



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

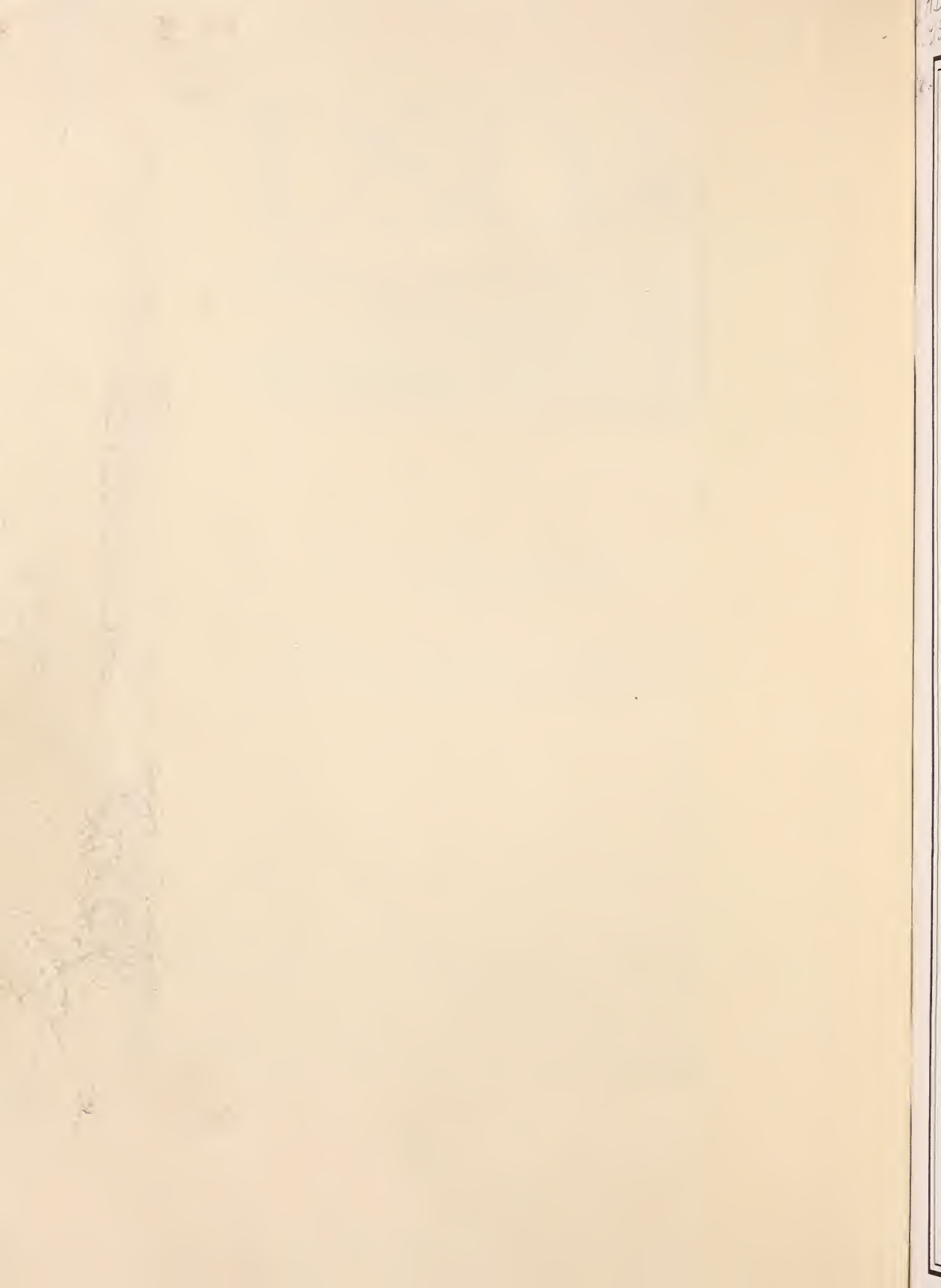
<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.



7/15/56
2/56

THE FOOD STAMP PROGRAM: A REVIEW OF SELECTED ECONOMIC STUDIES

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

ESCS-34

BIBLIOGRAPHIC DATA SHEET	1. Report No. ESCS-34	2.	3. Recipient's Accession No.
4. Title and Subtitle THE FOOD STAMP PROGRAM: A REVIEW OF SELECTED ECONOMIC STUDIES		5. Report Date September 1978	
7. Author(s)		6.	
9. Performing Organization Name and Address National Economic Analysis Division Economics, Statistics, and Cooperatives Service U.S. Department of Agriculture Washington, D.C. 20250		8. Performing Organization Rept. No. ESCS-34	
12. Sponsoring Organization Name and Address		10. Project/Task/Work Unit No.	
		11. Contract/Grant No.	
		13. Type of Report & Period Covered Final	
15. Supplementary Notes		14.	
16. Abstracts The Food Stamp Program was made part of permanent legislation in 1964. Studies of the economic impact of the program have been conducted by scientists in government, universities, and private research agencies. Since the program is relatively new, the existence of many of these studies is not generally known. This bibliography contains brief descriptions of the major empirical studies completed prior to 1974. Studies included relate to performance aspects of the various food stamp programs which have been tried. It is hoped that the bibliography will be helpful to scientists interested in conducting food stamp studies, and to policymakers.			
17. Key Words and Document Analysis. 17a. Descriptors Bibliographies Economic analysis Food Performance			
17b. Identifiers/Open-Ended Terms Economic research Food and Nutrition Service Food policy Food Stamp Program References Studies Welfare programs		22. Price Paper: \$4.50 Fiche: \$3.00 NTIS prices subject to change after September 30, 1978. After that date, contact NTIS for new price schedule. NTIS price codes will be A03 for paper and A01 for fiche.	
17c. COSATI Field Group 02-B, 05-B, 05-C			
18. Availability Statement Available from: NATIONAL TECHNICAL INFORMATION SERVICE, 5285 Port Royal Rd., Springfield, Va. 22161.		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 37
		20. Security Class (This Page) UNCLASSIFIED	22. Price See above

CONTENTS

	<u>Page</u>
Preface	v
Program Impacts on Business Receipts, Employment, and GNP	1
Studies Published Through 1964	1
Studies Published After 1964	1
Eligibility and Participation	4
Studies Published Through 1964	4
Studies Published After 1964	4
Food Expenditures, Food Stamps, and Nutritional Intake	11
Studies Published Through 1964	11
Studies Published After 1964	12
Program Design and Operation	18
Studies Published Through 1964	18
Studies Published After 1964	18
Alternative Food and Income Assistance Programs	25
Studies Published Through 1964	25
Studies Published After 1964	26

On January 1, 1978, three USDA agencies--the Economic Research Service, the Statistical Reporting Service, and the Farmer Cooperative Service--merged into a new organization, the Economics, Statistics and Cooperatives Service.

PREFACE

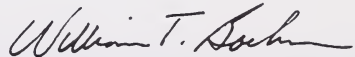
The Food Stamp Program was made part of permanent legislation with passage of the Food Stamp Act of 1964. Since that time, numerous studies have been conducted to identify what impacts, if any, the program has had on recipients, agricultural producers, and the economy generally. However, both scientists and policymakers have been hindered at times because the results of many of these studies have not been readily available.

This bibliography was developed, in part, to help overcome this problem. The bibliography is not exhaustive. Only the major analytical studies which relate to the performance of the various programs and were published prior to 1974 have been included. Many descriptive reports of Food Stamp Program operations have, therefore, been excluded. Some research reports which were important at the time they were published have not been listed in this bibliography because they are not now available for distribution.

The studies are divided into five major groups. In the first, studies which focus on the overall economic impacts of the program are reviewed. Studies which focus on the effects of program eligibility and participation rules appear in the second group. Program impacts on food consumption and nutritional intake are the subject in the third group. The two final groups contain studies which focus on the economic impacts of Food Stamp Program design and operational matters, and on the impacts of alternative food and income assistance programs.

Within subdivisions, the citations are grouped by their publication date, either before 1965 or after 1964. This is done to distinguish studies of the contemporary Food Stamp Program from those of earlier programs. Many of the earlier reports are important for conceptual developments and their research approach.

This report was prepared by a task group composed primarily of persons from the Food Economics Program Area within the National Economic Analysis Division. Paul E. Nelson was responsible for coordinating the project. He was assisted by Alden Manchester, Masao Matsumoto, Walter Epps, Fredericka Bunting, and William Sinclair. Mike Belongia, Linda Brown, Kathy Longen, Donna Murphy, and I helped organize the manuscript. Frances Yates provided clerical assistance. We thank all of those who have reviewed the work and have provided other assistance.



William T. Boehm
Leader
Food Economics

THE FOOD STAMP PROGRAM: A REVIEW OF SELECTED ECONOMIC STUDIES

PROGRAM IMPACTS ON BUSINESS RECEIPTS, EMPLOYMENT, AND GNP

Studies Published Through 1964

COPPOCK, Joseph D. "Indifference Curve Analysis Applied to the Food Stamp Plan," American Economic Review. Vol. 35, Mar. 1945, pp. 99-110.

This report presents a methodological approach to analysis of the Food Stamp Program. The author provides a tool to conceptualize the problem, but does not give any insights into developing answers to many questions often asked by policymakers.

NELSON, Paul E. An Economic Analysis of Two Proposed National Food Allotment Plans as Public Measures to Subsidize Food Consumption. M.S. thesis. American Univ., Washington, D.C., 1945.

The author develops a quantitative approach using indifference curve analysis to compare the impacts of Senate bill No. 185 and Senate bill No. 1151, both introduced in 1945.

SOUTHWORTH, Herman. "The Economics of Public Measures to Subsidize Food Consumption," Journal of Farm Economics. Feb. 1945.

A theoretical model is presented using indifference curve analysis to show how benefits vary with income, and what proportion of the bonus stamp subsidy would be spent for food and nonfood items.

