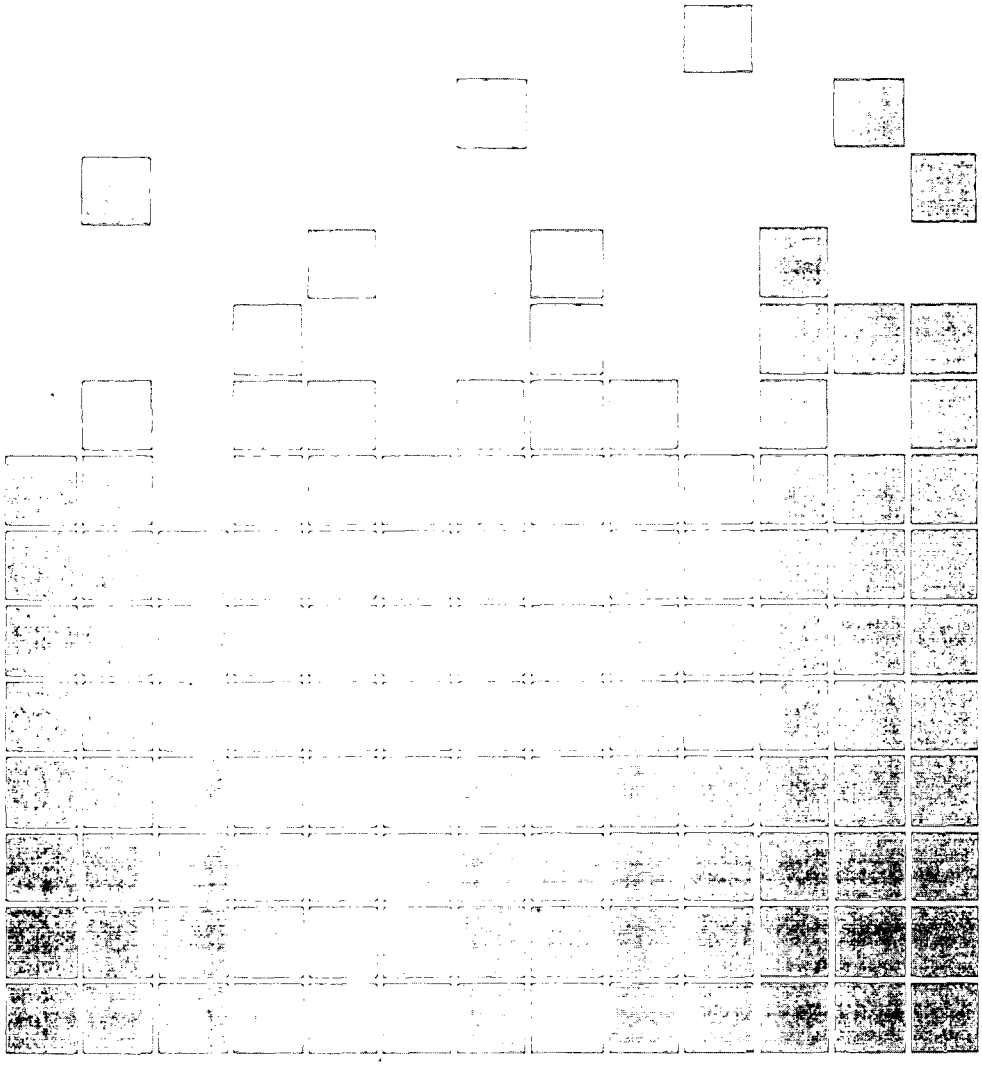
Nutrition Monitoring in the United States

The Directory of Federal and State Nutrition Monitoring Activities

Prepared by the Interagency Board for Nutrition Monitoring and Related Research



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Introduction

Nutrition monitoring in the United States is a complex system of coordinated activities that provides information about the dietary, nutritional, and related health status of Americans; the relationships between diet and health; and the factors affecting dietary and nutritional status. Surveys, surveillance systems, and other monitoring activities comprise the measurement component areas of the National Nutrition Monitoring and Related Research Program (NNMRRP), which was recently strengthened with the passage of the National Nutrition Monitoring and Related Research Act of 1990 (1). The Act required the development of a 10-Year Comprehensive Plan for Nutrition Monitoring and Related Research that has as its primary goal the establishment of a comprehensive national nutrition monitoring and related research program by:

- collecting quality data that are continuous, coordinated, timely, and reliable
- using comparable methods for data collection and reporting of results
- conducting relevant research, and
- efficiently and effectively disseminating and exchanging information with data users (2).

The Interagency Board for Nutrition Monitoring and Related Research (IBNMRR), co-chaired by the Assistant Secretary for Health, Department of Health and Human Services and the Assistant Secretary for Food and Consumer Services, Department of Agriculture, is responsible for overseeing implementation of this 10-Year Plan. A roster of the member agencies of the Board can be found on page iii. Correspondence to the Board or its members can be directed to the Executive Secretary/Department Liaison for the appropriate Department.

The Directory of Federal and State Nutrition Monitoring Activities, which is to be updated every 3 years, is part of the effort to improve dissemination of nutrition monitoring data. Published under the guidance of the Working Group on Federal-State Relations and Information Dissemination of the IBNMRR, it is an updated version of the first Directory published in 1989 (3).

The Directory is a guide to Federal and State survey, surveillance, and research activities that are a part of the National Nutrition Monitoring and Related Research Program. It is organized into the five measurement component areas within the NNMRRP:

- nutrition and related health measurements,
- food and nutrient consumption,
- knowledge, attitudes, and behavior assessments,
- food composition and nutrient data bases, and
- food supply determinations.

The surveys and research activities are listed in boldface print at the top of each page. Descriptive information is provided for each activity in the following categories:

Sponsoring Agency(s): Agencies that developed or helped to develop the survey or were responsible for conducting the survey or research activity.

Purpose: Why the survey was conducted, aspects of nutrition or health assessed, and unique characteristics of the survey.

Conducted: Year or years the data were planned to be collected.

Target population: Characteristics of the population surveyed.

Sample Size and Response Rate(s): Size of the sample population and percentage that were respondents.

Design and Methods: Description of the survey or study design and how data are collected; methodologies used (especially for dietary data).

Descriptive Variables: Data that describe the population, such as demographics.

Outcome Variables of Interest: Other data collected from respondents related to nutrition monitoring.

Contact Person(s): Persons who may be contacted for additional information on the survey.

Selected Key Publications: Publications considered important by the agency, including planning, operational, and training manuals, published data and analysis reports, and journal articles.

The Directory has been expanded to include information on State level activities. Chapter VI entitled, "Nutrition Monitoring Activities in the States," contains information on States, territories, and American Indian

Note: The Interagency Board for Nutrition Monitoring and Related Research wishes to acknowledge staff of the National Center for Health Statistics, Centers for Disease Control for their work on the Directory. Special thanks are extended to Ms. Jacqueline Wright for her work as managing editor in coordinating the many activities necessary to produce this document. The Board also thanks Ms. Katherine Alaimo for her assistance in compiling and editing the Directory and Ms. Luigia Flaim for technical preparation of the Directory. Finally, the Board wishes to acknowledge the Publications Branch of the National Center for Health Statistics, Centers for Disease Control, for assistance with the final preparation of this report.

tribes where nutrition-related surveillance activities are conducted by the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control. Local contacts are listed for each of the surveys. Information is also included on two surveys conducted at the State level by the Human Nutrition Information Service and the Food and Nutrition Service.

In order to facilitate access to survey publications and data tapes, chapters VII and VIII are included. "Searching AGRICOLA and MEDLINE" provides tips on how to search data bases for publications about nutrition monitoring activities. Many of the surveys described in the Directory also have data tapes available for public use. The last chapter, "Data Set Availability," contains lists of these data sets and information on where and how to obtain them, catalogs of data sets and relevant publications.

References

1. U.S. Congress. Pub. L. 101–445. National Nutrition Monitoring and Related Research Act of 1990. Washington: 101st Congress. October 22, 1990.
2. U.S. Department of Health and Human Services and U.S. Department of Agriculture. Ten-year comprehensive plan for the National Nutrition Monitoring and Related Research Program. 1992.
3. Interagency Committee on Nutrition Monitoring. Nutrition monitoring in the United States: The directory of Federal nutrition monitoring activities. Washington: Public Health Service. 1989.

Acronyms and Abbreviations

The following list of acronyms and abbreviations is provided as a quick index of those mentioned in this Directory. For those surveys and activities commonly referred to by an acronym or abbreviation, it is listed on the survey page after the name. Parenthetical acronyms and abbreviations identify the parent department and agencies to which the listed agencies belong. Additionally, the abbreviation **NA** will be used in the text to identify information that is *not applicable* to a specific survey.

ADAMHA	Alcohol, Drug Abuse, and Mental Health Administration (DHHS/PSH)
ARS	Agricultural Research Service (USDA)
BLS	Bureau of Labor Statistics (DOL)
CAB	Commonwealth Agriculture Bureau of Great Britain
CDC	Centers for Disease Control (DHHS/PHS)
DASH	Division of Adolescent and School Health (DHHS/PHS/CDC/NCCDPHP)
DHHS	Department of Health and Human Services
DOC	Department of Commerce
DOD	Department of Defense
DOL	Department of Labor
ERS	Economic Research Service (USDA)
FDA	Food and Drug Administration (DHHS/PHS)
FNS	Food and Nutrition Service (USDA)
FSP	Food Stamp Program
HNIS	Human Nutrition Information Service (USDA)
IHS	Indian Health Service (DHHS/PHS)
NAL	National Agricultural Library (USDA)
NCCDPHP	National Center for Chronic Disease Prevention and Health Promotion (DHHS/PHS/CDC)
NCHS	National Center for Health Statistics (DHHS/PHS/CDC)
NCI	National Cancer Institute (DHHS/PHS/NIH)
NHLBI	National Heart, Lung, and Blood Institute (DHHS/PHS/NIH)
NIA	National Institute on Aging (DHHS/PHS/NIH)
NIDA	National Institute on Drug Abuse (DHHS/PHS/ADAMHA)
NIH	National Institutes of Health (DHHS/PHS)
NLM	National Library of Medicine (DHHS/PHS/NIH)
NMFS	National Marine Fisheries Service (NOAA/DOC)
NOAA	National Oceanic and Atmospheric Administration (DOC)
OASH	Office of the Assistant Secretary for Health (DHHS)
ODPHP	Office of Disease Prevention and Health Promotion (DHHS/OASH/PHS)
PHS	Public Health Service (DHHS)
RDA	Recommended Daily Allowances
SSI	Supplemental Security Income
USAID	United States Agency for International Development
USARIEM	United States Army Research Institute of Environmental Medicine (DOD)
USDA	United States Department of Agriculture
USGPO	United States Government Printing Office
WIC	The Special Supplemental Food Program for Women, Infants, and Children

I. Nutrition and Related Health Measurements

National Health Examination Surveys (NHES I, NHES II, NHES III)

Sponsoring Agency: National Center for Health Statistics

Purpose: The purpose of the NHES programs, including NHES I, NHES II, and NHES III, was the collection and dissemination of health data, obtained best or only by direct physical examination, clinical and laboratory tests, and related measurement procedures. This information, which could not be furnished by people themselves or by health professionals who provided their medical care, was generally of two kinds. Prevalence data were collected for specifically defined diseases or conditions of ill health; and normative health-related measurement data were collected to describe the health characteristics within the total population. NHES I focused on selected chronic diseases of adults, whereas NHES II and NHES III were designed to focus analysis on growth and development in children and adolescents in addition to the large amount of general health information that was collected from each participant.

Conducted: NHES I, 1960–62
NHES II, 1963–65
NHES III, 1966–70

Target Population: NHES I ages 18–79 years*
NHES II ages 6–11 years*
NHES III ages 12–17 years*

* Civilian, noninstitutionalized persons residing in households in the conterminous United States.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
NHES I		
Total	7,710	
Interviewed/examined	6,672	87%
NHES II		
Total	7,417	
Interviewed/examined	7,119	96%
NHES III		
Total	7,514	
Interviewed/examined	6,768	90%

Design and Methods: The survey design was a stratified, multistage, probability cluster sample of the target population. The data were obtained by interview and examination. The examination included anthropometric measurements, physical examinations, and laboratory analyses of blood specimens.

Descriptive Variables: Demographic and socioeconomic variables including age, gender, race, ethnicity, income, and education.

