [year] Supermarket Sales Manual," *Progressive Grocer*, Maclean Hunter Media, Inc., July issues, 1995, 1996.

Comparisons show that Diary survey estimates of food-at-home expenditures for 1994 and 1995 are usually lower than PCE, which is based on administrative data and covers a larger population. In contrast, the Diary survey estimates are generally higher than *Supermarket Business* estimates, which may reflect the difference in data collection methods. Consumer expenditure estimates are higher than *Progressive Grocer* estimates. This difference is expected, since this trade source only covers supermarkets, as noted above. Consumer Expenditure survey estimates for fruits and vegetables, which are close to 10 percent below *Progressive Grocer* estimates, may reflect underreporting in the CE Diary survey.

National Health Expenditures. The Health Care Financing Administration (HCFA) of the U.S. Department of Health and Human Services publishes annual data on total aggregate health care expenditures of the United States, referred to as National Health Expenditures (NHE). Total health care expenditures include expenditures for health care by all sources in the United States economy, including public and private sources. The NHE data cover U.S. citizens living abroad, military personnel, inhabitants of U.S. territories, and parts of the institutional population—a larger population than covered by the Consumer Expenditure Survey. In particular, the NHE is designed to cover nursing home residents, while the Consumer Expenditure Survey is not.

Estimates of out-of-pocket personal health care expenditures from NHE are compared with the Consumer Expenditure Survey. Out-of-pocket money spent for health

care include expenditures for medical care that are not covered by insurance. Such expenses may include co-payments and deductible amounts that are required by health insurance plans. To derive its out-of-pocket estimates, HCFA uses data from administrative and industry sources, as well as some Consumer Expenditure Survey data. The NHE estimates used for these comparisons reflect several updates in data sources since the last consumer expenditure bulletin comparisons.

Text table 12 shows Consumer Expenditure Survey estimates of aggregate expenditures for health care (excluding health insurance and nursing home care) and ratios to NHE estimates of out-of-pocket health care expenditures. As reported in the Consumer Expenditure Survey, aggregate medical care expenditures, excluding health insurance, were \$89 billion in 1995, or 58 percent of the NHE estimate of \$141 billion. Of the Consumer Expenditure Survey total, \$37 billion were spent on medical commodities and \$53 billion on medical services. These amounts were 65 percent and 54 percent of the NHE estimates, respectively. Data show variations in the Consumer Expenditure Survey-to-NHE ratios over the 1992-95 period for both medical commodities and medical services. Declines in medical care commodities primarily reflect lower estimates for hearing aids in the Consumer Expenditure Survey and fluctuations in medical services may reflect volatility in spending on personal health care, due to changes in health insurance plans. In addition, comparison of health care expenditures may reflect underreporting in the Consumer Expenditure Survey or undetectable administrative error.

Text table 12. Comparison of aggregate expenditures for health care: Consumer Expenditure (CE) Survey and National Health Expenditures, 1992-95

Expenditure categories	Aggregate consumer expenditures Consumer Expenditure Survey (In billions)				Ratio of CE survey to National Health Expenditures			
	1992	1993	1994	1995	1992	1993	1994	1995
Health care, total ¹	\$89.6	\$95.2	\$94.7	\$89.0	0.63	0.65	0.64	0.58
Medical commodities, total	37.6	40.2	37.7	37.2	.72	.74	.68	.65
Drugs and supplies	30.2	32.6	30.9	30.1	.67	.70	.65	.60
Medical equipment	7.4	7.6	6.1	6.1	1.02	1.02	.81	.79
Medical services, total	52.0	55.0	57.0	52.9	.58	.60	.61	.54
Professional services	43.1	46.6	44.8	43.6	.56	.58	.54	.51
Hospital care	8.9	8.4	12.2	8.3	.76	.71	1.08	.73

¹Excludes health insurance premiums, nursing home care, and medical equipment repairs.

NOTE: Sums may not equal totals, due to rounding. CE categories have been grouped as needed to match NHE.

SOURCE: The 1995 NHE data used to obtain the ratios are from the U.S. Department of Health and Human Services, Health Care Financing Administration, "Data View: National Health Expenditures, 1995" *Health Care Financing Review*, Volume 18, Number 1, Fall 1996. Earlier NHE data used in the comparisons are from previous issues of the *Review*.

Current Population Survey. The Bureau of the Census collects income data in the March Supplement to the Current Population Survey (CPS). Using data collected for calendar years 1992 through 1995, comparisons were made with Consumer Expenditure Interview survey estimates of total consumer unit income before taxes and by source of income. CPS estimates of aggregate income by source of income were derived from Census estimates of mean income of persons and the number of persons with the specified income.

There are several differences between the Consumer Expenditure Survey and the CPS. The CPS collects data in March for the previous calendar year. By comparison, in the Consumer Expenditure Interview survey, estimates of income are obtained in the second and fifth interviews of the consumer unit. These estimates refer to the prior 12 months; and, due to the rotating panel design of the Interview survey, interviews may occur any time during the year. Census imputes CPS income data that are missing (due to nonresponse to income questions), based on demographic characteristics. In contrast, income data that are missing in the Consumer Expenditure Survey, due to nonresponse, are not imputed as part of the Consumer Expenditure Survey estimation procedure; instead, Consumer Expenditure Survey income estimates are based on complete income reporters only. Neither procedure accounts for underreporting, which is especially prevalent for property income.

In addition to the differences between the Consumer Expenditure Survey and the CPS described above, the 1993

and later ratios reflect the collection of CPS income data by computer-assisted personal interview. By comparison, Consumer Expenditure Survey data are collected by traditional paper and pencil interview. The 1993-95 ratios reflect further revisions to CPS data to include the 1990 Census-based sample design, reductions in sample size, and selected editing procedures. Due to these changes in CPS collection and estimation methods, one should use caution when comparing 1993 and later ratios with those for earlier years.

Text table 13 shows that the Consumer Expenditure Survey estimates of total income before taxes are about 84 to 90 percent of the CPS. This reflects comparable levels of estimates from the two surveys for the largest sources of income, such as wages and salaries, self-employment income, and Social Security income. Some differences in estimates are expected, because of methodology differences between the two surveys described above and because the CPS is designed specifically to collect income data, while the Consumer Expenditure Survey is designed primarily to collect expenditure data. In addition, the CPS population is about 3 percent larger than the Consumer Expenditure Survey population. The low ratios for property income reflect imputations for missing data in the CPS and underreporting in the Consumer Expenditure Survey. Some variation in ratios reflects the general difficulty of obtaining income information via household survey, which is experienced by both the Consumer Expenditure Survey and CPS.