WAUGH, F. V., and H. P. Davis. "Some Economic Impacts of the Food Stamp Program," Agricultural Economics Research. Vol. 13, No. 3, July 1961.

Benefits of the pilot programs are analyzed. The authors look at benefits to low-income households, food trade, and producers, and the associated costs to taxpayers.

Studies Published After 1964

BEEBOUT, Harold, and Anne Bergsman. Adding Simulated Benefits from AFDC, SSI, Food Stamps, Medicare, Medicaid and Veteran's Medical to CPS Reported Income for 1967 and 1974. U.S. Dept. Treasury, Office of Trade, Energy, and Financial Resources Policy Coordination, Washington, D.C., Oct. 19, 1975.

The authors attempt to improve the reporting of public assistance income by including medical benefit income, food stamps, and other payments in the income estimate.

BRYANT, Keith W. "An Analysis of the Market for Food Stamps," American Journal of Agricultural Economics. Vol. 54, No. 2, May 1972, pp. 305-314.

Bryant analyzes the Food Stamp Program as a market for a publicly supplied good, concentrating on the forces that determine the demand for and the supply of food stamps. The theory of the bureaucracy is examined under alternative assumptions about Food Stamp Program objectives.

HU, Teh-wei, N. L. Knaub, and S. Ghalib. Expenditure Patterns of Welfare Households, Aged Households, and Disabled Households. Penn. St. Univ., Institute of Research on Human Resources, State College, Pa., Mar. 1974.

KNAUB, Norman, and Teh-wei Hu. "The Effects of Food Stamps on Household Expenditures." Presented at the Econometric Society Meeting. San Francisco, Calif., Dec. 29, 1974.

These two reports are based on a Ph.D. thesis completed in the Department of Economics, Pennsylvania State University, June 1974, by Norman L. Knaub entitled The Effect of Welfare Payments on Family Expenditures. The data used are those in the 1968-71 Panel Study of Income Dynamics by the Survey Research Center, University of Michigan. Models were developed for food stamp and nonfood stamp welfare households.

Welfare recipients' expenditures on food, housing, alcohol, cigarettes, and cars are analyzed and contrasted with the expenditures of non-welfare recipients. The Food Stamp Program influence on these expenditures is examined. Welfare recipients were found to spend a larger fraction of their income on food than did nonrecipients. The additional food consumption stimulated by food stamps was apparently financed by a reduction in housing expenditures. The analysis suggests additional food stamps were not treated (by recipients) in the same manner as increases in cash income. The authors also state that the design of certain welfare programs indicate that welfare donors (tax-payers) want to encourage welfare recipients to increase their expenditures for food and housing.

MATSUMOTO, Masao. Impact of the Food Stamp Program on Three Local Economies--An Input-Output Analysis. ERS-503, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., May 1972.

Standard open-model, input-output analysis is used to assess the effect of the Food Stamp Program on the economies of three rural counties. The economic sectors in the counties are delineated and the degree of their interdependence determined. The food retailing, local government, and import sectors are given special attention. A change in the economy--that is, institution of the Food Stamp Program--is measured for its effect on increased output and employment.

NELSON, P. E., and J. Perrin. Economic Effects of the U.S. Food Stamp Program, Calendar Year 1972 and Fiscal Year 1974. Agr. Econ. Rpt. 331, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., July 1976.

The U.S. Department of Commerce's 1967 input-output model of the national economy was adjusted to identify the economic impact of the Food Stamp Program on specified sectors of the economy in terms of net increases in

business receipts and gross national product (GNP). Comparisons are made for recipients receiving the subsidy (income transfer) in the form of bonus stamps and as free stamps.

For calendar year 1972, total business receipts increased almost \$0.9 billion more with food stamps than would have been the case without them. For fiscal year 1974, this figure amounted to \$1.2 billion. Corresponding increases in GNP were \$311.4 million in 1972, and \$426.9 million for fiscal year 1974. The distribution of free stamps would also have increased business receipts and GNP for those 2 years. Business receipts for 1972 would have been \$204 million and for 1974, \$280 million. These increases, however, were \$668 million less in 1972 and \$916 million less in fiscal 1974 than increases that would have been generated with food stamps. The agriculture, forestry, and fisheries sector, along with food manufacturing and retail and wholesale trade, benefit under both options--bonus stamps and free stamps.

NELSON, P. E., and J. S. Perrin. Technical Supplement to Analysis of the Economic Impacts of the U.S. Food Stamp and School Lunch Programs. NEAD Working Paper, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., July 1976.

This supplement presents the methodology used to obtain the results published in Agricultural Economic Report 331 described in the preceding entry. Results in table 5 indicate the extent to which structural requirements account for the increase in food and food-related sector business receipts and gross national product. They represent the difference between business receipts reported in AER 331 for expenditures when stamps had to be purchased, and business receipts associated with free stamps when stamps were given without a purchase requirement.

_____. "Effects of the U.S. Food Stamp and National School Lunch Programs, Fiscal Year 1974," American Journal of Agricultural Economics. Vol. 58, No. 5, Dec. 1976.

Results are reported for an input-output analysis of the Food Stamp and School Lunch Programs for fiscal year 1974. Results are identical to those reported by the authors in Agricultural Economic Report 331 mentioned earlier and in another report by Nelson and Perrin, Agricultural Economic Report 350. However, additional evidence is presented, based on U.S. Department of Commerce data, regarding the amount of slack in the economy.

PESKIN, Janice. The Measure of Poverty. Tech. Paper VII, U.S. Dept. Health, Education, and Welfare, Office of Income Security Policy, Washington, D.C., 1976.

The author evaluates in-kind benefits and their equivalent cash value. She makes a broad assumption that 33 percent of income of those studied was spent for food, regardless of income level or household size. She then estimates the effect on poverty measures of the various in-kind benefits available.

SULLIVAN, Dennis H. "A Note on Food Stamp Reform," American Journal of Agricultural Economics. Vol. 58, No. 3, Aug. 1976.

The author uses indifference curve analysis to ascertain the difference in program impact upon recipients under the current program as opposed to the impact on those who would receive benefits under the Dole-McGovern proposal for a program without a purchase requirement. The main conclusion is that the popular argument that the Dole-McGovern proposal improves the welfare of the current participants at no cash cost to the Treasury is "not very strong." A theoretical analysis of the effects of eliminating the purchase requirement is presented.

ELIGIBILITY AND PARTICIPATION

Studies Published Through 1964

ABEL, Martin E., and W. Cochrane. Policies for Expanding the Demand for Farm Food Products in the United States, Part II, Programs and Results. Tech. Bull. 238, Univ. Minn., Agr. Expt. Sta., St. Paul, Minn., Apr. 1961.

REESE, Robert B., and S. F. Adelson. Special Survey of Needy Families Not Participating in the Food Stamp Program, St. Louis, Missouri, May-June 1964. Preliminary Rpt., U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., 1964.

A survey is described of needy families not participating in the Food Stamp Program in St. Louis, Missouri. The survey was undertaken in 1964 after the institution of the pilot Food Stamp Program. Its goals were to determine the characteristics and rationale of nonparticipants.

WETMORE, John M., Martin E. Abel, Elmer W. Learn, and Willard W. Cochrane. Policies for Expanding the Demand for Farm Food Products in the United States, Part I, History and Potentials. Tech. Bull. 231, Univ. Minn., Agr. Expt. Sta., St. Paul, Minn., Apr. 1959.

WETMORE, John M., Martin E. Abel, and Elmer W. Learn. Expanding the Demand for Farm Food Products in the United States. Sta. Bull. 456, Univ. Minn., Agr. Expt. Sta., St. Paul, Minn., June 1961.

The conclusion to be drawn from the Abel and Wetmore reports is one of pessimism as to the effectiveness of demand expansion as a single solution to the farm product surplus problem. The authors conclude that demand expansion programs could partially eliminate surplus agricultural production and improve human nutrition.

However, total food consumption was found to be highly unresponsive to changes in price and income: large variations in price were needed to achieve small changes in total food consumption. Expenditures on proposals to (1) subsidize food consumption of low-income groups, (2) lower food prices, or (3) provide better nutrition, reduced annual agricultural surpluses by about one-fourth or possibly one-third.

Studies Published After 1964

BEEBOUT, Harold, Mary Frances LeMat, and Allen Kendall. The Impact of the Resources Test and Survey Income Underreporting on Food Stamp Eligibility Estimates. Prepared by Mathematica, Inc., for the U.S. Dept. Agr., Food and Nutrition Serv., Washington, D.C., Jan. 23, 1976.

The study reported on was designed to provide estimates of food stamp eligibility by applying refinements in asset holdings and income to the individual households of a representative national sample. The estimates are based on the existing program regulations (July 1975).

BICKEL, Gary W., and Maurice MacDonald. Participation Rates in the Food Stamp Program: Estimated Levels, by State. Bureau of Social Science Res., Inc., Washington, D.C., Dec. 1974.

Food Stamp Program participation rates by States are studied in an attempt to make valid estimates of such rates.

COCHRANE, W. W., and M. E. Ryan. American Farm Policy, 1948-1973. Univ. Minn. Press, Minneapolis, Minn., 1976.

This publication gives the history of the original and the current Food Stamp Program within the context of other major pieces of farm legislation.

CODER, John F. "Results of a Survey on Household Participation in the Food Stamp Program: Data from the June 1973 Current Population Survey." Presented at American Statistical Association Meetings, St. Louis, Mo., 1974.

Households using food stamps were surveyed (1) to determine how adequate the Current Population Survey is in delineating the food stamp population, and (2) to develop a profile of food stamp households.

Control Systems Research, Inc. An Evaluation of Family Food Assistance Program Dual Operations in King, Pierce, and Snohomish Counties, Washington. Prepared for U.S. Dept. Agr., Food and Nutrition Serv., Washington, D.C., Sept. 1972.