Outcome Variables of Interest: Numerous health status indicators and conditions including height, weight, serum cholesterol, blood pressure, overweight, hypertension, and children's growth.

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Selected Key Publications:

National Center for Health Statistics. Plan and initial program of the Health Examination Survey. National Center for Health Statistics. Vital Health Stat 1(4). 1965.

National Center for Health Statistics. Plan, operation and response results of a program of children's examinations. National Center for Health Statistics. Vital Health Stat 1(5). 1967.

National Center for Health Statistics. Plan and operation of a Health Examination Survey of U.S. youths 12–17 years of age. National Center for Health Statistics. Vital Health Stat 1(8). 1969.

National Center for Health Statistics. Weight, height, and selected body dimensions of adults: United States, 1960–62. National Center for Health Statistics. Vital Health Stat 11(8). 1965.

National Center for Health Statistics. Height and weight of children: United States. National Center for Health Statistics. Vital Health Stat 11(104). 1970.

National Center for Health Statistics. Height and weight of youths 12–17 years: United States. National Center for Health Statistics. Vital Health Stat 11(124). 1973.

National Center for Health Statistics. Serum cholesterol levels of adults: United States, 1960–62. National Center for Health Statistics. Vital Health Stat 11(22). 1967.

National Center for Health Statistics. Total serum cholesterol values youths 12–17 years: United States. National Center for Health Statistics. Vital Health Stat 11(156). 1976.

National Center for Health Statistics. Decayed, missing, and filled teeth among children: United States. National Center for Health Statistics. Vital Health Stat 11(106). 1971.

First National Health and Nutrition Examination Survey (NHANES I)

Sponsoring Agency: National Center for Health Statistics

Purpose: The purpose of NHANES programs, including NHANES I, was the collection and dissemination of health and nutrition data, obtained best or only by direct physical examination, clinical and laboratory tests, and related measurement procedures.Prevalence data were collected for specifically defined diseases or conditions of ill health; and normative health-related measurement data were collected to describe the health characteristics within the total population. In addition to providing this information, NHANES I was designed to permit analytic studies that take advantage of the large amount of health and nutrition information that was collected from each participant.

Conducted: NHANES I, 1971–74
NHANES I Augmentation Survey, 1974–75

Target Population: Civilian, noninstitutionalized persons ages 1–74 years residing in households in the conterminous United States.

Sample Size and Response Rate(s):

	Sample size	*Interviewed*	*Examined*
NHANES I (1971–74)	28,043	27,753 (99%)	20,749 (74%)
NHANES I Augmentation Sample (1974–75)	4,288	4,220 (98%)	3,059 (71%)

Design and Methods: The survey design was a stratified, multistage, probability cluster sample of the target population. The data were obtained by interview and examination and included a 24-hour dietary recall, a limited food frequency questionnaire, physical examinations, anthropometric measurements, and laboratory analyses of blood and urine specimens.

Descriptive Variables: Demographic and socioeconomic variables including age, gender, race, ethnicity, income, education, and marital status.

Outcome Variables of Interest: Numerous nutritional and health status indicators and conditions including height, weight, dietary intake, serum cholesterol, blood pressure, overweight, anemia, children's growth charts, and hypertension.

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National Center for Health Statistics. Plan and operation of the Health and Nutrition Examination Survey, United States 1971–73. National Center for Health Statistics. Vital Health Stat 1(10a) 1973 and 1(10b) 1977.

Engel A, Murphy RS, Maurer K, Collins E. Plan and operation of the HANES I Augmentation Survey of adults 25–74 years, United States, 1974–75. National Center for Health Statistics. Vital Health Stat 1(14). 1978.

Hamill PV, Drizd TA, Johnson CL, et al. Physical growth: National Center for Health Statistics percentiles. Am J Clin Nutr 32:607–29. 1979.

National Center for Health Statistics. Dietary intake source data, United States, 1971–74. National Center for Health Statistics. Vital Health Stat 11(231). 1979.

National Center for Health Statistics. Diet and iron status, a study of relationships: United States, 1971–74. National Center for Health Statistics. Vital Health Stat 11(229). 1982.

National Center for Health Statistics. Basic data on anthropometric measurements and angular measurements of hip and knee joints for selected age groups 1–74 years of age, United States, 1971–75. National Center for Health Statistics. Vital Health Stat 11(219). 1981.

National Center for Health Statistics. Serum cholesterol levels of persons 4–74 years of age by socioeconomic characteristics, United States, 1971–74. National Center for Health Statistics. Vital Health Stat 11(217). 1980.

Hamill PV, Drizd TA, Johnson CL, et al. NCHS growth curves for children, birthN18 years, United States. National Center for Health Statistics. Vital Health Stat 11(165). 1977.

Second National Health and Nutrition Examination Survey (NHANES II)

Sponsoring Agency: National Center for Health Statistics

Purpose: The purpose of NHANES programs, including NHANES II, was the collection and dissemination of health and nutrition data, obtained best or only by direct physical examination, clinical and laboratory tests, and related measurement procedures. Prevalence data were collected for specifically defined diseases or conditions of ill health and compromised nutritional status; and normative health-related measurement data were collected to describe the health characteristics within the total population. In addition to providing this information, NHANES II was designed to permit analytic studies that take advantage of the large amount of health and nutrition information that was collected from each participant.

Conducted: 1976–80

Target Population: Civilian, noninstitutionalized persons ages 6 months–74 years residing in households in the United States.

Sample Size and Response Rate(s):

Sample size	*Interviewed*	*Examined*
27,801	25,286 (91%)	20,322 (73%)

Design and Methods: The survey design was a stratified, multistage, probability cluster sample of the target population. The data were obtained by interview and examination and included a 24-hour dietary recall, a limited food frequency questionnaire, physical examinations, anthropometric measurements, and laboratory analyses of blood and urine specimens.

Descriptive Variables: Demographic and socioeconomic variables including age, gender, race, ethnicity, income, education, and marital status.

Outcome Variables of Interest: Numerous nutritional and health status indicators and conditions including height, weight, dietary intake, blood pressure, blood lead, oral glucose tolerance tests, overweight, anemia, hypertension, and diabetes.

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Selected Key Publications:

McDowell A, Engel A, Massey JT, Maurer K. Plan and operation of Second National Health and Nutrition Examination Survey, 1976–80. National Center for Health Statistics. Vital Health Stat 1(19). 1981.

Yetley E, Johnson C. Nutritional applications of the Health and Nutrition Examination Surveys (HANES). Annu Rev Nutr 7:441–63. 1987.

Najjar MF, Rowland M. Anthropometric reference data and prevalence of overweight, United States, 1976–80. National Center for Health Statistics. Vital Health Stat 11(238). 1987.

Carroll MD, Abraham S, Dresser CM. Dietary intake source data. National Center for Health Statistics. Vital Health Stat 11(231). 1983.

Fulwood R, Johnson CL, Bryner JD, et al. Hematological and nutritional biochemistry reference data for persons 6 months–74 years of age: United States, 1976–80. National Center for Health Statistics. Vital Health Stat 11(232). 1982.

Fanelli MT, Woteki CE. Nutrient intakes and health status of older Americans: Data from the NHANES II. Ann N Y Acad Sci 561:94–103. 1989.

Kuczmarski RJ. Prevalence of overweight and weight gain in the United States. Am J Clin Nutr 55:495S–502S. 1992.

Life Sciences Research Office, Federation of American Societies for Experimental Biology. Assessment of the folate nutritional status of the U.S. population based on data collected in the Second National Health and Nutrition Examination Survey, 1976–80. Bethesda, Maryland: Federation of American Societies for Experimental Biology, Special Publications Office, 1984a.

Life Sciences Research Office, Federation of American Societies for Experimental Biology. Assessment of the iron nutritional status of the U.S. population based on data collected in the Second National Health and Nutrition Examination Survey, 1976–80. Bethesda, Maryland: Federation of American Societies for Experimental Biology, Special Publications Office. 1984b.

Sempos CT, Cooper R, Kovar MG, et al. Dietary calcium and blood pressure in National Health and Nutrition Examination Surveys I and II. Hypertension 8:1067–74. 1986.

Hispanic Health and Nutrition Examination Survey (HHANES)

Sponsoring Agency: National Center for Health Statistics

Purpose: The purpose of HHANES was to obtain data on the health and nutritional status of the three largest Hispanic subgroups in the United States. It was conducted because the sample size for Hispanics was insufficient in the NHANES to adequately estimate the nutritional and health status of this important subpopulation. HHANES, like the NHANES, had goals that included: national population reference distributions, national prevalences of diseases and risk factors, and monitoring trends in nutritional and health status over time. The design for this survey also placed an emphasis on identifying unmet health care needs among Hispanics.

Conducted: 1982–84

Target Population: Civilian, noninstitutionalized, "eligible" Hispanics ages 6 months–74 years residing in households in three defined geographic areas of the United States: Mexican Americans residing in five Southwestern States (Arizona, California, Colorado, New Mexico, and Texas), Cubans residing in Dade County, Florida, and Puerto Ricans residing in the New York City area (parts of New York, New Jersey, and Connecticut).

Sample Size and Response Rate(s):

	Sample size	*Interviewed*	*Examined*
Mexican American	9,894	8,554 (87%)	7,462 (75%)
Cuban American	2,244	1,766 (79%)	1,357 (61%)
Puerto Rican	3,786	3,369 (89%)	2,834 (75%)

Design and Methods: The survey design was a stratified, multistage, probability cluster sample of the target populations. Although HHANES was not designed as a national Hispanic survey, and no national estimates for the Hispanic population can be made, it was the first health examination survey to cover the health and nutritional status of Hispanic subgroups. The three HHANES universes included approximately 76 percent of the 1980 Hispanic origin population in the United States. The data were obtained by interview and examination and included a 24-hour dietary recall, a food frequency questionnaire, physical examinations, anthropometric measurements, and laboratory analyses of blood and urine specimens.

Descriptive Variables: Demographic and socioeconomic variables including age, gender, ethnicity, income, education, and marital status.

Outcome Variables of Interest: Numerous nutritional and health status indicators and conditions including height, weight, dietary intake, blood pressure, blood lead, glucose and cholesterol, overweight, anemia, hypertension, and diabetes.

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National Center for Health Statistics. Plan and operation of the Hispanic Health and Nutrition Examination Survey, 1982–84. National Center for Health Statistics. Vital Health Stat 1(19). 1985.

Murphy RS. At last—a view of Hispanic health and nutritional status. Am J Public Health 80(12):1429–30. 1990.

Johnson CL, Woteki CE. The art and science of interpreting survey data. Editorial. Am J Public Health 80(12):1427–29. 1990.

Delgado JL, Johnson CL, Roy I, Trevino FI. Hispanic Health and Nutrition Examination Survey: Methodological considerations. Am J Public Health 80(Suppl):6–10. 1990.

Najjar MF, Kuczmarski RJ. Anthropometric data and prevalence of overweight for Hispanics: 1982–84. National Center for Health Statistics. Vital Health Stat 11(239). 1989.

Flegal KM, Ezzati TM, Harris MI, et al. Prevalence of diabetes in Mexican-Americans, Cubans and Puerto Ricans from the Hispanic Health and Nutrition Examination Survey, 1982–84. Diabetes Care 14(Suppl 3):628–38. 1991.

Looker AC, Johnson CL, McDowell MA, Yetley EA. Iron status prevalence of impairment in three Hispanic groups in the United States. Am J Clin Nutr 49:553–8. 1989.

Carroll M, Sempos CT, Fulwood R, et al. Serum lipids and lipoproteins of Hispanics: 1982–84. National Center for Health Statistics. Vital Health Stat 11(240). 1990.

Woteki CE. The Hispanic Health and Nutrition Examination Survey (HHANES 1982–84): Background and introduction. Am J Clin Nutr 51:897S–901S. 1990.

Third National Health and Nutrition Examination Survey (NHANES III)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: NHANES III is designed to assess the health and nutritional status of the population and to monitor changes over time. A major aim of the nutrition component is to provide data for nutrition monitoring purposes, including tracking nutrition-related risk factors and estimating the prevalence of compromised nutritional status. A second major aim of the NHANES III nutrition component is to provide information for studying the relationship between diet, nutritional status, and health. Normative health-related measurement data are collected to describe the health characteristics for the total population.

Conducted: 1988–94 (Two national phases: 1988–91 and 1991–94)

Target Population: Civilian, noninstitutionalized population ages 2 months and older.

Sample Size and Response Rate(s): Proposed sample size of 40,000 over 6-year time period.