The authors analyze participation rates where food stamp and commodity distribution programs were operated simultaneously. With both programs, participation rose initially and then fell below pre-program levels. A minority of the households that chose commodities over stamps cited unwillingness or inability to pay the stamp purchase price.

CRAYTON, Evelyn F. Study to Identify and Measure the Benefits Received by Poverty Households From Participation in USDA Food Assistance Program, Parts I, II, and III. Tuskegee Institute, Human Resources Development Center, Tuskegee Institute, Ala., 1975-76.

This report has three parts. Part I reports an analysis of the eligible nonparticipants of two counties in Alabama and contains recommendations which would facilitate "outreach" efforts to increase participation. In part II, the author compares family income, food expenditures, and other socio-economic profiles of families participating and not participating. Part III presents an evaluation of the dietary status of participating and non-participating households.

The primary reasons cited for nonparticipation in the food stamp county are the cost, family ineligibility, and the fact that families did not consider the value of the stamps (bonus) to be received sufficient to induce the administrative effort to participate.

In the food distribution county, reasons for not participating are ineligibility and severe inconvenience in picking up foods.

The following recommendations could alleviate some of these problems:

1. Encourage home production of food.
2. Expand activities of the Cooperative Extension Service to educate potential and current participants on the availability of the program and how to use it.
3. Expand outreach on the part of the Food and Nutrition Service and the Cooperative Extension Service.
4. Introduce or expand nutrition and consumer education in schools--kindergarten through 12th grade.

For all dietary factors studied, households using food stamps have somewhat higher nutritional adequacy and mean adequacy ratios than households in the food distribution county. However, because nonparticipating families in both counties have essentially the same nutritional adequacy scores as participants, the impact of the programs is uncertain.

DUSTORHOFT, Dorette. Utilization of Food Stamp Programs as Part of Assistance Programs Offered by County Social Services Centers. N. Dak. Special Rpt. No. 36, Univ. N. Dak., Bur. Govt. Aff., Grand Forks, N. Dak., Feb. 1973.

The authors studied the Food Stamp Program in North Dakota. They describe the Public Assistance Program in the State and show its relationship to the Food Stamp Program. Other financial assistance programs offered through the county welfare agencies also are delineated and their effects on the Food Stamp Program indicated.

The authors explain why people in various counties utilize the programs. Statistics showed great variances among counties as to utilization of the Public Assistance and Food Stamp Programs. Many poverty-level families were not using available assistance. A major problem may have been that many of them were not eligible. The authors investigated possible causes of nonutilization and proposed recommendations to alleviate the problems.

EGBERT, Alvin C., and S. J. Hiemstra. "Shifting Direct Government Payments from Agriculture to Poor People: Impacts on Food Consumption and Farm Income," Agricultural Economics Research. Vol. 21, No. 3, July 1969.

Food consumption patterns of low-income households are analyzed, and the feasibility is explored of using a program such as the Food Stamp Program to replace the then operative price-support program. Some income elasticity figures based on the Household Food Consumption Survey are introduced.

HINES, Fred. Factors Related to Participation in the Food Stamp Program. Agr. Econ. Rpt. 298, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., July 1975.

The author uses aggregate data to develop a procedure for identifying those factors which tend to be related to participation in the Food Stamp Program. The study is important for its methodological development as the county data used are often only available by State. Expenditures were not analyzed.

LANE, J. P. Sample Survey Data on Who Used Food Stamps, 1973-1974. Tech. Note No. 1, U.S. Dept. Health, Education, and Welfare, Office of Income Security Policy, Washington, D.C., Feb. 1975.

This report contains the results of a 1974 survey of 5,517 food stamp households. The participant households were grouped by major demographic and income characteristics. The characteristics are listed which differentiate public assistance food stamp recipients from those not on other forms of public assistance.

LOVE, HAROLD G. "The Reasons Participants Drop Out of the Food Stamp Program: A Case Study of Its Implications," American Journal of Agricultural Economics. Vol. 52, No. 3, Aug. 1970, pp. 387-394.

The author analyzes the low average participation of potentially eligible households in the Food Stamp Program in St. Louis. Most public assistance households stopped participating in the Food Stamp Program because of the high stamp purchase requirement. Improvements in earned income reduced the participation rate among other low-income families.

MARA, M. J., AND E. E. Brown. Food Stamp Participation: Ware County, Georgia, 1975. Dept. Agr. Econ., University of Georgia, College Station, Athens, Georgia, Aug. 1976.

The authors analyzed selected characteristics of households certified to receive food stamps to determine who, in fact, received them and which characteristics influenced their decisions to buy stamps. An important contribution of the study is that it isolates factors associated with participation.

NELSON, Paul E. "Michigan Food Stamp Program: A Partial Analysis of Performance," American Journal of Agricultural Economics. Vol. 54, No. 1, Feb. 1972.

Factors associated with participation in the Food Stamp Program are examined. Important factors identified are: the prior existence of a commodity distribution program, number of unemployed household heads, number of migrant laborers, and number of public assistance participants. No evidence was found to support the contention that food stamps have no impact on food-store patronage patterns. Purchases made with food stamps account for a 1-percent increase in State tax receipts.

RUNGELING, Brian, and Lewis H. Smith. Factors Affecting Food Stamp Nonparticipation in the Rural South. Univ. Miss., Center for Manpower Studies, University, Miss., Jan. 15, 1975.

The authors analyzed the reasons for nonparticipation in the Food Stamp Program in the rural South. Among these, the more important ones are: (1) eligible households consider stamp prices "too high," (2) eligible households do not fully understand the benefits of the bonus stamp system, (3) many eligible households are unaware that they are eligible, or (4) many households do not believe they need food stamps.

The authors conclude that "restriction of choice" and "frustrating and degrading administrative procedures" were not primary factors in household decisions not to participate. In particular, the elderly do not participate because they lack funds and transportation. The authors recommend changes in the existing program; for example, substituting cash payments for stamps.

SCEARCE, W. Keith, J. Marshall Paxton, and Robert B. Jensen. Food Stamps: A Study in Two Virginia Localities. Va. Polytech. Inst. and St. Univ., Dept. Agr. Econ., Blacksburg, Va., Mar. 1975.

Focus of the study is the eligibility of households for participation in the Food Stamp Program and the extent of their participation, especially households with heads 60 years of age or older. Rates of participation may be used to estimate the number of eligible households and program participants in a specified month.

SEEVERS, G. L., and W. G. Leshner. U.S. Family Food Programs: An Interstate Comparison. Special Rpt. 319, Oreg. St. Univ., Agr. Expt. Sta., Corvallis, Oreg., Feb. 1971.

Based on 1968 data, a study was made to determine why participation in family food programs (Food Stamp and commodity distribution) varied widely among States. The effect of interstate variation on subsidies received from the Federal Government was also examined. Participation rates are shown to be significantly influenced by the proportion of the population living in counties offering a program. The authors believe this may be due to "State local resistance;" that is, the level of administrative passivity, restrictive policies, and other factors affecting the ease of attainment. To estimate the interstate subsidy effect, the benefits and costs for each State was calculated.

SEXAUER, Benjamin, Rebecca Blank, and Henry Kinnucan. "Participation in Minnesota's Food Stamp Program," Minnesota Agricultural Economist. No. 576, Univ. Minn., Agr. Ext. Serv., St. Paul, Minn., Feb. 1976.

This report identifies the extent of participation in the Food Stamp Program for Minnesota, by county, for April 1975. Major factors which affect the participation level include the proportion of the population in each county below the poverty level, or below the 125 percent of the poverty level as measured in the 1970 census; the unemployment rate in April 1975; the proportion

of the population that received welfare payments that month; and the average per capita income in 1974.

Of less importance are the percentage of the county's population composed of a minority group, the proportion of the population 65 years of age or above, the proportion 17 years old and younger, the proportions which are rural and rural nonfarm, and the length of time the program has operated in the county.

SOBOL, M. G. "Enrollments and Use of Federal Food Stamp Program: New Jersey," Social Science Quarterly. 57(No. 3)557, Dec. 1976.

The author uses New Jersey data in a regression model to explain the extent of the State's enrollment in the Food Stamp Program from 1969 to 1973. In his model, the dependent variable is the number of households authorized to purchase stamps in a specified period. Independent variables are the previous month's unemployment rate, the previous month's real spendable earnings, the number of migrant agricultural workers in the previous month, and an error term. The primary factors explaining entry are the unemployment level and real spendable income. Together, these explain about 50 percent of the increases in New Jersey's enrollment in the Food Stamp Program between 1969 and 1973.

Social Development Corporation. A Study of the USDA Family Feeding and School Lunch Programs with Recommendations. Part A--The Food Stamp System. Prepared for U.S. Senate Select Committee on Nutrition and Human Needs, Washington, D.C., Oct. 1969.

The major purpose of this study was to determine why the Food Stamp Program in 1969 had failed to reach more of the poor. Cash purchase requirements, income barriers, and administrative requirements were found to be the primary reasons.

U.S. Congress. National Survey of Food Stamp and Food Distribution Program Recipients: A Summary of Findings on Income Sources and Amounts and Incidence of Multiple Benefits, Studies in Public Welfare. Paper No. 17. A study prepared for the Subcommittee on Fiscal Policy of the Joint Economic Committee, Washington, D.C., Dec. 31, 1974.

This report presents findings of a national survey of Food Stamp and food distribution program recipients. The survey was made to determine who these people were, what benefits they received from these and other Government programs, and what their total incomes were. After-tax income earnings from wages and salaries, interest, and other private sources account for only about 20 percent of average income, and public cash and in-kind income account for 80 percent.

The four major income transfer sources (nearly two-thirds of total income received) are Aid to Families with Dependent Children, Medicaid, Social Security, and food stamps or food distribution. Benefits from public assistance programs were received by 60 percent of food stamp households, and 67 percent of food distribution households. Of these, AFDC was received by 37 percent of the food stamp households and 34 percent of the food distribution households.

U.S. Department of Agriculture. National Survey of Food Stamp and Food Distribution Program Recipients: A Summary of Findings on Income Sources and Amounts and Incidence of Multiple Benefits. Prepared for the Joint Economic Committee, U.S. Congress, Washington, D.C., Dec. 31, 1974.

This study presents the findings of a national survey used to develop a profile of participants in the Food Stamp Program and to determine the extent of multiple-program participation.

_____, Economic Research Service. Participation in USDA Food Programs, Two Mississippi Delta Counties. Administrative Rpt., Mktg. Econ. Div., Washington, D.C., 1967.

This bulletin reports the results of a study to identify and analyze the factors affecting participation in the Food Stamp Program in two Mississippi Delta counties. Major reasons given by households choosing not to participate include lack of money, high cost of stamps, or a lack of interest. The nonparticipating households were spending more for food than if they had been participating in the Program.

_____, Food and Nutrition Service. Participation in the Food Stamp Program as Shown by Quality Control Reviews of Nonassistance Households, January-June 1975. Feb. 1976, pp. 123-135.

Nonassisted participants in the Food Stamp Program were studied, and errors of eligibility and over- and under-issuance of stamps were analyzed.

U.S. Department of Commerce, Bureau of the Census. Characteristics of Households Purchasing Food Stamps. Current Population Reports, Special Studies Series P-23, No. 61, July 1976.

The report presents classifications by race, age, location, income, and other characteristics of households participating in the Food Stamp Program. Characteristics of food stamp participants participating in other public assistance programs are compared with those of other poor families.

WEST, D. A., and D. W. Price. "The Effects of Income, Assets, Food Programs, and Household Size on Food Consumption," American Journal of Agricultural Economics. Vol. 58, No. 4, Nov. 1976, p. 726.

The authors used a sample of households containing 995 children between the ages of 8 and 12 for this study. They stratified the sample by poverty level and ethnic group. The child was the unit of observation. Results indicate that USDA Food Stamp and free lunch programs did increase the total value of food purchased.

The proportion of the additional purchasing power allocated to food exceeded the marginal propensity to consume food out of current income. However, this proportion was less than the average propensity to consume foods for low-income households.

Bonus stamps had a greater impact on increasing food consumption among Mexican-Americans than among Blacks or Anglos. The free lunch transfer had less impact on raising food consumption among Mexican-Americans than among Blacks or Anglos.

FOOD EXPENDITURES, FOOD STAMPS, AND NUTRITIONAL INTAKE

Studies Published Through 1964

BROOKS, Thomas M. "Food Consumption Under the Food Stamp Program," National Food Situation. NFS-105, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Aug. 1963, pp. 21-24.

The author compares the value of individual foods purchased by food stamp households with that of households formerly receiving commodities and households not qualified for food assistance in the pilot areas.

GOLD, Norman L., A. C. Hoffman, and F. V. Waugh. Economic Analysis of the Food Stamp Plan. Special Rpt., U.S. Dept. Agr., Bureau Agr. Econ., Washington, D.C., 1940.

Authors describe and analyze the original Food Stamp Program conducted during 1939-40. They particularly note the extent to which participants used stamps to substitute for their normal food expenditures. Participants whose situation most closely resembled the kind of arrangements now being proposed (that is, free stamps) were persons not required to buy orange stamps to get free blue ones.

In such cases, "the effect of the program on food consumption was perhaps not greatly different from what it would be if the participants were simply given cash, although it was certain that at least some considerable part of the subsidy would go for additional food (p. 44)." "In contrast ...a conservative estimate would be that about 75 percent of the value of blue (free) stamps represented an increase in the food expenditures of those participants who bought the orange stamps" to obtain free blue stamps (p. 44).

HAVAS, Nick. Pilot Food Stamp Program: Impact on Retail Food Store Sales in Avoyelles Parish, La. Agr. Econ. Rpt. 55, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., May 1964.

The author analyzes the impact of the pilot Food Stamp Program on retail food sales in one parish in Louisiana.

HAVAS, Nick, and Robert E. Frye. Pilot Food Stamp Program--Its Effect on Retail Food Stores in Fayette County, Pa., and McDowell County, W. Va. Agr. Econ. Rpt. 29, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Apr. 1963.

Research is reported on the effect of the Food Stamp Program on total sales and the purchase of selected food groups in retail foodstores. Specifically, changes in sales occurred in sample foodstores in Fayette County, Pa., and McDowell County, W. Va., about 1 year after the Food Stamp Program was put into operation.

The overall change in purchases was large enough to indicate that the added purchasing power created by the Food Stamp Program, coupled with the discontinuance of the Commodity Donation Program, measurably increased purchases in retail food stores. A greater proportion of coupon-using customers bought selected items in larger quantities than customers not using coupons. This was particularly true for flour, margarine, fresh milk, and fresh eggs. Also, more soft drinks, frozen dinners, produce, and meat items were purchased by coupon users.

REESE, Robert. Food Consumption and Dietary Levels Under the Pilot Food Stamp Program, Detroit, Michigan, and Fayette County, Pennsylvania. Agr. Econ. Rpt. 9, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., June 1962.

The effectiveness of the pilot Food Stamp Program is assessed relative to its dual objectives: expanding agricultural product markets and improving diets of needy families through increased food purchases.

U.S. Department of Agriculture, Agricultural Marketing Service. The Food Stamp Program. An Initial Evaluation of the Pilot Projects. AMS-472, Food Distribution Div., Washington, D.C., Apr. 1962.

This study evaluates the pilot Food Stamp Projects initiated in eight economically depressed areas of the United States on May 29, 1961. In two, food consumption impacts were studied. In each area, 85 percent and 95 percent of the free coupons were related to increased food expenditures. Animal products and fruits and vegetables accounted for more than 80 percent of the gains in the value of food consumed.

Studies Published After 1964

A. C. Nielsen Company. Chicago Food Stamp Pilot Test. Prepared for U.S. Dept. Agr., Food and Nutrition Serv., Washington, D.C., Nov. 1971.

Methods are tested for measuring and recording the food purchases by both customers paying and those using food stamps. Tape-recorded audits were found to be superior to the other methods tested. Methods for organizing and processing the information on purchases were suggested.

BAGALI, J. N., and A. A. Prato. "Nutrition and Nonnutrition Components of Demand for Food Items," American Journal of Agricultural Economics. Vol. 58, No. 3, Aug. 1976, pp. 563-567.

The authors report on a model they developed and tested which measured what parts of demand for food products were influenced by a desire for nutrition and those influenced by other factors. The nonnutritional demand structure for 42 meat, poultry, and fish products over different consumer groups were compared to determine how food expenditures, region, and urbanization affect the nonnutrient component of demand for these food products.

They state: "the ability of income-enhancing food programs, e.g., food stamps, to increase the intake of high nutrition component foods may be quite limited. In particular, even though higher income families spend more on food, they do not necessarily have nutritionally better diets because the additional income is spent on foods having high nonnutrition components."

BENUS, J., J. Kmenta, and H. Shapiro. "The Dynamics of Household Budget Allocation to Food Expenditures," Review of Economics and Statistics. Vol. LVIII, No. 2, May 1976.

This article reports the following conclusions:

1. Households with higher and rising incomes adjust their expenditures more slowly than lower income households.
2. The income elasticity for food is quite low (0.2) for earned income, and is even lower for transfer income and "income" from food subsidy programs.
3. The marginal propensity to consumer for food is 0.05 out of basic income, 0.86 out of "income" generated in food subsidy programs.

The authors used pooled cross-section and time-series data from the University of Michigan Panel Study of Income Dynamics.

BLAKELEY, Leo V. "Domestic Food Costs," American Journal of Agricultural Economics. Vol. 56, No. 5, Dec. 1974.

The author assesses the determinants of the domestic demand for food. He notes peripheral interest in the Food Stamp Program as it affects the demand for food, and particularly, the demand for beef.

Citizens' Board of Inquiry into Hunger and Malnutrition in the United States. Hunger, U.S.A. Boston, Mass., 1968.

This reports presents an impressionistic view of hunger and malnutrition in the United States. The Food Stamp Program, its role, and its shortcomings in alleviating hunger are addressed.

DUNCAN, Greg J., and James N. Morgan, editors. "Family Composition, Changes and Other Analyses of the First Seven Years of the Panel Study of Income Dynamics," Five Thousand American Families--Patterns of Economic Progress. Vol. IV, Univ. Mich., Survey Research Center, Institute for Social Research, Ann Arbor, Mich., 1976.

The authors report that, in the spring of 1974, panel families said they spent an average of \$35 a week for groceries and about \$6 per week for food in restaurants. These total food costs represented a 23-percent higher expenditure than that of 1972.

These increases showed little consistent variation across income and income/needs categories. In 1974, households reported that food expenditures accounted for about 23 percent of their previous year's income. The corresponding statistic for 1972 was 21 percent.

The most extensive change occurred in families in the bottom decile of the income distribution. The percentage of their previous year's income allotted for food climbed from 20 to 47 percent during the 2-year period. Even with the price increases, the restaurant expenditures of the low-income families increased from \$60 to \$110 over the 2-year period.

FEASTER, J. G. Impact of the Expanded Food and Nutrition Education Program on Low-Income Families: An In-Depth Analysis. Agr. Econ. Rpt. 220, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Feb. 1972.

The author presents summary statistics on the households participating in the Expanded Food and Nutrition Education Programs. Of those who participated, 40 percent also participated in a Federal food program at some time during the sample period. Food expenditures by income level are reported.