	Sample size	*Interviewed*	*Examined*
Phase 1 (1988–91)	20,278	17,465 (86%)	15,629 (77%)**
Phase 2 (1991–94)	*	*	*

**Does not include 254 home-examined persons with limited data.
*Not available.

Design and Methods: The survey design is a complex, multistage, stratified, probability cluster sample of households throughout the conterminous United States. with two, 3-year national samples. Several groups will be oversampled: children, elderly, blacks, and Mexican Americans. Data are obtained by interviews and examinations. For those too frail or unable to attend the full examination, in-house examinations are obtained. A dietary 24-hour recall and 1-month food frequency are used to obtain dietary data. A special dietary study, the Supplemental Nutrition Survey of Older Americans (SNSOA) supported by the National Institute on Aging/NIH, is conducted with examinees, ages 50 years and over, to obtain two independent replicate 24-hour recalls by telephone in Phase I (1988–91).

Descriptive Variables: Gender, age, race, ethnicity, income, education, employment, health insurance coverage, and marital status.

Outcome Variables of Interest: Numerous nutritional and health indicators including food and nutrient intake, dietary practices, body measurements, hematological tests including iron status, biochemical analyses of whole blood and serum (including lipid, lipoproteins, lead, and glucose tolerance), blood pressures, electrocardiograms, urine tests, bone densitometry, dental examinations, gallbladder ultrasonography, and cognitive and physical functioning.

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Selected Key Publications:

National Center for Health Statistics. National Health and Nutrition Examination Survey III: Data collection forms. Hyattsville, Maryland: Public Health Service. 1990.

National Center for Health Statistics. Plan and operation of the Third National Health and Nutrition Examination Survey, 1988–94. Series 1. Hyattsville, Maryland: National Center for Health Statistics. In preparation.

Briefel RR, Sempos CT, eds. Dietary methodology workshop for the Third National Health and Nutrition Examination Survey. National Center for Health Statistics. Vital Health Stat 4(27). 1992.

Woteki CE, Briefel RR, Hitchcock D, et al. Selection of nutrition status indicators for field surveys: The NHANES III design. J Nutr 120:1440–45. 1990.

Harris TB, Woteki CE, Briefel RR, Kleinman JC. NHANES III for older persons: Nutrition content and methodological considerations. Am J Clin Nutr 50:1145–9. 1989.

McDowell MA, Harris TB, Briefel RR. Dietary surveys of older persons. Clin Appl Nutr 1(4):51–60. 1991.

Briefel RR, Woteki CE. Development of food sufficiency questions for the Third National Health and Nutrition Examination Survey. J Nutr Educ 24:24S–28S. 1992.

Life Sciences Research Office, Federation of American Societies for Experimental Biology. Suggested measures of nutritional status and health conditions for the Third National Health and Nutrition Examination Survey. Bethesda, Maryland: Life Sciences Research Office. 1985.

McDowell MA, Briefel RR, Warren RA, et al. The dietary data collection system—An automated interview and coding system for NHANES III. Stumbo PJ, ed. Proceedings of the fourteenth National Nutrient Databank Conference. Ithaca, New York: The CBORD Group, Inc. 125–31. 1989.

Woteki CE, Briefel RR, Kuczmarski R. Contributions of the National Center for Health Statistics. Am J Clin Nutr 47:320–8. 1988.

NHANES III Dietary interviewer's training manual. Rockville, Maryland: Westat, Inc. 1989.

McQuillan GM, Gunter EW, Lannom L. Field issues for the plan and operation of the laboratory component of the Third National Health and Nutrition Examination Survey. J Nutr 120:1446–50. 1990.

Briefel RR, Flegal KM, Winn DM, et al. Assessing the nations diet: Limitations of the food frequency questionnaire. Am J Diet Assoc 92(8):959–62. 1992.

Sempos CT, Briefel RR, Flegal KM, et al. Factors involved in selecting a dietary survey methodology for national nutrition surveys. Aust J Nutr Diet 49(2):22–27, 29–30. 1992.

National Health and Nutrition Examination Survey I Epidemiologic Followup Study (NHEFS)

Sponsoring Agency: National Center for Health Statistics and National Institute on Aging in collaboration with other National Institutes of Health and Public Health Service Agencies

Purpose: The goal of NHEFS is to investigate the relationships between clinical, nutritional and behavioral factors assessed in the First National Health and Nutrition Examination Survey (NHANES I) and subsequent morbidity, mortality, and hospital utilization. In addition, changes in risk factors, functional limitation, and institutionalization were studied.

Conducted: 1982–84, 1986, 1987, and 1992

Target Population: The NHEFS cohort included all persons between 25 and 74 years of age who completed a medical examination at NHANES I in 1971–75 (n = 14,407). The NHEFS is comprised of a series of followup surveys, three of which have been conducted to date. The first wave of data collection was conducted for all members of the NHEFS cohort (n = 14,407) from 1982–84. The second wave, the 1986 NHEFS, was conducted for members of the NHEFS cohort who were 55–74 years of age at their baseline examination and not known to be deceased at the 1982–84 NHEFS (n = 3,980). The third wave, the 1987 NHEFS, was conducted for the entire nondeceased NHEFS cohort (n = 11,750). The fourth wave of data collection, the 1992 NHEFS, includes the entire nondeceased NHEFS cohort (n = 11,195).

Sample Size and Response Rate(s):

1982–84 NHEFS cohort	14,407	
Traced	13,383	93% of 1982–84 cohort
Interviewed	12,220	91% of traced cohort
1986 NHEFS cohort	3,980	
Traced	3,767	95% of 1986 cohort
Interviewed	3,608	96% of traced cohort
1987 NHEFS cohort	11,750	
Traced	11,018	94% of 1987 cohort
Interviewed	9,998	91% of traced cohort

Design and Methods: The first wave of data collection involved tracing the cohort; conducting personal interviews with subjects or their proxies; measuring pulse rate, weight, and blood pressure of surviving participants; collecting hospital and nursing home records of overnight stays; and collecting death certificates of decedents. The 1982–84 NHEFS interview included a detailed series of questions concerning food frequency intake and vitamin supplementation. Continued followups of the NHEFS population were conducted in 1986, 1987, and 1992 using the same design and data collection procedures developed in the 1982–84 NHEFS, with the exception of a 30-minute computer-assisted telephone interview administered in place of a personal interview, and no physical measurements were taken. The telephone interview did not include food frequency questions.

Descriptive Variables:

Individual—Income, age, race, ethnicity, occupation, marital status, education, and current employment.

Family/household—Household composition, education of head of household, and family income.

Outcome Variables of Interest: Self-reports of selected physician-diagnosed medical conditions, history of hospitalization and institutionalization, functional status, food frequency intake, vitamin supplementation, medication usage, vision and hearing problems, smoking and alcoholic beverage consumption and history, tooth loss, physical activity level, psychological status, physical measurements of pulse, blood pressure, and weight, and cause of death information for decedents.

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Selected Key Publications:

Madans JH, Cox CS, Kleinman JC, et al. 10 years after NHANES I: Mortality experience at initial followup, 1982–84. Public Health Rep 101(5):474–81. 1986.

Madans JH, Kleinman JC, Cox CS, et al. 10 years after NHANES I: Report of initial followup, 1982–84. Public Health Rep 101(5):465–73. 1986.

Cohen BB, Barbano HE, Cox CS, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1982–84. National Center for Health Statistics. Vital Health Stat 1(22). 1987.

Finucane FF, Freid VM, Madans JH, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1986. National Center for Health Statistics. Vital Health Stat 1(25). 1990.

Cox CS, Rothwell ST, Madans JH, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1987. National Center for Health Statistics. Vital Health Stat 1(27). 1992.

Schatzkin A, Jones DY, Hoover RN, et al. Alcohol consumption and breast cancer in the NHANES I Epidemiologic Followup Study. N Engl J Med 316(19):1169–73. 1987.

Schatzkin A, Taylor PR, Carter CL, et al. Serum cholesterol and cancer in the NHANES I Epidemiology Followup Study. Lancet 2(8554):298–301. 1987.

HANES Mortality Followup Studies

- **NHANES II Mortality Study**
- **HHANES Mortality Study**
- **NHANES III Followup Study**

Sponsoring Agency:

NHANES II Mortality Study—National Center for Health Statistics, Centers for Disease Control and the Food and Drug Administration

HHANES Mortality Study—National Center for Health Statistics, Centers for Disease Control

NHANES III Followup Study—National Center for Health Statistics, Centers for Disease Control, and the National Institute on Aging/NIH and others yet to be determined.

Purpose: The second National Health and Nutrition Examination Survey (NHANES II) was conducted during the years 1976–80. The purpose of the NHANES II Mortality Study is to establish the vital status of the NHANES II cohort of examined adults who were 35 years of age and over at the time of their initial examination. And for those sample persons who are judged to be deceased, the cause of death will be assessed from the death certificate. This information will then be used to form a nationally representative longitudinal study.

The Hispanic Health and Nutrition Examination Survey (HHANES) was conducted during the years 1982–84. The purpose of the HHANES Mortality Study is to establish the vital status of the HHANES II cohort of examined adults. And for those sample persons who are judged to be deceased, the cause of death will be assessed from the death certificate. This information will then be used to form a data base for the longitudinal study of Hispanic adults from three regions in the United States; that is, the Southwest, Dade County, Florida, and the New York City Metropolitan Area.

The third National Health and Nutrition Examination Survey (NHANES III) will be conducted during the years 1988–94. The purpose of the NHANES III Followup Study is to track changes in the health and vital status of the entire NHANES III cohort of sample persons who were interviewed or examined at baseline as part of the cross-sectional portion of the survey. This information will then be used to form a nationally representative longitudinal study.

Conducted: NHANES II Mortality Study: Current followup is covering the vital status of the NHANES II cohort during 1976–88. Subsequent followups will be conducted every 2 years and will cover the years after 1988.

HHANES Mortality Study: Current followup is covering the vital status of the HHANES cohort during 1982–90. Subsequent followup will be conducted every 2 years and will cover the years after 1990.

NHANES III Followup Study: Currently in progress with methods similar to the previous followup studies.

Target Population:

NHANES II Mortality Study—The cohort of the 9,252 adult sample persons who were 35 years of age and over at the time of their initial baseline examination as part of the NHANES II.

HHANES Mortality Study—The cohort of the 7,100 adult sample persons who were 20 years of age and over at the time of their initial baseline examination as part of the HHANES.

NHANES III Followup Study—All sample persons who were 2 months of age and over who were interviewed in NHANES III.

Sample Size and Response Rate(s):

NHANES II Mortality Study—Sample size is 9,252. Data collection are still underway as of May 1992.

HHANES Mortality Study—Sample size is 7,100. Data collection are still underway as of May 1992.

NHANES III Followup Study—Sample size planned for 30,000. Baseline, cross-sectional data collection will continue through 1994.

Design and Methods: NHANES II Mortality Study and HHANES Mortality Study are passive followup studies with no direct contact with members of the cohort. Vital status will be assessed entirely by matching information about the sample persons with the National Death Index (NDI). The NDI data base is a central, computerized index of death record information compiled from magnetic tapes submitted to the NCHS by the State vital statistics offices. All deaths in the United States starting with 1979 are contained in NDI files. Cause of death will be obtained from the death certificate.

Plans are currently being developed for the NHANES III Followup Study. Initially, vital status will be assessed by matching information about the sample persons with the National Death Index (NDI). An application has been submitted for permission to match with the Medicare Statistical Files to obtain morbidity data. Plans for recontacting some portion of the sample are also being considered.

Descriptive Variables: A wide range of demographic information and examination results are available by

matching with the baseline data tapes from the cross-sectional portion of the respective surveys on which these followup studies are based. Demographic information includes age, sex, race, national origin, education, income, and marital status. Examination data includes a 24-hour dietary recall, body measurements, hematological tests, biochemical analyses of whole blood and serum, blood pressure, and electrocardiogram.

Outcome Variables of Interest:

For NHANES II *Mortality Study and HHANES Mortality Study*—Total and cause-specific mortality.

For NHANES III Followup Study—Total mortality, cause-specific mortality, and morbidity data from Medicare. Information on changes in health status and selected risk factors may also be collected.

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Selected Key Publications: None to date.

National Health Interview Survey (NHIS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The purpose of the basic health and demographic survey is to address major current health issues through the collection and analysis of data on the civilian, noninstitutionalized population of the United States. National data on the incidence of acute conditions, episodes of persons injured, disability days, physician contacts, prevalence of chronic conditions, limitations of activity, hospitalizations, assessed health status, and other health-related topics are provided by the survey.