FEASTER, J. G., and G. B. Perkins. Families in the Expanded Food and Nutrition Education Program: Comparison of Food Stamp and Food Distribution Program Participants and Nonparticipants. Agr. Econ. Rpt. 246, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Sept. 1973.

The results of a 6-month survey (taken in 1969) of participants in the USDA Extension Service Expanded Food and Nutrition Education Program are presented. Socioeconomic characteristics of food stamp and food distribution families, eligible nonparticipants and ineligible nonparticipants are compared. The majority in all categories do not eat a balanced diet; however, more food stamp families purchase food providing a balanced diet than do families in other categories. Income-food expenditure relationships are explored for the nonparticipating eligibles.

_____. "A Methodology for Estimating Minimum Impact of Food Stamps on Food Expenditures of Low-Income Families and on the Aggregate Demand for Food." Contributed paper presented at joint meetings of American Agricultural Economics Association, Canadian Agricultural Economics Association, and Western Agricultural Economics Association, Edmonton, Alberta, Canada, American Journal of Agricultural Economics. Vol. 55, No. 5, Dec. 1973, p. 1025.

The authors report procedures for estimating:

1. The minimum impact on food expenditures per dollar of bonus stamps by family size and income level.
2. An average minimum impact per dollar of bonus food stamps aggregating all family sizes and income levels.
3. The minimum impact of bonus food stamps on the aggregate demand for food.
4. The effect of cash income supplements on food expenditures.

They also compare the effectiveness of food stamps and cash income supplements in increasing food expenditures. Empirical support consists of a case study which utilized data from the USDA's Extension Service's Expanded Food and Nutrition Education Program 1969 national survey of low-income participating families.

GALATIN, Malcolm. "A Comparison of the Benefits of the Food Stamp Program, Free Food Stamps, and an Equivalent Cash Payment," Journal of Public Policy. Issue No. 21, spring 1973.

The author studies the alternatives of free stamps and equivalent cash and compares them with the current Food Stamp Program. He simulates utility functions to delineate preferences for the three alternative programs. Data were obtained from Pennsylvania households.

Greenleigh Associates, Inc. A Study of the Food Stamp Program in Pittsburgh, Pennsylvania. Prepared for U.S. Dept. Agr., Consumer and Mktg. Serv., Washington, D.C., July 1970.

The behavior of food stamp recipients is examined and compared with that of nonfood stamp participants in the Pittsburgh area. Data on the average food expenditures of food stamp families are compared with those of nonprogram families. Marginal impact of bonus stamps on food expenditures was not analyzed.

HIEMSTRA, Stephen J. "Food: A Special Issue in Welfare Programs," National Food Situation. NFS-131, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Feb. 1970, pp. 25-30.

The report includes a discussion of how the food programs expand food consumption. It provides no new data, and the author assumes an income elasticity of approximately 0.15.

LANE, Sylvia. Food Distribution and Food Stamp Program Effects on Nutritional Achievement of Low-Income Households in Kern County, California. Research Rpt., Univ. Calif., Dept. Agr. Econ., Davis, Calif., 1974.

The author determines if the diets of those participating in the Food Stamp and food distribution programs are nutritionally superior to those of comparable nonparticipants, and which of the two food programs results in a higher nutritional level.

Lack of information is by far the major reason for not participating. When income was supplemented with both distributed food and food stamps, the percentage of total income spent for food declined. Food stamp recipients scored higher achievement rates in six of nine essential nutrient categories than did nonparticipants. Regression analysis shows statistically significant improvement in diet with the Food Stamp Program. The author also examines various demographic effects upon food consumption.

LOGAN, S. H., and D. B. DeLoach. The Food Stamp Program: Del Norte and Humboldt Counties, California. Bull. No. 860, Univ. Calif., Agr. Expt. Sta., Davis, Calif., Mar. 1973.

This study is an analysis of the commodity mix that Food Stamp Program shoppers purchase compared with that of nonfood stamp families. No discussion of marginal food expenditures in relation to bonus stamps is included.

LUKACZER, Moses. "Lessons for the Federal Effort Against Hunger and Malnutrition--From a Case Study," American Journal of Public Health. Vol. 61, No. 2, Feb. 1971.

The author presents a case study of the operation of the Food Stamp Program and the commodity programs in south Texas and their impact on lifestyles and consumption levels of recipient families. No relevant economic analysis is presented.

MADDEN, J. P., and M. D. Yoder. Program Evaluation: Food Stamps and Commodity Distribution in Rural Areas of Central Pennsylvania. Penn. St. Univ., Dept. Agr. Econ. and Rural Sociology, State College, June 1972.

Dietary impacts of the Food Stamp and commodity programs are examined. The sample consisted of 460 families in 2 Pennsylvania counties in 1969-70. Effects of food program participation and other factors on monthly food expenditures per person are reported. Families using food stamps had somewhat better diets than those not using stamps, but only under certain circumstances. Little benefit to the participants was found more than 2 weeks after the purchase of food stamps. Food stamp families substituted a large proportion of their increased food purchasing power for expenditures on items other than food.

MITTELHAMMER, Ron, and D. A. West. Impact of the Food Stamp Program on the Demand for Food--Some Theoretical Considerations. Wash. St. Univ., Dept. Agr. Econ., Pullman, Wash., 1975.

A theoretical framework is presented for analyzing the impact of a food stamp transfer versus a cash transfer on the demand for food by poor households. Demands of many households were unaffected by the form of the transfer, but some households who consumed at levels below the USDA low-cost food plan with a cash transfer had a higher demand for food under the stamp transfer.

NEENAN, P. H., and C. G. Davis. Impact of the Food Stamp Program on Low Income Household Food Consumption in Florida. Univ. Fla., Institute of Food and Agricultural Sciences, Gainesville, Fla., 1977.

In the study, the authors use recall data from the Expanded Food and Nutrition Education Program. The marginal propensity to spend (MPS) for food of bonus stamp recipients is 0.45. Eligible non-participants have an MPS of 0.32.

PRICE, David W. "Demographic and Economic Characteristics of Households and Their Influence on the Availability of Food," Evaluation of School Lunch and School Breakfast Programs in the State of Washington. Ch. 9, Wash. St. Univ., Pullman, Wash., 1975. "The Effects of Income, Assets, Food Programs and Household Size on Food Consumption," American Journal of Agricultural Economics. Vol. 58, No. 4, Nov. 1976.

These two papers report results from a 1972-73 study of households containing 995 children between the ages of 8 and 12. (The extent to which teenagers were represented is unknown.) The sample was stratified by poverty level and ethnic group. Larger numbers of lacks and Mexican-Americans were obtained than if an unstratified random sample of the entire State had been taken.

The objective was to determine how the value of food consumption was affected by bonus food stamps and free school lunches, and whether the relative impacts of income and household size on food expenditures changed because of these programs.

The authors summarize: "The USDA Food Stamp and Free Lunch Programs increase the value of food consumed by eligible Washington (State) households. The proportion of additional purchasing power provided by the programs that is allocated to food exceeds the marginal propensity to consume for food out of current income. It is, however, below the average propensity to consume food by low income households."

REESE, Robert B. Effect of Public Food Programs Upon Food Consumption and Dietary Adequacy. Unpublished report., U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., June 1969.

The author compares the food donations, Food Stamp, and child feeding programs to determine the effect each has upon food consumption and adequacy of the diets of program participants. The Food Stamp Program participation, at least initially, was lower than participation with the full diet in areas with low-income eligibility cutoffs.

Diets improved under the Food Stamp Program, but to exceed levels found for near-poverty groups, special education was required. Child feeding programs in the schools (including nursery schools) provide the primary mechanism for improving diets among people not in poverty.

REESE, Robert B., J. G. Feaster, and G. B. Perkins. Bonus Food Stamps and Cash Income Supplements. MRR-1034, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Oct. 1974.

Both this and the previous report are based on data from the Expanded Food and Nutrition Education Program (EFNEP) and other sources. Food stamps are estimated to be at least twice as effective as cash in increasing food expenditures. Increases would be 29-31 percent for those using cash and approximately 60 percent for users of stamps at the \$200-per-month income level.

U.S. Department of Agriculture, Food and Nutrition Service, and the Commonwealth of Puerto Rico. The Food Distribution System and Food Stamp Program in Puerto Rico. Executive Press, Inc., Puerto Rico, July 1975.

Approximately 69 percent of the Puerto Rican families were eligible to participate in the program at the time of the study. Of those, it was estimated that 75 percent would ultimately participate. Implementation of the program would increase food demand 19.1 percent, causing a 22.56-percent rise in Puerto Rico's food price index and further increases in imported food. The marketing structure is analyzed, along with the impacts of the Food Stamp Program.

Major evaluations of the Food Stamp Program are reviewed. The authors conclude that 50 to 65 percent of the free or "bonus" stamps resulted in expanded food demand. Without the Food Stamp Program, total U.S. expenditures for food could be reduced by roughly 1.5 percent to 2.0 percent. The Food Stamp Program is twice as effective, or more, than comparable amounts of cash income supplements in expanding expenditures for food among low-income families. The estimates used come from the Economic Research Service, now a part of the Economics, Statistics and Cooperatives Service; authors did not describe the techniques used to make the estimates.

PROGRAM DESIGN AND OPERATION

Studies Published Through 1964

DAVIS, Howard P. "The Food Stamp Plan: A Progress Report," Journal of Farm Economics. Vol. 64, No. 2, May 1962, pp. 598-602.

CHRISTENSEN, S. Kent. "Some Reactions of the Food Trade," Journal of Farm Economics. Vol. 64, No. 2, May 1962, pp. 607-612.

These papers contain descriptions of the pilot Food Stamp Program instituted in 1961. Preliminary evaluation studies indicate that the program changed food purchase and consumption patterns of the stamp recipients. No analytical data are presented.

These articles, written within a year of the initiation of the pilot program, primarily report on administrative and operational features of the program.