Conducted: Annually since 1957

Target Population: Civilian, noninstitutionalized population of the United States.

Sample Size and Response Rate(s):

For the 1990 survey:

	Sample size	*Response rate*
Households	46,476	*
Individuals	119,631	*

* The overall response rate was 95.5 percent. This reflects a 4.5 percent noninterview rate for the 48,680 eligible NHIS households.

Design and Methods: The NHIS is a continuing, nationwide, household interview survey. The sample design plan follows a multistage probability design that permits a continuous sampling of the civilian, noninstitutionalized population residing in the United States. Each week a probability sample is interviewed by personnel from the U.S. Bureau of the Census.

The sample design of the survey has undergone changes following each decennial census. This periodic redesign of the NHIS sample allows the incorporation of the latest population information and statistical methodology into the survey design. The current sample design was first used in 1985 and it is anticipated that this design will be used until 1995.

Descriptive Variables: Demographic and socioeconomic variables including age, sex, race, Hispanic origin, ethnicity, education, marital status, living arrangement, veteran status, income, employment status, occupation and industry, geographic region, and place of residence.

Outcome Variables of Interest:

Nutrition monitoring—Self-reported height and weight for persons 18 years of age and over.

Basic health variables—Acute and chronic conditions, activity limitation, episodes of persons injured, restricted activity, self-assessed health, physician contacts, and hospitalization.

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Selected Key Publications:

Adams PF, Benson V. Current estimates from the National Health Interview Survey, 1990. National Center for Health Statistics. Vital Health Stat 10(181). 1991.

Kovar MG, Poe GS. The National Health Interview Survey design, 1973–84, and procedures, 1975–83. National Center for Health Statistics. Vital Health Stat 1(18). 1985.

Massey JT, Moore TF, Parsons VL, Tadros W. Design and estimation for the National Health Interview Survey, 1985–94. National Center for Health Statistics. Vital Health Stat 2(110). 1989.

Schoenborn CA. Exposure to alcoholism in the family: United States, 1988. Advance data from vital and health statistics, no 205. Hyattsville, Maryland: National Center for Health Statistics. 1991.

National Health Interview Survey on Aging

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: This survey was designed to complement the 1985 National Nursing Home Survey; these two surveys describe the health status and health care of most of the elderly population in the United States.

Conducted: January–December 1984

Target Population: Civilian, noninstitutionalized population ages 55 years and over in the United States.

Sample Size and Response Rate(s):

Sample size	*Interviewed*	*Response rate*
16,697	16,148	97%

Design and Methods: Personal interview survey. Complex, multistage, stratified, and cluster sample, including all persons in the NHIS household who were 65 years of age or over, and a randomly selected sample of 50 percent of persons 55–64 years of age.

Descriptive Variables: Similar to NHIS. Self-reports on a set of basic health and demographic items.

Outcome Variables of Interest:

Topic areas—Family structure, community services, occupation, health conditions, instrumental activities of daily living, health opinions, living arrangements, social support, retirement, activities of daily living, home care, and hospice.

Nutrition-related items—Meal services, difficulty preparing meals, and difficulty eating.

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Selected Key Publications:

Fitti JE, Kovar MG. The supplement on aging to the 1984 National Interview Survey. National Center for Health Statistics. Vital Health Stat 1(21). 1987.

Fulton JP, Katz S, Jack SS, Hendershot GE. Physical functioning of the aged: United States, 1984. National Center for Health Statistics. Vital Health Stat 10(167). 1989.

Dawson D, Hendershot G, Fulton J. Aging in the eighties: Functional limitations of the individuals 65 years of age and over. Advance data from vital and health statistics; no 133. Hyattsville, Maryland: National Center for Health Statistics. 1987.

National Health Interview Survey on Health Promotion and Disease Prevention (NHIS-HPDP)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control. Collaboratively designed, sponsored, and analyzed by several agencies of the Public Health Service charged with responsibility for monitoring progress toward the 1990 Health Objectives for the Nation.

Purpose: The 1985 NHIS-HPDP was designed to provide baseline data for many of the 1990 Health Promotion Objectives for the Nation, including some of the nutrition-related objectives. The 1990 NHIS-HPDP was designed to provide end-point in order to assess whether the 1990 Objectives were achieved.

Conducted: 1985 and 1990

Target Population: Civilian, noninstitutionalized household population of the United States, ages 18 years and over.

Sample Size and Response Rate(s):

	NHIS household response rate (sample size)	*HPDP response rate (sample size)*	*Final response rate*
1985	96% (36,300)	94% (35,817)	90%
1990	96% (48,680)	87% (47,103)	83%

Design and Methods: Complex, multistage, stratified, and clustered sample design. Data collection was by household interviews, conducted face-to-face. Although proxy information may have been obtained for basic health data, all Health Promotion and Disease Prevention data were based on self-response.

Descriptive Variables: Gender, age, race, Hispanic ethnicity, family income, educational attainment, living arrangements, marital status, veteran status, labor force status, occupation and industry, geographic region, and place of residence.Health status information collected on the basic health and demographic questionnaire are available on the NHIS-HPDP tape for each HPDP sample person. These include assessed health status, bed days and doctor visits in past 12 months, and interval since last doctor visit. Event-based data (for example, chronic conditions and restricted activity days in past 2 weeks) for HPDP sample persons are available on separate tapes but this information can be linked to the NHIS-HPDP.

Outcome Variables of Interest:

Nutrition-related—1985 and 1990: data on knowledge, advice from doctors, and behaviors associated with proper eating habits, weight loss techniques; sodium and high animal-fat diets; high blood cholesterol, overweight, hypertension, and heart disease; alcohol use (lifetime drinking status; quantity and frequency of alcohol consumption in past 2 weeks; knowledge of heavy alcohol consumption as a risk factor for selected chronic conditions); opinion of the relationship between fluoride use and avoiding between-meal sweets and dental health; and breast-feeding practices (for all children in the family under age 5).

1990 only: Knowledge of alcohol and cholesterol as risk factors for hypertension, received and/or followed professional advice to cut down on alcohol use due to hypertension; alcohol use (quantity and frequency) for most recent 2-week period in which alcohol was consumed in the past year (in 1985, data were obtained only for past 2 weeks).

General health promotion—1985 and 1990: Pregnancy and smoking, general health habits, injury control, child safety and health, high blood pressure, stress, exercise, smoking, alcohol use, dental care, occupational safety and health (1985 only), and preventive care.

1990 only: Mammography, radon.

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Selected Key Publications:

Thornberry OT, Wilson RW, Golden PM. The 1985 Health Promotion and Disease Prevention Survey. Public Health Rep 101(1):566–70. 1986.

Stephenson MG, Levy AS, Saas NL, McGarvey WE. 1985 NHIS findings: Nutrition knowledge and baseline data for weight-loss objectives. Public Health Rep 102(1):61–7. 1987.

(The two issues of Public Health Reports cited above contain 10 other articles analyzing various topics in the 1985 NHIS on Health Promotion and Disease Prevention.)

Schoenborn CA. Health promotion and disease prevention: United States, 1985. National Center for Health Statistics. Vital Health Stat 10(163). 1988.

1991 National Health Interview Survey on Health Promotion and Disease Prevention

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control. Collaboratively designed, sponsored, and analyzed by several agencies of the Public Health Service charged with responsibility for monitoring progress toward the Year 2000 Health Objectives for the Nation.

Purpose: The 1991 NHIS-HPDP was designed to provide baseline data for many of the Healthy People 2000: Health Promotion and Disease Prevention Objectives, including some nutrition-related objectives.

Conducted: 1991

Target Population: Civilian, noninstitutionalized, household population of the United States, ages 18 years and over.

Sample Size and Response Rate(s): Available fall, 1992

Design and Methods: Complex, multistage, stratified, and cluster sample design. Data collection was by household interviews, conducted face-to-face. Although proxy information may have been obtained for basic health data, all Health Promotion and Disease Prevention data were based on self-response.

Descriptive Variables: Gender, age, race, Hispanic ethnicity, family income, educational attainment, living arrangements, marital status, veteran status, labor force status, occupation and industry, geographic region, and place of residence.

Health status information collected on the basic health and demographic questionnaire are available on the NHIS-HPDP tape for each HPDP sample person. These include assessed health status, bed days and doctor visits in past 12 months, and interval since last doctor visit. Event-based data such as chronic condition, restricted activity days in past 2 weeks, etc., for HPDP sample persons are available on separate tapes but this information can be linked to the NHIS-HPDP.

Outcome Variables of Interest:

Nutrition-related—Breast-feeding and bottle-feeding (children under 5 years); perceived relative weight; weight control attempts and methods; self-reported height and weight; purchase of low salt foods; adding salt to food; reading ingredient and/or nutrient lists on labels; receiving or need Meals on Wheels; received and/or followed dietary medical advice or medication prescription to lower cholesterol; diet and eating habits during most recent routine check-up; any alcohol use in past year and quantity and frequency in past 2 weeks.

General health promotion—Hearing; unintentional injuries; pregnancy and smoking; childhood immunizations; child health, environmental health, including passive smoke and radon; tobacco use, including cigarettes, pipes, cigars, snuff, and chewing tobacco; adult immunizations; occupational safety and health; diabetes-related conditions and treatments; vision-related conditions and treatments; limitations of activity due to chronic or disabling conditions; diabetes diagnosis and treatment; urinary incontinence; clinical and preventive services; physical activity and fitness; mental health; and oral health.

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Selected Key Publications: None to date.

National Health Interview Survey on Vitamin and Mineral Supplements

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control; Center for Food Safety and Applied Nutrition, Food and Drug Administration

Purpose: Questions were designed to determine the prevalence and quantitative level of vitamin and mineral supplement intake among adults and young children in the United States.

Conducted: 1986

Target Population: Civilian, noninstitutionalized children ages 2–6 years and adults ages 18 years and over in the United States.

Sample Size and Response Rate(s):

	Sample size	*Interviewed*	*Response rate*
Children, 2–6 years	1,926	1,877	*
Adult, 18 years and over	12,200	11,775	*

* The overall response rate was 93.1 percent. This reflects a 3.5 percent noninterview rate for all eligible NHIS households and a 3.4 percent noninterview rate for the eligible vitamin and mineral subsample.

Design and Methods: Complex, multistage, stratified, and cluster sample. Self- report (for adults) and proxy reports (for children) of vitamin or mineral supplements to the diet used during the 2 weeks before interview. Personal home interviews conducted by trained Bureau of the Census interviewers.

Descriptive Variables: Basic health and demographic information was collected for all members of sample households, including persons sampled for vitamin and mineral questionnaire.

Outcome Variables of Interest: Prevalence of the use of vitamin and mineral supplements including specific types of supplements (for example, iron supplements, calcium supplements, and multinutrient supplements) and the nutrients contained in supplements. The survey included intakes of 24 nutrients from supplements: 12 vitamins (vitamins A, D, E, C, B6, B12; and thiamin, riboflavin, niacin, folate, biotin, and pantothenic acid) and 12 minerals (calcium, phosphorous, iodine, iron, magnesium, copper, zinc, potassium, chromium, manganese, selenium, and flouride). The potency and form (for example, tablet or powder) of the different types of supplements and the units used to declare potency (for example, USRDA or mg). The specific chemical compounds for mineral supplements were also recorded. Data were also collected on the number of supplements taken, duration of use, and whether the supplement was prescribed.

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Selected Key Publications:

Bender MM, Levy AS, Schucker RE, Yetley EA. Trends in the prevalence and magnitude of vitamin and mineral supplement usage and correlation with health status. Accepted by J Am Diet Assoc.

Park YK, Kim I, Yetley EA. Characteristics of vitamin and mineral supplement products in the United States. Am J Clin Nutr 54:750–59. 1991.

Moss AJ, Levy AS, Kim I, Park YK. Use of vitamin and mineral supplements in the United States: Current users, types of products, and nutrients. Advance data from vital and health statistics; no 174. Hyattsville, Maryland: National Center for Health Statistics. 1989.

National Health Interview Survey on Cancer Epidemiology and Cancer Control

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control; National Cancer Institute, National Institutes of Health.

Purpose: This survey gathers data on the prevalence of cancer, cancer survivorship, and associated risk factors, including Hispanic acculturation, food intake, vitamin and mineral intake, food knowledge, smoking habits, occupational exposure, family cancer history, reproduction and hormone use, access to medical care, cancer screening knowledge and practice, general knowledge and attitudes about cancer, and workplace tobacco policies and exposure. In addition, sections on childhood immunizations, AIDS knowledge and attitudes, and family resources are included.

Conducted: 1987 and 1992

Target Population: Civilian, noninstitutionalized population ages 18 years and over in the United States.

Design and Methods: Complex, multistage, stratified, cluster sample, including one randomly selected person 18 years of age or over in each NHIS household. Hispanics were oversampled in the 1987 survey, and in the 1990 survey Hispanic persons and blacks were oversampled.

Sample Size and Response Rate(s):

	Sample size	*Interviewed*	*Response rate*
1987	50,000	45,000	90%
1992	50,000	*	*

* Not available

Descriptive Variables: Self-report of the basic health and demographic variables in the National Health Interview Survey. Additional variables emphasize risk factors for cancer.

Outcome Variables of Interest: The nutrition variables included the frequency of eating over 68 selected food items, vitamin and mineral supplement intake, knowledge of a good diet, knowledge of the relationship between diet and cancer, changes in diet for health reasons, and self-reported height and weight.

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Selected Key Publications:

Dawson DA, Thompson GB. Breast cancer risk factors and screening: United States, 1987. National Center for Health Statistics. Vital Health Stat 10(172). 1989.

Schoenborn CA, Boyd G. Smoking and other tobacco use: United States, 1987. National Center for Health Statistics. Vital Health Stat 10(169). 1989.

National Health Interview Survey on Youth Behavior Supplement (NHIS-YBS)

Sponsoring Agency: National Center for Health Statistics, and National Center for Chronic Disease Prevention Health and Promotion, Centers for Disease Control

Purpose: The Youth Behavior Supplement (YBS) is one of three components of the Youth Risk Behavior Surveillance System designed to monitor priority risk behaviors of American youth between the years 1990 and 2000. The Youth Risk Behavior Surveillance System was developed with three complementary data collection efforts in mind. In addition to the NHIS-YBS, the surveillance system includes periodic school-based surveys conducted by State and local departments of education and a periodic national school-based survey conducted by CDC's Division of Adolescent and School Health (DASH) (Youth Risk Behavior Survey—OMB No. 0920–0258). All three types of surveys will use similar, if not identical, questions to measure the delineated set of high priority risk behaviors so that the data obtained from the three surveys are comparable.

Conducted: Planned for March 1992–February 1993

Target Population: Youth ages 12–21 years, including high school students, ages 14–17 years; prehigh school students, ages 12–13 years; out-of-school youth, ages 12–17 years; out-of-school youth with less than high school education, ages 18–21 years; out-of-school youth who completed high school but never entered college education, ages 18–21 years; out-of-school youth who have some college education but are not attending college at the time of the survey, ages 18–21 years; and college students ages 18–21 years.

Sample Size and Response Rate(s): The 1992 NHIS-YBS is designed to be administered to one adolescent per household, to include approximately 11,000 sampled persons.

Design and Methods: In addition to the youth 14–17 years of age who attend high schools ($n = 4,218$), the 1992 NHIS-YBS will collect data on six additional sub-populations of youth not covered by the school-based surveys, and on which no alternate information on priority risk behaviors exists. Those include:

1. Prehigh school students, ages 12–13 years ($N = 2,089$)
   The data on the younger ages are critical to assess the onset of many of the priority behaviors so that interventions can be targeted to the appropriate age group.
2. Out-of-school youth (OSY), ages 12–17 years ($N = 820$, after over-sampling procedures)
3. Out-of-school youth, ages 18–21 years, with less than high school education (were OSY before graduation from high school) ($N = 894$, after over-sampling procedures)
4. Out-of-school youth, ages 18–21 years, who completed high school diploma but never entered college ($N = 1,130$)
5. Out-of-school youth, ages 18–21 years, who have some college education but are not attending college at the time of the survey ($N = 500$)
6. College students, ages 18–21 years ($N = 1,100$)

Descriptive Variables: Self-report of the basic health and demographic variables in the National Health Interview Survey.

Outcome Variables of Interest: Sexual behaviors that increase the risk of HIV infection, other sexually transmitted diseases and unintended pregnancies; behaviors that increase the risk of unintentional injuries; drug and alcohol use; tobacco use; dietary behaviors; and physical activity, immunization status, and family resources.

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Selected Key Publications: None to date.

National Hospital Discharge Survey (NHDS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The survey provides data on patients discharged from non-Federal general and short-stay specialty hospitals in the United States and on the nature and treatment of illnesses among the hospital population.

Conducted: Annually since 1965

Target Population: Discharges from non-Federal general and short-stay specialty hospitals.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
Hospitals	542	88%
Discharges	250,000 (approximate)	

Design and Methods: The original sample of hospitals was selected in 1964 from a frame of non-Federal general and short-stay specialty hospitals listed in the National Master Facility Inventory. That sample was updated periodically from lists of hospitals that opened later provided by the American Hospital Association.

The survey was redesigned in 1988 based on a three-stage, probability sample of non-Federal, short-stay hospitals within a national sample of Primary Sampling Units (PSU's). Data are either abstracted directly from the face sheets of sampled hospitals' medical records or obtained from existing data bases.

Descriptive Variables: Patient variables include age, sex, race, ethnicity, marital status, expected source of payment, length of stay, discharge status, diagnoses, and procedures received while in the hospital.

Outcome Variables of Interest: The NHDS contributes to nutrition monitoring by providing information on hospitalizations resulting from nutrition-related diseases. Information on diagnoses, procedures, length of stay, and discharge status is recorded, and can be used to examine the care of patients with relevant conditions.

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Selected Key Publications:

Graves EJ. Detailed diagnoses and procedures, National Hospital Discharge Survey, 1989. National Center for Health Statistics. Vital Health Stat 13(108). 1991.

Graves EJ. Detailed diagnoses and procedures, National Hospital Discharge Survey, 1988. National Center for Health Statistics. Vital Health Stat 13(107). 1991.

Graves EJ. National Hospital Discharge Survey: Annual summary, 1988. National Center for Health Statistics. Vital Health Stat 13(106). 1991.

National Ambulatory Medical Care Survey (NAMCS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The purpose of this survey is to gather and disseminate statistical data about ambulatory medical care provided by non-Federal, office-based physicians to the population of the United States.

Conducted: Annually from 1973–81, 1985; re-fielded on a continuous, annual basis in 1989

Target Population: Visits by ambulatory patients to non-Federal physicians in office-based practice.

Sample Size and Response Rate(s):

	Sample size	*Response rate**
1989:		
Physicians	2,535	74%
Patient visits	38,384	
1990:		
Physicians	3,063	74%
Patient visits	43,469	

* Percentage of eligible physicians participating

Design and Methods: The survey is based on a multistage, stratified, and probability sample of physicians within a national sample of Primary Sampling Units. Physicians record data on encounter forms for a sample of patient visits during a randomly assigned 1-week reporting period. Physicians are contacted by telephone, mail, and personal interview.

Descriptive Variables: Demographic characteristics of the patient, including age, sex, ethnicity, and race.

Outcome Variables of Interest: Reasons for visit, diagnoses, diagnostic services, counseling services, and medication therapy. Nutrition-related information that is collected includes for example, physician-reported hypertension, hypercholesterolemia, obesity, and counseling services for diet, exercise, cholesterol reduction, and weight reduction.

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Selected Key Publications:

Tenny JB, White KL, Williamson JW. National Ambulatory Medical Care Survey: Background and methodology. National Center for Health Statistics. Vital Health Stat 2(61). 1974.

Nelson C, McLemore T. The National Ambulatory Medical Care Survey: United States, 1975–81 and 1985 trends. National Center for Health Statistics. Vital Health Stat 13(93). 1988.

Bryant E, Shimizu I. Sample design, sampling variance, and estimation procedures for the National Adulatory Medical Care Survey. National Center for Health Statistics. Vital Health Stat 2(108). 1988.

Schappert SM. The National Ambulatory Medical Care Survey: 1989 summary. National Center for Health Statistics. Vital Health Stat 13(110). 1992.

National Hospital Ambulatory Medical Care Survey (NHAMCS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: This survey is designed to provide nationally representative data describing the utilization of hospital emergency and outpatient departments in the United States.

Conducted: Initiated in 1992 (to be conducted on a continuous annual basis)

Target Population: Visits to emergency and outpatient departments of non-Federal, short-stay general and specialty hospitals.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
Hospitals	550	*
Patient visits	75,000	*

* Not available

Design and Methods: The survey is based on a multistage, stratified, probability sample of non-Federal, short-stay hospitals selected within a national sample of Primary Sampling Units. A probability sample of clinics and emergency departments is selected within hospitals, and a probability sample of patient visits is selected within the sample clinics and emergency departments. Data collection are continuous throughout the year with each hospital randomly assigned to a 4-week data reporting period.

Descriptive Variables: Demographic characteristics of the patient, including age, sex, ethnicity, race.

Outcome Variables of Interest: Patients' reasons for visit, diagnoses, diagnostic services, and medication therapy. For hospital outpatient department visits, nutrition-related information is collected, including for example, physician-reported hypertension, hypercholesterolemia, and obesity, and counseling services for diet, exercise, cholesterol reduction, and weight reduction.

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Selected Key Publications: None to date.

National Nursing Home Survey (NNHS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: To provide national data on the characteristics of the nursing homes, its services, residents, and staff for all nursing homes in the United States.

Conducted: 1973–74, 1977, and 1985

Target Population: All types of nursing and related-care homes with three or more beds, set up and staffed for use by residents and routinely providing nursing and personal care services. Also includes individuals residing in nursing homes currently or during the last year.

Sample Size and Response Rate(s):

For the 1985 survey—

	Sample size	*Response rate*
Nursing homes	1,079	93%
Current residents	5,243	97%
Discharged residents	6,354	95%
Registered nurses	2,763	80%

Design and Methods: The survey was based on a stratified, two-stage, probability design with a first-stage selection of facilities and a second-stage sample of residents, discharges, and registered nurses from the sample facilities. Resident data were collected by reviewing medical records and questioning the nurse who usually provided care for the resident. Residents were not interviewed directly. Sample registered nurses completed self-administered questionnaires.

Descriptive Variables: Facility-level characteristics of the nursing home and demographic characteristics of the residents.

Outcome Variables of Interest: Diagnoses, functional status, charges for care, and discharge status.

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Selected Key Publications:

Meiners MR. Selected operating and financial characteristics of nursing homes, United States, 1973–74 National Nursing Home Survey. National Center for Health Statistics. Vital Health Stat 13(22). 1976.

Van Nostrand JF, Zappolo A, Hing E, et al. The National Nursing Home Survey, 1977 summary for the United States. National Center for Health Statistics. Vital Health Stat 13(43). 1979.

Hing E, Sekscenski E, Strahan G. The National Nursing Home Survey, 1985 summary for the United States. National Center for Health Statistics. Vital Health Stat 13(97). 1989.

Hing E. Nursing home utilization by current residents: United States, 1985. National Center for Health Statistics. Vital Health Stat 13(102). 1989.

Sekscenski E. Discharges from nursing homes: 1985 National Nursing Home Survey. National Center for Health Statistics. Vital Health Stat 13(103). 1990.

Hing E, Bloom B. Long-term care for the functionally dependent elderly. National Center for Health Statistics. Vital Health Stat 13(104). 1990.

National Home and Hospice Care Survey (NHHCS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The purpose of the survey is to collect and disseminate nationally representative data on the characteristics of the hospices and home health agencies, the patient population they serve, the staff they employ, and the utilization of their services.

Conducted: Planned for fall 1992 (to be conducted on an annual basis)

Target Population: Current and discharged patients of hospices and home health agencies in the United States.

Sample Size and Response Rate(s): Not available

Design and Methods: The survey will be a multistage probability design based on a national sample of Primary Sampling Units (PSU's). Within PSU's, a probability sample of hospice and home health agencies will be selected from those listed in the 1991 National Health Provider Inventory. A sample of current and discharged patients will be selected within the agencies.

Descriptive Variables: Agency-level characteristics of the hospices and home health agencies, including ownership, Medicare certification, and types of employees. Demographic characteristics of the current and discharged patients, including age, race, sex, ethnicity, marital status, and living arrangement.

Outcome Variables of Interest: Diagnoses, functional status, source of payment, and discharged status.

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Selected Key Publications: None to date.