PAARLBERG, Don. American Farm Policy: A Case Study of Centralized Decision-Making. John Wiley and Sons, Inc., New York, 1964.

In chapter 28 of this report, the author discusses food programs to increase food use. He describes the administrative procedures of the Food Stamp Program and their relationship to direct commodity distribution. The farmer's share of the consumer's dollar (38 cents at that time) is used as a basis for estimating impact upon farm income.

Studies Published After 1964

BEEBOUT, Harold. National Participation and Cost Impacts of Proposed Changes in the Food Stamp Program. U.S. Dept. Agr., Food and Nutrition Serv., Washington, D.C., Feb. 27, 1975.

The author reports on a simulation model of the Food Stamp Program developed to test the comparative impacts of specified program changes. Of the 10 alternatives tested, Plan 10 appeared to meet the criteria outlined by the Food and Nutrition

Service, which commissioned development of the model. This alternative requires a 30-percent tax rate and a standard deduction for all households of \$125 per month, with an extra \$25 if the household includes an aged person. If a lower tax rate is desired to reduce the high cumulative tax rate caused by program layering and if work incentives are to be ensured, a 25-percent tax rate might be coupled with a \$75 monthly standard deduction and an extra \$50 for households with an aged person.

BOEHM, William T. "The Food Stamp Program and Unit-Consumer Households--A Suggested Revision," American Journal of Agricultural Economics. Vol. 54, No. 2, May 1974.

A proposal to base the allotment of food coupons on both the number of persons in the household and its age-sex composition is presented. The author argues that such a method would treat more equally families of like composition. Help would be extended to those most in need.

BREIMYER, H. "An analysis of the Market for Food Stamps," American Journal of Agricultural Economics. Vol. 55, No. 1, Feb. 1973, p. 110.

Breimyer castigates Bryant's article (listed immediately below) as being a worthy attempt so "erroneous as to discredit the initial good intent." Among other criticisms, Breimyer challenges Bryant's table 2 because assumptions, other than those made, might invalidate his conclusions.

BRYANT, W. K. "An Analysis of the Market for Food Stamps," American Journal of Agricultural Economics. Vol. 54, No. 2, May 1972, p. 305.

The author analyzes the Food Stamp Program as a market for a publicly supplied good, concentrating on forces determining the demand for and supply of food stamps. He develops a revenue function for stamps sold to participating households, an appropriations revenue function for bonus stamps, and a total cost function. From these, the author draws output and participation implications.

_____. "An Analysis of the Market for Food Stamps: Correction and Extension," American Journal of Agricultural Economics. Vol. 54, No. 5, Nov. 1972, p. 689.

In this paper, Bryant corrects an error in the paper referenced above and he extends the analysis of the price structure of food stamps to more household size classes. He also considers the price changes which occurred after suspension of the 1971 price structure. Of his models, he concludes that the corrected budget-maximizing model most adequately represents Food and Nutrition Service program administration.

BRYANT, W. K. (reply). American Journal of Agricultural Economics. Vol. 55, No. 1, Feb. 1973, p. 112.

Bryant's responds to Breimyer's and Hiemstra's comments. He claims facts and data marshalled by his critics were "beside the point." He reaffirms his basic intent was neither to congratulate nor to castigate the Food and Nutrition Service.

CLARKSON, K. W. Food Stamps and Nutrition. American Enterprise Institute for Policy Research, Washington, D.C., Apr. 1975. See also: Clarkson, K. W., "Welfare Benefits of the Food Stamp Program," Southern Economic Journal, Vol. 431, No. 1, July 1976.

The author presents results from a study of costs and benefits of the existing Food Stamp Program. No original data on food expenditures by participants or nonparticipants are used. The empirical analysis is based on the monetary values of food stamps, bonus stamps, and the purchase requirement. Clarkson also uses data from the 1965 USDA Household Food Consumption Survey. He concludes that the program has not met its legislated objectives.

Federal Reserve Bank of Chicago. "The Food Stamp Program," Business Conditions. July 1975, pp. 3-12.

This report presents a clear description of the administrative requirements and the mechanical operation of the Food Stamp Program. It includes some criticisms and suggestions for improvement. The author accepts the results of the American Enterprise Institute's study referenced above.

Federal Reserve Bank of Richmond. Monthly Review. Nov. 1968, p. 8.

This report gives a brief history of the Food Stamp Program, including the experience of the 1930's. The focus is on administrative structure, rules for participation, and the program's operation under 1961 legislation. The extent of participation, total stamps issued, bonus stamps, and some other data from the 5th Federal Reserve District are reported.

The report also describes how the coupons clear through financial and business channels. Food stamps en route to redemption cannot be treated as "vault cash" when a bank computes its revenues.

_____. Monthly Review. Nov. 1971, p. 11.

This article describes the Food Stamp Program's "Mechanics of Operation" following legislative change of eligibility requirements. Reasons for liberalization of program rules are presented, and evidence cited of increased participation associated with rule changes. The questions critics continue to raise concerning the program and its effectiveness are reported.

FORSHT, R. Gar, and Richard Platt. Income Distribution of Food Stamp Households in September 1975, Program Evaluation Report (PER)-1, U.S. Dept. Agr., Food and Nutrition Serv., Sept. 1976.

A national sample of food stamp households was surveyed to obtain information on the income distribution of households certified as eligible. Results are presented for the 50 States, the District of Columbia, and Puerto Rico, and for households in all areas eligible for the program.

For the 50 States and the District, 94 percent of the U.S. households had gross monthly incomes under \$600. These households comprised about 88 percent of the persons eligible for the program. Less than one-half of a percent of the households had incomes of \$1,000 or more a month and they made up 1 percent of the participants. Moreover, 46 percent of the households consisted of one and two persons, and they accounted for about 21 percent of all persons eligible. The average size of a participating household was 3.2 persons in September 1975.

HIEMSTRA, S. J. "An Analysis of the Market for Food Stamps," concurrent, American Journal of Agricultural Economics. Vol. 55, No. 1, Feb. 1973.

Hiemstra critically reviews the May 1972 article in the same journal by Bryant. He argues that the analysis was based on several misconceptions and loose assumptions which, by implication, make Bryant's results questionable. Hiemstra challenges table 2, in part, because household issuance data were converted to a per capita basis, but income groups were not adjusted accordingly.

HOAGLAND, G. William. The Food Stamp Program: Income or Food Supplementation? Budget Issue Paper No. 1, Congressional Budget Office, Washington, D.C., Jan. 1977.

The author describes how the Food Stamp Program has reached a coverage sufficient to consider it an income as well as a food supplementation program. He points out that a key budgetary issue is whether this program should be redirected to emphasize one or the other of these two supplementation aspects. He then treats five budgetary options available, presenting comparative, probable consequences of the selection of each option.

LEONARD, Rodney E. "Administrative Aspects of Food Programs as Renewable Resources," American Journal of Agricultural Economics. Vol. 58, No. 1, 1976, pp. 1,006-1,009.

The author presents an administrative concept for the Food Stamp Program (and other food assistance programs) as an integral part of a consumer food policy.

The author considers food programs to be a renewable resource. He outlines how this approach would result in different administrative management than the approach now used, in which the function of administration is to protect the programs and the virtue and reputation of the executive and legislative branches.

MADDEN, J. Patrick. "Analysis of Food Aid Programs." Presented at Agricultural and Food Price and Income Policy Alternative Directions for the U.S. and Implications for Research, Washington, D.C., Jan. 15-16, 1976, pp. 126-133.

This paper contains a review of literature. The author discusses the available analytical evidence regarding the cost effectiveness of the Food Stamp Program.

MADDEN, J. Patrick, and Allen M. Prindle. The Negative Income Tax as a Means of Improving Family Nutritional Levels. Penn. St. Univ., Dept. Agr. Econ. and Rural Sociology, State College, July 3, 1974.

The study is based on household data collected during the Negative Income Tax experiments in 1970-72. Primary emphasis in the study is on assessing the nutritional value of the food intake of participating households. Some tabulations and multiple-regression analyses were made, which related food expenditures, as well as measures of nutrients consumed by households, to levels of income and a number of categorical variables. The results are inconclusive.

Mathematica, Inc. Options for Improving the Equity and Efficiency of Benefit Determination Procedures for the Food Stamp Program. FNS-143, U.S. Dept. Agr., Food and Nutrition Serv., July 1975.

The authors consider the general determinants of food stamp costs and caseloads as to categorical restrictions on coverage; the basic guarantee (coupon allotment); the purchase requirement; transactions costs; earmarking of income; itemized deductions; and program administration. Recommendations are made for improving the equity and efficiency of the basis for issuing food stamps, primarily:

1. Elimination of food stamp basis-of-issuance table.
2. Substitution of a constant benefit-reduction rate.
3. Elimination of separate criteria for income eligibility (for example, all families would be eligible whose net income was such that 30 percent of it was less than the value of their coupon allotment).
4. Elimination of most itemized deductions and an increased standard deduction adjusted for family size.

PARKER, K. E., and others. "Polyunsaturated Placebos for the Poor: Food Stamps, The Food Industry and Government Regulation," Howard Law Journal. 17(3), spring 1974, p. 489.

The authors criticize the current welfare programs within the context of the Nation's constitution and laws. They focus on food programs, especially the Food Stamp Program, and they castigate the establishment of rules and regulations which serve as "barriers" to participation of eligible households. They protest the power of the food industry. Their solution

is to set up public interest law firms which would advocate the consumers' interests in the courts and before administrative agencies.

SULLIVAN, Gene D. "Food Stamps: A Boost to the Southeastern Economy," Federal Reserve Bank of Atlanta Monthly Review. Vol. 58, No. 6, Res. Dept., The Federal Reserve Bank, Atlanta, Ga., June 1973, pp. 86-91.