Vital Statistics Program

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The purpose of the basic vital statistics program is to formulate and maintain a cooperative and coordinated vital records and vital statistics system with State-operated registration systems to produce national, State, and local data on births and deaths (including infant and fetal deaths and induced terminations of pregnancy).

Conducted: Initiated in 1915 (Data are collected continuously but published annually.)

Target Population: Total U.S. population.

Sample Size and Response Rate(s):

Births—

	Coverage
Before 1951, 1955, and 1985–present	Complete coverage
1951–54, 1956–66, and 1968–71	Statistics based on 50% samples
1967	Coverage ranged from 20–50% of births
1972–84	Statistics based on all records filed in States submitting computer tapes and 50% sample of records in all other States

Deaths—Complete coverage except for 1972, when coverage was 50 percent

Design and Methods: The vital registration system was proposed in 1850 and established in 1915. The original registration area consisted of 10 States and the District of Columbia. By 1933, all 48 States and the District of Columbia were participating in the registration system. Vital statistics of the United States are collected and published through a decentralized, cooperative system. Responsibility for the registration of births, deaths, fetal deaths, and induced terminations of pregnancy is vested in the individual States and certain independent registration areas. The degree of uniformity necessary for national statistics has been achieved by periodic issuance of recommended standards from the responsible national agency and the cooperative adoption of these standards by the individual registration areas. The standard certificates have been the principal means for achieving uniformity in information.

Descriptive Variables: *For births*—age, education, race, and Hispanic origin of mother and father; marital status and nativity of mother; and sex, birth order, and plurality of infant (singleton, twin, triplet, etc.).

For deaths—sex, age, education, marital status, race and Hispanic origin of decedent, type and place of death, geographic place of death, occupation and industry of decedent (selected States), residence, and whether autopsy was performed.

For fetal deaths—age, education, race and Hispanic origin of mother and father; marital status of mother; sex of fetus, plurality, live and total birth order, place and date of delivery; and geographical location.

Outcome Variables of Interest:

Births—before 1989, infant's birth weight, gestational age, and Apgar score. Added in 1989, mother's weight gain during pregnancy, alcohol and tobacco use, and certain medical risk factors of pregnancy, such as anemia, diabetes, and hypertension; for the infant, the presence of fetal alcohol syndrome, hyaline membrane disease, congenital anomalies, and anemia.

Deaths—underlying and multiple causes of death.

Fetal deaths—period of gestation, weight of fetus, month of pregnancy prenatal care began, and number of prenatal visits. Added in 1989, medical risk factors for this pregnancy; complications of labor and delivery; obstetrical procedures; method of delivery; congenital anomalies of fetus; smoking, alcohol use, and weight gain during pregnancy; and attendant at delivery.

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Selected Key Publications:

Births:

National Center for Health Statistics. Vital statistics of the United States, 1988, vol I, natality. Washington: National Center for Health Statistics. 1990. (Published annually)

National Center for Health Statistics. Advance report, final natality statistics, 1989. Monthly vital statistics report; vol 40 no 8, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1991. (Annual Summaries published)

Taffel SM. Trends in low birth weight: United States, 1975–85. National Center for Health Statistics. Vital Health Stat 21(48). 1989.

Taffel SM. Maternal weight gain and the outcome of pregnancy: United States, 1980. National Center for Health Statistics. Vital Health Stat 21(44). 1986.

Deaths:

National Center for Health Statistics. Vital statistics of the United States, 1988, vol II, mortality, part A and B. Washington: National Center for Health Statistics. 1991 and 1990. (Published annually)

National Center for Health Statistics. Advance report, final mortality statistics, 1989. Monthly vital statistics report; vol 40 no 8, suppl 2. Hyattsville, Maryland: National Center for Health Statistics. 1992. (Annual Summaries published)

Maurer JD, Rosenberg HM, Keemer JB. Deaths of Hispanic origin, 15 reporting States, 1979–81. National Center for Health Statistics. Vital Health Stat 20(18). 1990.

Fetal deaths:

National Center for Health Statistics. Vital statistics of the United States, 1988, vol II, mortality, part A and B. Washington: National Center for Health Statistics. 1991 and 1990. (Published annually)

Powell-Griner E. Perinatal mortality in the United States: 1950–81. National Center for Health Statistics. Monthly vital statistics report, vol 34 no 12, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1986.

Powell-Griner E. Perinatal mortality in the United States: 1981–85. National Center for Health Statistics. Monthly vital statistics report, vol 37 no 10, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1989.

National Mortality Followback Survey (NMFS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: This survey is intended to augment the information on characteristics of decedents by inquiring more fully into various aspects of concern to policymakers, health care providers and administrators, epidemiologists, biomedical researchers, demographers, and the general public.

Conducted: Data collected 1986–88 based on 1986 deaths; planned for 1993.

Target Population: Random sample of adults ages 25 years or over; oversample of persons dying of heart disease, rare cancers, Native Americans, blacks, and women in reproductive years.

Sample Size and Response Rate(s):

For 1986 deaths—

	Sample size	*Response rate*
Informants	18,733	89%

Response rate for hospitals was 81%

Design and Methods: Probability sample of all death certificates. Mail and telephone survey of informants named on death certificates, survivors and next of kin, and hospital discharge summaries.

Descriptive Variables: Cause of death, height, weight, medical history, medical care in last year of life, dietary patterns, lifestyle behaviors, and social and demographic characteristics.

Outcome Variables of Interest: Cause of death, health care utilization, other conditions, and functional limitations.

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Selected Key Publications:

Kapantais G, Powell-Griner E. Characteristics of persons dying from diseases of heart: Preliminary data for the 1986 NMFS. Advance data from vital and health statistics; no 172. Hyattsville, Maryland: National Center for Health Statistics. 1989.

Kapantais G, Powell-Griner E. Characteristics of persons dying from AIDS: Preliminary data from the 1986 NMFS. Advance data from vital and health statistics; no 173. Hyattsville, Maryland: National Center for Health Statistics. 1989.

Kemper P, Murtaugh CM. Lifetime use of nursing home care. N Engl J Med 324:595–600. 1991.

Seeman I, Poe G, McLaughlin J. Design of the 1986 NMFS: Considerations of collecting data on decedents. Public Health Rep 104(2):183–88. 1989.

National Survey of Family Growth (NSFG)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The survey provides a wide range of information on fertility, family planning, and aspects of maternal and child health that are closely related to fertility and family planning, such as birth weight, breast-feeding, and prenatal care.

Conducted: 1973, 1976, 1982, and 1988; planned for 1994

Target Population: Women of reproductive age (15–44 years)

Sample Size and Response Rate(s):

Year	*Completed interviews*	*Response Rate**
1973	9,797	81.0%
1976	8,611	82.7%
1982	7,969	79.4%
1988	8,450	79.2%

* Number of completed interviews divided by number of women eligible for interview.

Design and Methods: Multistage probability sample of women ages 15–44 years in the United States. In 1973 and 1976, never-married women without children were excluded. Data are based on personal interviews lasting about 1 hour; no food intake data are collected. Data on birth weight, breast-feeding, and prenatal care are based on recall by the mother.

Descriptive Variables: Age of mother at time of birth, race, Hispanic origin, education of mother, ratio of family income to poverty level, birth order, mother's marital status at time of birth, mother's occupation, and region of residence.

Outcome Variables of Interest: Breast-feeding, birth weight, source and timing of prenatal care. Focus of the survey is on variables affecting births, including age at first intercourse, contraceptive use and effectiveness, infertility, sterilization, use of family planning and infertility services, and marriage and cohabitation.

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Selected Key Publications:

Ryan AS, Pratt WF, Wysong JL, et al. A comparison of breast-feeding data from the National Survey of Family Growth and the Ross Laboratories Mothers Survey. Am J Public Health 81(8):1049–52. 1991.

Pratt WF, Mosher WD, Bachrach C, Horn M. Understanding U.S. fertility. Population Bulletin 39(5). 1984. (Population References Bureau, Inc., 1875 Connecticut Avenue, NW., Washington, DC, 20009)

Pamuk E, Mosher WD. Health aspects of pregnancy and childbirth: United States, 1982. National Center for Health Statistics. Vital Health Stat 23(16). 1988.

Mosher WD. Fertility and family planning in the United States: Insights from the National Survey of Family Growth. Fam Plann Perspect 20(5):207–17. 1988.

Judkins DR, Mosher WD, Botman S. National Survey of Family Growth: Design, estimation, and inference. National Center for Health Statistics. Vital Health Stat 2(109). 1991.

Aral S, Mosher WD, Cates W Jr. Self-reported pelvic inflammatory disease in the United States, 1988. JAMA 266(18):2570–73. 1991.

Mosher WD, Pratt WF. Fecundity, infertility, and reproductive health in the United States, 1982. National Center for Health Statistics. Vital Health Stat 23(14). 1987.

Mosher WD, Pratt WF. Fecundity and infertility in the United States, 1965–88. Advance data from vital and health statistics; no 192. Hyattsville, Maryland: National Center for Health Statistics. 1990.

Mosher WD. Contraceptive practice in the United States, 1982–88. Fam Plann Perspect 22(5):198–205. 1990.

Mosher W. Fertility and family planning in the 1970's: The National Survey Family Growth. Fam Plann Perspect 14(6):314–20. 1982.

National Maternal and Infant Health Survey (NMIHS)

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: The NMIHS collected nationally-representative data on natality, fetal, and infant mortality vital events. The major areas of investigation are causes of low-birth weight infants and infant deaths, barriers to prenatal care, the effects of maternal smoking, alcohol and drug use, and the use of public programs by mothers and infants.

Conducted: Data collected 1988–90 based on 1988 vital events

Target Population: Study of women, hospitals, and prenatal care providers associated with live births, still births, and infant deaths 1988.

Sample Size and Response Rate(s):

	Actual sample size	*Response rate**
Live births	9,953	74%
Fetal deaths (of 28 weeks or more gestation)	3,309	69%
Infant deaths	5,332	65%

* Response rates are for mothers based on type of pregnancy outcome. Hospital response rates were approximately 80 percent; prenatal care provider response rates were approximately 70 percent.

Design and Methods: National probability sample of registered births and fetal and infant deaths. Data were collected by a combination of mail, telephone, and personal interviews. Data were linked with the sampled vital records and weighted based on national estimates.

Descriptive Variables: Height, weight, maternal weight gain, hematocrit, hemoglobin, blood pressure, vitamin and mineral supplement use by mothers and infants, breast-feeding practices, maternal alcohol consumption and smoking, and nutrition-related health problems (nausea, diarrhea, and constipation).

Outcome Variables of Interest: Low birth weight and infant and fetal mortality.

Contact Person(s): Chief, Followback Survey Branch
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Selected Key Publications:

Sanderson M, Placek P, Keppel K. The 1988 National Maternal and Infant Health Survey: Design, content, and data availability. Birth 18(1):26–32. 1991.

Moore RM, Jeng LL, Kaczmarek RG, Placek PJ. Use of diagnostic ultrasound, X-ray examinations, and electronic fetal monitoring in perinatal medicine. J Perinatol 10:361–65. 1991.

Moore RM, Jeng LL, Kaczmarek RG, Placek PJ. Use of diagnostic imaging procedures and fetal monitoring devices in the care of pregnant women. Public Health Rep 105:471–81. 1990.

Longitudinal Followup to the National Maternal and Infant Health Survey

Sponsoring Agency: National Center for Health Statistics, Centers for Disease Control

Purpose: This survey is a followup of 9,400 mothers of the 1988 live birth cohort at 3 years of age to examine child health status and development, health services utilization, child care and safety, utilization of Federal support programs, and maternal health behaviors. It is also a followup of 1,000 women who experienced infant deaths and 1,000 women who had stillbirths in 1988 to study plans for adoption and foster care and reproductive health.

Conducted: 1991–92

Target Population: Participants of the 1988 NMIHS.

Sample Size and Response Rate(s):

	Sample size	*Response rate**
Mothers of 3-year olds	9,400	87%
Women who had infant deaths	1,000	82%
Women who had late fetal deaths in 1988	1,000	82%

* Provisional response rates

Design and Methods: National probability sample of 9,400 children who were live-born and studied in the 1988 NMIHS. Data are collected by telephone and personal interviews from mothers. Additional data are collected from pediatricians and hospitals.

Descriptive Variables: Use of vitamin and mineral supplements, WIC participation, serial height and weight (from birth to 3 years at every pediatric visit), head circumference, hemoglobin, hematocrit, and maternal determinants of child variables.

Outcome Variables of Interest: Child development, morbidity, and development of low-birth weight infants.