The author reports that in 1972 the Food Stamp Program injected \$415 million of added purchasing power into the economy of the six States of the Sixth Federal Reserve District. Since 1968, this region has received about 20 percent of the value of all U.S. food stamps.

Program operations and effects on grocery sales and food prices are described and various criticisms and problems are presented. He concludes that the program has brought substantial benefits, and that the cost-benefit ratio is favorable when compared with that of other programs.

TIMMER, C. Peter. "The Food Dollar," Human Ecology Forum. Vol. 7, No. 1, summer 1976, pp. 14-16.

The author presents a policy analysis of the Federally funded Food Stamp and school feeding programs. He contends that Federal food programs have grown partly from the discovery of American hunger and, more directly, from the international food situation. Interrelationships exist among the sevenfold growth in budget for Federal food programs, the Soviet grain deals, and explosions in food prices. The school food programs suffer from high cost and lack of local enthusiasm and participation. Duplication of administrative effort in the food programs is a basic problem. One suggestion for combining programs is that participants pay for school lunches with food stamps.

TOBIN, James. "On Limiting the Domain of Inequality," Journal of Law and Economics. Vol. 13, No. 2, Oct. 1970, p. 263.

The author presents ways of limiting the inequality of the distribution of resources and income within the U.S. economy. He holds that general taxation (positive and negative) offers the most effective way to moderate inequalities of income and wealth generated by a competitive market economy. A cash negative income tax provides the best opportunity to reduce poverty and increase equality. Tobin believes that food stamps do not guarantee improved nutrition and considers them an inferior currency.

U.S. Department of Agriculture, Food and Nutrition Service. Food Stamp Program. Prepared for the Committee on Agriculture and Forestry, U.S. Senate, Washington, D.C., July 21, 1975.

In response to Senate Resolution 58, USDA provided this report on Food Stamp Program objectives, trends and analysis of

participation and cost, profiles of participants, estimates of eligible population, rates of participation, relative size of benefits, and program relationships to other Federal programs. The authors make recommendations on targeting eligibility, simplifying administration, tightening accountability, and enhancing program integrity.

U.S. Department of Agriculture, Food and Nutrition Service. Summary Report on the Food Stamp Program: Response to Senate Resolution 58. Washington, D.C. June 1975

A collection of statistics relevant to the Food Stamp Program is included. No estimates or analyses of food expenditures are presented.

U.S. Congress, Joint Economic Committee. The Economics of Federal Subsidy Programs (Compendium). Part 8--Selected Subsidies, Committee Print, 93d Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., July 29, 1974.

The papers in part 8 analyze subsidies for food, water, pollution abatement, cable television, health insurance, and an oil import quota system, among others. In her paper, Gillim analyzes food subsidies and recommends:

1. Unification of all food subsidies into a single program
2. Built-in adjustment procedure to reflect changes in food prices
3. Substitution of cash for in-kind subsidies to households
4. Expanded program of information and demonstration of food selection and preparation to meet nutritional needs
5. Enlarged program of ready-to-eat meals served to children in schools and day care institutions and to the elderly at home.

_____. "Studies in Public Welfare." Households of Public Income Transfer Programs. Paper No. 2, Committee Print, 92nd Congress, 2nd Session, U.S. Government Printing Office, Washington, D.C., Oct. 15, 1972.

This reference text and handbook lists specific features of individual public income transfer program operations, and includes some information on how these programs operate together. Because of program changes since 1972, the book has become increasingly of historical interest.

U.S. House of Representatives, Committee on Agriculture. Field Investigation of the Food Stamp Program, October 1964. Committee Print, 91st Congress, 2nd Session, Washington, D.C., Dec. 1970.

This report describes unannounced investigative tours of several cities by members of the House Subcommittee on Departmental Operations. The report discusses Congressional interest in statutes establishing the Food Stamp Program and details common operational problems discovered as a result of the investigations. Recommendations are given.

Food Stamp Program. Hearings before the 94th Congress, 2nd Session, Washington, D.C., 1976.

The Committee on Agriculture met in 1976 for a series of hearings on proposals for the Food Stamp Program and recommendations for change in it. In the hearings, individuals and representatives of numerous voluntary associations presented their ideas and recommendations.

U.S. Department of Treasury. Statement of the Honorable William E. Simon, Secretary of the Treasury. Submitted to Senate Select Committee on Nutrition and Human Needs, Washington, D.C., Oct. 21, 1975.

This statement is primarily an effort to document evidence of fraud and misappropriation of Food Stamp Program funds.

U.S. Select Committee on Nutrition and Human Needs. Report on Nutrition and Special Groups. Part I--Food Stamps. U.S. Senate, Washington, D.C., Mar. 1975.

This report presents program history, reasons for eligibles' not participating, outreach programs, reasons for increases in both the number of eligibles and those participating, bottlenecks in the program due to the 1974-75 recession, and inflation and the inadequacy of the size of the coupon allotment. Several recommendations are made on program improvement. One calls for reducing purchase prices and use of the low-cost diet rather than the economy diet as a basis for establishing cost and amount of food stamp allotment accounted for by bonus stamps.

U.S. Senate, Committee on Agriculture and Forestry. National Food Stamp Reform Act of 1976. Mar. 13, 1976.

This report is a section-by-section analysis of the National Food Stamp Reform Act of 1976.

ALTERNATIVE FOOD AND INCOME ASSISTANCE PROGRAMS

Studies Published Through 1964

COCHRANE, Willard W. Achieving a High Level of Food Consumption. U.S. Dept. Agr., Bureau Agr. Econ., Nov. 1944.

The author points out the necessity of a high level of food consumption for adequate nutrition and full employment for the farm sector of the U.S. He also discusses past programs initiated to increase food consumption and proposes two new programs: a national school lunch program and a food discount plan similar to the Food Allotment Plan.

SCHICKELE, Rainer. A Tentative Analysis of a Food Allotment Program. U.S. Dept. Agr., Warfood Admin., Washington, D.C., Jan. 15, 1945.

This memoranda contains a succinct analysis of a national food allotment plan. The author shows how such a plan could complement rather than compete with currently functioning similar programs, such as the School Lunch and Industrial Feeding programs.

U.S. Department of Agriculture. An Analysis of Food Stamp Plans. A supplemental report developed in the U.S. Department of Agriculture pursuant to Public Law 540, 84th Congress. Transmitted to the President of the Senate and Speaker of the House of Representatives, Jan. 3, 1957, Washington, D.C.

This report analyzes food stamp programs proposed prior to the inception of the present plan.

Studies Published After 1964

BAWDEN, D. Lee. "The Impact of a Universal Income Maintenance Program on Income and Employment," American Journal of Agricultural Economics. Vol. 57, No. 5, Dec. 1975, p. 963.

Bawden assesses the income and employment effects of replacing public assistance and food stamps with a universal income-maintenance program. He contends that a universal income-maintenance program would substantially benefit the poor--the rural poor substantially more than the urban poor.

BAWDEN, D. Lee, G. G. Cain, and L. J. Housman. "The Family Assistance Plan: An Analysis and Evaluation," Public Policy. 19(2)323, spring 1971.

This study explains how the Family Assistance Program, based on the October 1970 version, would work. The authors discuss program objectives and the fundamentals of program operations, concluding that the plan would substantially improve the Nation's welfare system. In addition, they urge officials to establish a more uniform administrative structure within the Federal Government to limit discretionary authority at the local level, to eliminate related programs such as food stamp and child care services, to eliminate the work test, and to treat income from various sources more uniformly for tax purposes.

BREIMEYER, Harold F. Food Programs for Low Income Families--Welfare or Market Building. Univ. Mo., Columbia, Mo., 1969.

Breimeyer discusses problems with the food programs followed by a generally nonquantitative analysis of philosophic, political, and economic ramifications of food programs and the problems administrators of these programs face.

BREIMEYER, Harold F., and Harold G. Love. Supplemental Food Programs in Missouri. Univ. Mo., Columbia, Mo., Sept. 1970.

The principal programs treated are: Food Stamps, Commodity Distribution, National School Lunch, and Special Milk. Both food stamps and commodity foods were found to act as alternatives to a community, and these are similar because each only supplements a family's purchases. Food stamps provide a more attractive diet; and, although the program costs the Government more than commodity foods do, it provides more of a net increase in diets.

Because costs to participants are scaled, food stamps offer the greatest advantage to lowest income families. School lunch program planners have struggled with ways to provide lunches to children unable to pay the full cost, and they have been less successful in large cities than elsewhere. Relative to Government costs, the Special Milk Program probably yields the highest increase in demand for products.

BUNTING, F., and R. Reese. "USDA Food and Nutritional Programs--A Progress Report," National Food Situation. NFS-151, U.S. Dept. Agr., Econ. Res. Serv., Washington, D.C., Feb. 1975.

This study indicates that rapid expansion during the seventies of the Food Stamp and other USDA food and nutrition programs was accompanied by structural program changes resulting from higher priorities assigned to national food and nutrition goals, changes in the role of the Federal Government in attaining these objectives, and agricultural and economic conditions. The authors hold that further changes will depend in part on results from an ongoing legislative reexamination of Federal cash and in-kind income transfer programs and alternative forms of welfare systems.

CARLIN, Thomas A. An Economic Analysis of the Predicted Effects of Alternative Family Assistance Programs on Selected Household Expenditures. Ph.D. thesis. Penn. St. Univ., State College, Pa., 1971.

The author estimates expenditure functions (equations) for the poor for food, clothing, shelter, medical care, and furnishings. These equations are used to establish the impact on expenditure patterns of an increase in income due to household participation in a family income-maintenance program. The models based upon the "permanent income concept" work well in explaining variations in expenditures of poor families for food, clothing, and shelter; but they work poorly for explaining how expenditures for furnishings and medical care vary.

GALATIN, Malcolm. "A Comparison of the Benefits of the Food Stamp Program, Free Food Stamps, and an Equivalent Cash Payment," Public Policy. 21(2), spring 1973, p. 291.

After using indifference-curve analysis tailored to types of household recipients, the author applies his theoretical results to four categories of public assistance. He concludes that the greater the

monthly income of an eligible household, the less likely a change from the Food Stamp Program to either free food stamps or cash would benefit the family.

LEVITAN, Sar A. Programs in Aid of the Poor. Third edition, Policy Studies in Employment and Welfare, No. 1, Baltimore and London, Johns Hopkins Univ. Press, Baltimore, Md., 1976.

The author reviews and appraises existing aid programs for the poor, and explores feasible approaches for alleviating poverty in the future. This edition updates pertinent statistical data and discusses recent and proposed programs. The four types discussed are cash support programs, programs aimed at future generations, programs supplying goods and services, and programs aiding the employed poor.

MICHEL, Robert H. "The Future Direction of Income Transfer Programs," Public Administration Review. Vol. 36, No. 5, Sept.-Oct. 1976, pp. 603-607.

The author contends that benefit payments to individual persons are not being made efficiently or effectively, and that welfare benefits and food stamp benefits are rife with error and waste. Programs at the Federal level are layered, one on top of another, without the realization that public sector dollars are often worthless in terms of the multiplier effect. Though reform proposals abound, few would decrease the problems. Some reforms involve Federal funding and management; others, Federal funding and State management.

The author suggests that reforms should give primary responsibilities in public assistance to the States, and that States should promote consumer choice and competition and maintain cost-effectiveness and productivity controls. The public should insist upon specific goal definition, with the emphasis upon helping those who cannot help themselves and on creating jobs.

MITTELHAMMER, R., and D. A. West. "Food Stamp Participation Among Low Income Households: Theoretical Considerations of the Impact on the Demand for Food," Southern Journal of Agricultural Economics. Vol. 7, No. 1, 1975, p. 2230.

The authors adopt Herman Southworth's approach and use 1961 data for expenditures. Their analysis with crude data indicates that the demand for food among families with very low incomes is further stimulated by the in-kind provisions--stamps must be used and they are expendable only for food. However, households preferring less food than they could purchase with their maximum food stamp allotments would increase their utility under a cash transfer. However, this does not necessarily mean a net gain in utility for society, as donors of funds used for bonus stamps prefer the transfer to be "in kind" and not cash.

NATHAN, Richard P. "Food Stamps and Welfare Reform," Journal of Policy Analysis. Vol. 2, No. 1, winter 1976.

The author identifies three possible approaches to public assistance: (1) establishment of a new program to replace existing efforts, (2) preservation of the status quo, and (3) incrementalism.

The incremental approach is considered as currently most desirable from the point of view of providing adequate and equitable income support for the poor. The author proposes a balanced set of changes in the Food Stamp Program as a next step in welfare incrementalism. He acknowledges that the current program is close to being a negative income tax. The removal of the purchase requirement would bring the two even closer. He feels strongly that the elimination of the purchase requirement would change the role of the Food Stamp Program substantially.

National Advisory Commission on Food and Fiber. Food and Fiber for the Future. Washington, D.C., July 1967, p. 100.

The Food and Fiber Commission, in "Food Reserves in a Market Oriented Economy," states: "Domestic food aid could be extended to institutions (schools, hospitals, old age, and orphan homes) by means of food stamps, as is now done with individual welfare cases under the Food Stamp Program."

National Planning Association. Food for the Hungry--Direct Distribution and Food Stamp Programs for Low-Income Families. Planning Pamphlet No. 126, Washington, D.C., Feb. 1969.

This article lists some criticisms of the programs of the pre-seventies, their historical background and objectives, and early local abuses of the program. While the Food Stamp Program would expand demand, the authors do not feel that it would replace farm programs. The Food Stamp Program offers greater work incentives than commodity distribution. As for nutritional considerations, lack of dietary training means that a food distribution program would be more efficient.

Analyses are presented of USDA Secretary Orville Freeman's plan (later implemented), for a free stamp program and a variable purchase plan. The authors hold that consumption would be greater under variable purchase, diets would be more adequate under free stamps, and costs of variable purchase would be greater than Freeman's plan, but less than for a free stamp plan. They do not justify these conclusions.

O'CONNOR, J. Frank, Patrick J. Madden, and Allen M. Prindle. The Negative Income Tax as a Means of Improving Nutritional Levels Among Low-Income Families. Prepared for U.S. Dept. Health, Education, and Welfare, Washington, D.C., Apr. 1975.

The authors' purpose was to examine the effect of the negative income tax on the nutritional quality or adequacy of the diets

of the households in the sample drawn for the Rural Negative Income Tax Experiment. The authors recognize that use of a 24-hour dietary recall methodology is vulnerable to false negative results and that the conclusions remain open to debate. However, tentative results indicate that the home-maker's knowledge is the most significant indicator of dietary sufficiency.

OLSEN, Edgar O. "Some Theorems in the Theory of Efficient Transfers," Journal of Political Economy. Vol. 79, No. 1, Jan.-Feb. 1971, pp. 166-176.

The author proves a positive theorem about the effects of any voluntary voucher scheme. He also describes a situation in which vouchers could result in optimal resource allocations and shows that face values and charges for the vouchers must be to achieve optimum results. He applies the theorems to several proposed voucher schemes.

_____. "Subsidized Housing in a Competitive Market: Reply," American Econ. Review. Vol. 61, No. 1, Mar. 1971, pp. 220-224.

The author treats the question of using cash in place of rent certificates when housing for the poor is subsidized. He points out that the basic discussion could apply equally well to food stamps. He shows that there exists a set of indifference maps and a societal budget constraint such that a rent certificate scheme with no enforcement costs will result in efficient resource allocation.

SEXAUER, Benjamin. In Defense of the Food Stamp Program. Staff Paper P77-4. Univ. Minn., Dept. of Agricultural and Applied Economics, St. Paul, Minn., Feb. 1977.

The author describes development of the Food Stamp Program, reasons for its recent growth, and difficulty in achieving nutritional goals. He compares the program with other welfare programs and discusses cash grants versus in-kind assistance.

STEINER, G. Y. The State of Welfare. Brookings Institution, Washington, D.C., 1971

The author indicts the U.S. welfare system. In the process, he provides technical histories of Aid to Families with Dependent Children, public housing, the Food Stamp Program, and veterans' relief. He also presents reforms he feels should be accomplished and the politics involved.

STOREY, James R. "Social Policy Role of Food Assistance Programs," American Journal of Agricultural Economics. Vol. 58, No. 5, Dec. 1976, pp. 1,010-1,016.

The author adopts three major objectives for income transfer programs to which he believes most Americans would subscribe:

1. All Americans should have incomes sufficient to live at a level considered adequate by society;

2. Incomes should be judged equitable with respect to past or current efforts at self help, and in light of any particular circumstances requiring extraordinary remedies;
3. These incomes should be received in a manner least disruptive to the working of the private economy.

Using this frame of reference, the author treats major transfer programs, and concludes that, to be most effective, food programs need more specific targeting, as has been done with the Special Supplemental Food Program for Women, Infants, and Children (WIC). The Food Stamp Program would be replaced by a Federally administered cash payment system for income maintenance.

THUROW, Lester C. "Cash Versus In-Kind Transfers," American Economics Review. Vol. 64, No. 2, May 1974, pp. 190-195.

This article discusses theoretically cost versus in-kind transfers from the standpoint of the relative social welfare benefits. Cash is viewed as better unless specific externalities can be demonstrated.

U.S. Congress, Joint Economic Committee. Welfare in the 1970's: A National Study of Benefits. Paper No. 15, Committee Print, Studies in Public Welfare, available in 100 local areas, U.S. Government Printing Office, Washington, D.C., July 22, 1974.

This report details how welfare programs are working at both local and national levels. Benefits from individual programs are often quite low. However, combined benefits from multiple participation often amount to more than those that low wage earners receive after taxes. Thus, financial incentives to work are low. Also, the administrative crisis that developed in several programs became evident at the local level. For example, many reports were riddled with statistical errors, and much staff time was devoted to their correction.

. National Survey of Food Stamp and Food Distribution Program Recipients: A Summary of Findings on Income Sources and Amounts and Incidence of Multiple Benefits. Paper No. 17, Committee Print, Studies in Public Welfare, U.S. Government Printing Office, Washington, D.C., Dec. 31, 1974.

This report presents results of a national survey of food stamp and food distribution recipients. Recipients from 3,600 households from each program were interviewed and their income sources identified. Net (after taxes) earnings from wages and salaries, interest, and other private sources accounted for 20 percent of a recipient's average income, and public cash or in-kind income accounted for 80 percent. Aid to Families with Dependent Children, medicaid, social security, food stamps, or food distributions accounted for nearly two-thirds of the total. Additional statistical detail presents the fullest statistical report at the time of publication of income sources and extent of multiple-program participation.

U.S. Select Committee on Nutrition and Human Needs. National Nutrition Policy Study--1974. Hearings, 93rd Congress, 2nd Session, Part 3A--Appendix to Nutrition and Special Groups, U.S. Senate, Washington, D.C., June 1974, pp. 1071-1498.

This report presents testimony by expert witnesses covering food stamps, the effects of rising food prices on low-income groups, nutrition of the elderly, the U.S. population in general, migrant workers, the development of poor people's food cooperatives, school feeding programs including day care and summer feeding, and the nutrition problem in Puerto Rico.

WUNDERLE, Robert E., and David L. Call. An Evaluation of the Pilot Food Certificate Program in Chicago, Illinois and Bibb County, Georgia. Cornell Univ., Graduate School of Nutrition, Ithaca, N.Y., Apr. 1971.

This study evaluates the operation of a pilot food certificate program designed to provide nutritious food to pregnant women, mothers, and their infants.

UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF
AGRICULTURE
AGR 101
THIRD CLASS