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Selected Key Publications:

Sanderson M, Placek P, Keppel K. The 1988 National Maternal and Infant Health Survey: Design, content, and data availability. Birth 18(1):26–32. 1991.

Pregnancy Nutrition Surveillance System (PNSS)

Sponsoring Agency: National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control

Purpose: The system monitors nutrition-related problems and behavioral risk factors associated with low birth weight among high-risk prenatal populations. The PNSS is used to identify preventable nutrition-related problems and behavioral risk factors in order to target interventions.

Conducted: Continuously since 1978 (The system was enhanced in 1989 to include additional data items.)

Target Population: Low-income, high-risk pregnant women.

Sample Size and Response Rate(s): The coverage of PNSS reflects the number of pregnant women who participate in the programs contributing to the surveillance system. Over 300,000 records from 20 States including the District of Columbia and American Samoa were submitted for analysis during Fiscal Year 1990.

Design and Methods: Simple key indicators of pregnancy nutritional status and behavioral risk factors are monitored using clinic data from participating States. The data are collected on a convenient population of low income, high-risk pregnant women who participate in publicly-funded prenatal nutrition and food assistance programs.

Descriptive Variables: State, county, clinic, reason for attending clinic, individual identification, age, ethnic origin, marital status, migrant status, and education.

Outcome Variables of Interest: Simple key indicators of pregnancy nutritional status, behavioral risk factors, and birth outcome are measured using readily available clinical data. Pre-gravid weight status, anemia (hemoglobin, hematocrit), pregnancy behavioral risk factors (smoking and drinking), birth weight, and other indicators are monitored. Breast-feeding and formula-feeding data are also collected. Additional data items added in 1989 include expanded smoking and alcohol consumption questions and information on weight gain and feeding behaviors.

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Selected Key Publications:

Centers for Disease Control. Anemia during pregnancy in low-income women. Morbid Mortal Wkly Rep 39(5):73–6. 1990.

Larsen CE, Serdula MK, Sullivan, KM. Macrosomia: Influence of maternal overweight among a low income population. Am J Obstet Gynecol 162(2):490–4. 1990.

Centers for Disease Control. Racial/ethnic differences in smoking, other risk factors and low birth-weight among low-income pregnant women, 1978–88. Morbid Mortal Wkly Rep 39(55–3):13–21. 1990.

Pediatric Nutrition Surveillance System (PedNSS)

Sponsoring Agency: National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control

Purpose: The purpose of PedNSS is to monitor simple key indicators of nutritional status among low-income, high-risk infants and children who participate in publicly funded health, nutrition, and food assistance programs.

Conducted: Continuously since 1973

Target Population: Low-income, high-risk children, birth–17 years of age, with emphasis on birth–5 years of age.

Sample Size and Response Rate(s): The coverage of PedNSS reflects the number of clinic visits in participating programs. Over 5 million records from 40 States plus the District of Columbia, Puerto Rico, Navajo Nation and the Intertribal Council of Arizona were submitted for analysis during Fiscal Year 1990. Data can be analyzed at individual, clinic, county, State, and national levels.

Design and Methods: Simple, key indicators of nutritional status are continuously monitored in States using clinic data from a convenience population of low-income children who participate in publicly-funded health, nutrition, and food assistance programs. Data are collected through client interview and records.

Descriptive Variables: State, county, clinic, reason for attending clinic, individual identification, age, sex, and ethnic origin.

Outcome Variables of Interest: Anthropometry (height and weight), birth weight, and hematology (hemoglobin, hematocrit).

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Selected Key Publications:

Serdula MK, Cairns KA, Williamson DF, Brown, JE. Correlates of breast-feeding in a low income population of whites, blacks, and Southeast Asians. J Am Diet Assoc 91:41–5. 1991.

Yip R, Fleshood L, Spillman TC, et al. Using linked program and birth records to evaluate coverage and targeting in Tennessee's WIC program. Public Health Rep 106(2):176–81. 1991.

Yip R, Scanlon K, Trowbridge F. Improving growth status of Asian refugee children: CDC Pediatric Nutrition Surveillance System 1980–89. Pediatrics (In review).

Freedman DS, Lee S, Byers T, et al. Serum cholesterol levels in a multiracial sample of 7439 preschool children from Arizona. Prev Med (In press).

Yip R, Binkin NJ, Trowbridge FL. Altitude and childhood growth. J Pediatr 113(3):486–89. 1988.

Yip R, Binkin NJ, Fleshood L, Trowbridge FL. Declining prevalence of anemia among low income children in the United States. JAMA 258(12):1619–23. 1987.

Gayle HD, Dibley MJ, Marks JS, Trowbridge FL. Malnutrition in first two years of life. Am J Dis Child 141:531–34. 1987.

Peck RE, Marks JS, Dibley MJ, et al. Birth weight and subsequent growth among Navajo children. Public Health Rep 102(5):500–7. 1987.

Peck RE, Marks JS, Dibley MJ, et al. Nutritional status of minority children, United States 1986. Morbid Mortal Wkly Rep 36(23):366–9. 1987.

Surveillance of Severe Pediatric Undernutrition (SSPUN)

Sponsoring Agency: National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control

Purpose: SSPUN was a State-based, pilot effort to obtain population-based estimates of preschool children who have severe pediatric undernutrition, including the etiologies and risk factors for the problem.

Conducted: 1989–90

Target Population: Low-income, high-risk children 6 months–5 years of age.

Sample Size and Response Rate(s): Four States were awarded cooperative agreement funds to determine the feasibility of monitoring the prevalence, etiologies and risk factors for pediatric undernutrition. Efforts were made to obtain population-based estimates through a variety of statistical methods. Each State sample was determined according to the population covered.

Design and Methods: Children were identified through multiple reporting sources including hospitals, public health clinics, day care facilities, and schools. Anthropometric measurements were taken to determine SPUN, and a survey was administered to determine etiologies and additional risk factors.

Descriptive Variables: State, catchment area, facility, individual identification, age, sex, and ethnic origin.

Outcome Variables of Interest: Anthropometry (height and weight), birth weight, hematology (hemoglobin and hematocrit), recent or chronic illness history, food program participation, and various other potential risks.

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Selected Key Publications: None to date.

Survey of Heights and Weights of American Indian School Children

Sponsoring Agency: Indian Health Service, and Centers for Disease Control, U.S. Department of Health and Human Services

Purpose: The purpose of this survey was to collect baseline data for the height and body weight status of American Indian school children.

Conducted: Fall 1990

Target Population: American Indian school children ages 5 to 18 years.

Sample Size and Response Rate(s): Approximately 9,500 students. Response rate not applicable.

Design and Methods: All students in selected grades in a sample of schools with a high percentage of American Indian students were weighed and measured. All height, weight, and body mass data from the American Indian students were compared to the same age and sex groups from the NHANES II and Hispanic HANES (Mexican American) data.

Descriptive Variables: American Indian children ages 5 to 18 years, gender, and education.

Outcome Variables of Interest: Height, weight, and body mass index.

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Selected Key Publications: Final report expected in mid-1992.

Navajo Health and Nutrition Survey

Sponsoring Agency: Indian Health Service, Navajo Area Office

Purpose: The purpose of this survey is to collect population-based health status data for use in public health programming by the IHS and by the Navajo Nation. Most data currently maintained by the IHS are user-based, and therefore, do not provide prevalence data for the major chronic diseases. The information collected includes data that are not routinely available from IHS medical records.

Conducted: 1991–92

Target Population: Persons ages 12 years and over residing on or near the Navajo Indian Reservation in Arizona, New Mexico, and Colorado.

Sample Size and Response Rate(s): Sample size expected to be 1,000–1,700; provisional response rate 87 percent.

Design and Methods: The sample was randomized according to Census enumeration districts. Districts were randomly selected and divided into segments based on population counts. Segments of 10 homes each were randomly selected. All members meeting the age criteria within each selected home were asked to participate.

Data collection included anthropometry (height and weight; triceps, subscapular, and suprailiac skinfolds; hip and waist girth, wrist and elbow breadth), hematology (fasting, 1- and 2- hour oral glucose tolerance test, cholesterol, HDL, standard lab scan, and complete blood count); health risk behavior questionnaire; food frequency (adapted from NHANES III); 24-hour dietary recall; and three blood pressure measurements.

Descriptive Variables: Age, gender, ethnicity, income, food assistance, household description, and availability of utilities.

Outcome Variables of Interest: Diabetes prevalence, obesity prevalence, hip and waist measurement ratio, frequency of native foods included in diet, average calorie intake, various nutrient intakes, breast-feeding information, pregnancy history, and interrelationships of various factors.

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Selected Key Publications: None to date. (Publications expected in October 1992)

Food Security and Nutrition Monitoring Project (IMPACT)

Sponsoring Agency: U.S. Agency for International Development

Purpose: The project goal is to strengthen food security and nutrition monitoring systems in developing countries through technical assistance and training and through collaborative inquiries to improve the availability, relevance and quality of food, and nutrition information.

Conducted: 1990–95

Target Population: Policymakers and technical officers involved in the areas of food security, nutrition, agriculture, and other nutrition-related sectors in host country institutions as well as in U.S. A.I.D. field missions.

Sample Size and Response Rate(s): NA

Design and Methods: Under the Food Security and Nutrition Monitoring Project, as part of the collaborative inquiries (operations research), field surveys are being carried out by the International Food Policy Research Institute (IFPRI) in the areas of alternative indicators of food and nutrition security; and agriculture and nutrition linkages. Country sites include Kenya, Ghana, Guatemala, and India. Sample sizes, variables, and survey design vary by discrete activity.

Descriptive Variables: NA

Outcome Variables of Interest: NA

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Selected Key Publications:

Identification and evaluation of alternative indicators of food and nutrition security: Some conceptual issues and an analysis of extant data. IFPRI. September 1991.

Series of African Nutrition Reports produced by the Demographic Health Surveys, IRD/MACRO International (forthcoming).

II. Food and Nutrient Consumption

Nationwide Food Consumption Survey (NFCS)

- **All income and low-income households**
- **Household food use**
- **Individual food intakes**

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The NFCS describes food consumption behavior and assesses the nutritional content of diets for their implications for policies relating to food production and marketing, food safety, food assistance, and nutrition education.

Conducted: Every 10 years since 1936 (In 1987–88 data collected from April 1987–August 1988)

Target Population: Households in the 48 conterminous States and individuals residing in those households. NFCS included two samples: a basic sample of all households and a low-income sample of households with incomes at or below 130 percent of the poverty thresholds—a level consistent with eligibility for the Food Stamp Program.

Sample Size and Response Rate(s):

For 1987–88:

	Household		*Individual (1-day)*	
	Number	*Response rate*	*Number*	*Response rate*
Basic sample.	4,589	38%	10,172	31%
Low-income sample . .	2,584	42%	*	*

* Not available

(The household response rate is the number of participating households divided by the estimated number of occupied eligible housing units. The individual response rate is the household response rate multiplied by the percentage of individuals completing a 1-day dietary recall.)

Design and Methods: The NFCS is a multistage, stratified area probability sample. In the household component, the household food manager was asked to recall with the aid of a food list, the kinds and amounts of food that disappeared from home food supplies during the previous 7 days. Such food includes food that was prepared and eaten and food that was discarded, as well as leftovers fed to pets. The food manager was also asked to report the price of each purchased food. In the individual component, each household member was asked to recall the kinds and amounts of foods eaten at home and away during the previous day and to keep a record of the foods eaten on the day of the interview and the following day (1-day recall/2-day record).

Nutrients available from food used by the households and nutrients ingested by individual household members are derived using food composition data files developed from the HNIS National Nutrient Data Bank (see page 140).

Descriptive Variables:

Household—Income, size, education of male and female heads, cash assets, region, urbanization, tenancy, and participation in the Food Stamp and WIC programs.

Individuals—Sex, age, race, ethnicity (Hispanic or not), employment of individuals ages 15 years and over, height, weight, and pregnancy/lactation/nursing status.

Outcome Variables of Interest:

Household—Quantity (pounds), monetary value (dollars), and nutritive value of food used.

Individual—Food intakes in grams from 64 food groups and subgroups; intakes of 28 nutrients and food components.

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Selected Key Publications:

Guenther PM, Perloff BP. Effects of procedural differences between 1977 and 1987 in the Nationwide Food Consumption Survey on estimates of food and nutrient intakes: Results of the USDA Bridging Study. U.S. Department of Agriculture, NFCS rep no 87–M–1. 1990.

U.S. Department of Agriculture, Human Nutrition Information Service. Evaluation of nonresponse in the Nationwide Food Consumption Survey 1987–88. NFCS rep no 87–M–2. (In preparation).

Popkin BM, Haines PS, Patterson RE. Dietary changes in older Americans, 1977–87. Am J Clin Nutr 55(4):823–30. 1992.

U.S. Department of Agriculture, Human Nutrition Information Service. Food consumption and dietary levels of households in the United States, 1987–88. NFCS rep no 87–H–1. (In preparation).

U.S. Department of Agriculture, Human Nutrition Information Service. Food and nutrient intakes by individuals in the United States, 1 day, 1987–88. NFCS rep no 87–I–1. (In preparation).

Peterkin BB, Rizek RL, Tippett KS. Nationwide Food Consumption Survey, 1987. Nutr Today 23(1):18–24. Jan–Feb 1988.

Continuing Survey of Food Intakes by Individuals (CSFII), 1985–86

- **All income and low income households**
- **Women ages 19 to 50 years and their children ages 1 to 5 years**
- **Men ages 19 to 50 years**

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The Continuing Survey of Food Intakes by Individuals provides timely information on U.S. diets and diets of population groups of concern and indicates changes in diets from previous surveys. In addition, it describes food consumption behavior and assesses the nutritional content of diets for their implications for policies relating to food production and marketing, food safety, food assistance, and nutrition education.

Conducted: 1985 and 1986 (Data collection for each year began in April and continued through March of the following year.)

Target Population: Persons of selected sex and age residing in the 48 conterminous States in households with incomes at any level (basic survey) and with incomes at or below 130 percent of the poverty thresholds (low-income survey); in 1985, women 19 to 50 years of age and their children ages 1 to 5 years, and men 19 to 50 years of age; and in 1986, women 19 to 50 years of age and their children ages 1 to 5 years.

Sample Size and Response Rate(s):

	Household		*Women and children (1-day)*	
Year	*Number*	*Response rate*	*Number*	*Response rate*
1985–				
Basic sample	1,341	59%	2,051	57%
Low-income sample	1,916	69%	3,434	65%
1986–				
Basic sample	1,351	69%	2,057	66%
Low-income sample	1,223	79%	2,145	75%

(The household response rate is the number of participating households divided by the estimated number of occupied eligible housing units. The individual response rate is the household response rate multiplied by the percentage of individuals completing a 1-day recall.)

Design and Methods: The CSFII was a multistage, stratified area probability sample. The survey included the collection of six 1-day recalls at about 2-month intervals during a 1-year period. The first 1-day recall was collected with an in-person interview; subsequent interviews were done by telephone when possible. Each respondent was asked to recall the kinds and amounts of foods eaten at home and away during the previous day. Nutrients ingested by individuals were derived using food composition data files developed from the HNIS National Nutrient Data Bank (see page 140).

Descriptive Variables:

Household—Income, size, education and employment of the male head, cash assets, region, urbanization, tenancy, and participation in Food Stamp and WIC programs.

Individual—Sex, age, race, education and employment of women ages 19 to 50 years, pregnancy/lactation/nursing status, height, weight, and ethnicity (Hispanic or non-Hispanic).

Outcome Variables of Interest: Food intakes in grams from 60 food groups and subgroups; intakes of 28 nutrients and food components; names and times of eating occasions, nutrient content of each food eaten, and sources of food obtained and eaten away from home.

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Selected Key Publications:

Haines PS, Guilkey DK, and Popkin BM. Modeling food consumption decision as a two-step process. Am J Agri Econ 7(3):543:522. 1988.

Peterkin BB. Eating patterns—What's to be done about them. In: Food and Nutrition Board, National Academy of Sciences, ed. What is America Eating? Washington, D.C.: National Academy Press: 158–61. 1986.

Rizek RL. First result from USDA's Continuing Survey of Food Intakes by Individuals. J Am Diet Assoc 86(6):788. 1986.

U.S. Department of Agriculture. Nationwide Food Consumption Survey, Continuing Survey of Food Intakes by Individuals, Women 19–50 Years and Their Children 1–5 Years, 1 Day, 1985. NFCS, CSFII rep no 85–1. 1985.

U.S. Department of Agriculture. Nationwide Food Consumption Survey, Continuing Survey of Food Intakes by Individuals, Low-Income Women 19–50 Years and Their Children 1–5 Years, 4 Days, 1985. NFCS, CSFII rep no 85–5. 1988.

Continuing Survey of Food Intakes by Individuals (CSFII)1989–91

- **All income and low income households**
- **Individuals of all ages**

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The CSFII provides continuing information on U.S. diets and diets of population groups of concern and indicates changes in diets from previous surveys. In addition, it describes food consumption behavior and assesses the nutritional content of diets for their implications for policies relating to food production and marketing, food safety, food assistance, and nutrition education.

Conducted: 1989, 1990, and 1991; planned for 1993–95 (Data collection for each year began in April and continued through March of the following year.)

Target Population: Individuals in households in the 48 conterminous States. The survey included two separate samples: households with incomes at any level (basic survey) and households with incomes at or below 130 percent of the poverty thresholds (low-income survey). The 1993–95 survey will include individuals from all 50 States, and low-income population and some age groups may be oversampled.

Sample Size and Response Rate(s):

	Household		*Individual (1-day)*	
*Year**	*Number***	*Response rate***	*Number***	*Response rate***
1989:				
Basic sample	1,490	63%	3,502	56%
Low-income sample	725	73%	1,648	66%
1990:				
Basic sample	1,483	63%	3,216	54%
Low-income sample	762	69%	1,746	60%

**Preliminary
*1991 response rates not available

(The household response rate is the number of participating households divided by the estimated number of occupied eligible housing units. The individual response rate is the household response rate multiplied by the percentage of individuals completing a 1-day recall.)

Design and Methods: The CSFII was a multistage, stratified area probability sample. The survey included the collection of 3 days of intake data. Each respondent was asked to recall the kinds and amounts of foods eaten at home and away from home during the previous day. Respondents were also asked to keep a record of foods eaten on the day of the interview and on the following day (1-day recall and 2-day record). Nutrients ingested by individuals were derived using food composition data files developed from HNIS's National Nutrient Data Bank (see page 140).

Descriptive Variables:

Household—Income, size, cash assets, region, urbanization, tenancy, and participation in Food Stamp and WIC programs.

Individual—Sex, age, race, education and employment of persons 15 years of age and over, pregnancy/lactation/nursing status, height, weight, and ethnicity (Hispanic or non-Hispanic).

Outcome Variables of Interest: Food intakes in grams from 64 food groups and subgroups; intakes of 28 nutrients and food components; names and times of eating occasions, nutrient content of each food eaten, and sources of food obtained and eaten away from home.

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Selected Key Publications: None to date.

Survey of Fish Purchases by Socio-economic Characteristics

Sponsoring Agency: National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce

Purpose: A 1-year panel survey was conducted to obtain the patterns of fish product purchases according to socio-economic characteristics of households. The survey was needed to determine how the various characteristics of the population cause shifts in demand and improve predictive capabilities.

Conducted: 1969–70

Target Population: The participants represented the U.S. population by geographic region and varied by income, family size, occupation, age, race, and religion.

Sample Size and Response Rate(s):

	Households	*Individuals*	*Response rate*
1969–70	1,586	4,864	NA

Design and Methods: A panel of households were surveyed by completing a diary of fish purchases.

Descriptive Variables: Geographic region, income, family size, occupation, race, and religion.

Outcome Variables of Interest: Purchases are classified by month and quarter; number of meals eaten away from home for each household class; summaries by fish products, measurement of consumption, and socio-economic characteristics.

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Selected Key Publications:

Nash DA. A survey of fish purchases by socio-economic characteristics. Data Report 62. United States Department of Commerce. 1971.

Miller MM, Nash DA. Regional and other related aspects of shellfish consumption—Some preliminary findings from the 1969 Consumer Panel Survey. Circular 361. United States Department of Commerce. 1971.

National Seafood Consumption Survey

Sponsoring Agency: National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce

Purpose: This survey provided national data on seafood purchases, consumption of fish and shellfish in the United States and consumer attitudes. In addition, the 1973–74 survey provided data on the seafood consumption patterns among young children and pregnant women.

Conducted: 1973–74 and 1980–81 (1-year)

Target Population: The 1973–74 panel was selected to be representative of families, young children, and pregnant women in the United States. The 1980–81 panel was selected to be representative of households and individuals in the United States.

Sample Size and Response Rate(s):

	Households	*Individuals*	*Response rate*
1973–74	7,000	24,652	NA
1980–81	7,500	12,000	NA

Design and Methods:

1973–74—The panel of 7,000 households was balanced nationally with regard to major demographic characteristics. Panelists recorded their seafood consumption for each family member in a diary for a 1-month period. One-twelfth of the panelists recorded each month for 1 year.

1980–81—The survey used a nationwide panel of 7,500 households that completed diaries on the amount of seafood purchased for home use, and the amount consumed at home and away from home. The panel also provided consumer attitudinal data. The same households reported the full 12-month period. Purchase data were collected on a continuing basis during the year. Household consumption data were collected 1 month per quarter. The attitudinal part of the survey was conducted at the end of the survey period.

Descriptive Variables:

1973–74—Age, sex, race, ethnicity, education, income, household size, occupation, religion, pregnancy status, and dietary status.

1980–81—Age, sex, race, education, income, family size, occupation, geographic location, pregnancy status, and dietary status.

Outcome Variables of Interest:

1973–74—Information was provided on species eaten, total amount available at the meal, identity of family members eating seafood, and the number of servings consumed by each family member. It also provided rankings of seafood species by percent of households and by use by individuals. The number of women reporting to be pregnant was judged to be too small for any type of analysis.

1980–81—The purchase data are presented according to type of seafood product (fresh, frozen, fillets, canned, etc.) by species, region, and a variety of demographic variables. The attitudinal information is presented by type of seafood product, region, and demographic variable. The survey includes about 32 major seafood product categories and 500 detailed seafood items, as well as information on the purchase date and type of cooking utensils. Although the consumption data differed widely from other available data, the relative ranking of seafood products and the distribution patterns of each seafood product were similar to other studies. The collection of intake data for households and individuals were incomplete.

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Selected Key Publications: None to date.

Total Diet Study (TDS)

Sponsoring Agency: Center for Food Safety and Applied Nutrition, Food and Drug Administration

Purpose: The Total Diet Study assesses the levels of nutritional elements, elemental contaminants, industrial chemicals, pesticide residues, and radionuclides in the U.S. food supply and in the representative diets of specific age-sex groups. The Total Diet Study also monitors trends in the levels and consumption of these substances over time. The study is important for continuous monitoring of the nutritional quality and safety of the U.S. food supply and representative U.S. diets.

Conducted: Annually since 1961

Target Population: Eight age-sex groups were included in the Total Diet Studies from 1982 to 1991. The 1991 revision of the Total Diet Study will include 14 age-sex groups (6–11 month old infants; 2, 6, and 10 year old children; 14–16 year old females and males; 25–30 year old females and males; 40–45 year old females and males; 60–65 year old females and males; and females and males 70 years of age and over).

Sample Size and Response Rate(s): NA (No individuals are surveyed; no survey instruments are used.)

Design and Methods: Core foods of the U.S. food supply are purchased from retail markets and restaurants, prepared for consumption, and analyzed for nutrients and contaminants four times each year. The diets used between 1982 to 1991 included 234 foods; the 1991 revision includes 265 foods. Representative diets of the selected age-sex groups are developed based on national food consumption data. The food composition data are merged with the food consumption data to estimate daily intake of the nutrients and contaminants. The results from the four collections each year are averaged. The yearly results are compared with previous data to determine trends over time.

Descriptive Variables: Population descriptors include age and gender as indicated under "Target Population".

Outcome Variables of Interest: No data for outcome variables are collected. Individual foods are analyzed for nutrients and contaminants.

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Selected Key Publications:

Pennington JAT, Gunderson EL. A history of the Food and Drug Administration's Total Diet Study, 1962 to 1987. J Assoc Off Anal Chem 70:772–82. 1987.

Pennington JAT, Young BE. Total Diet Study nutritional elements, 1982–89. J Am Diet Assoc 91(2):179–83. 1991.

Pennington JAT, Young BE. Sodium, potassium, calcium, phosphorous, and magnesium in foods from the U.S. Total Diet Study. J Food Comp Anal 3:145–65. 1990.

Pennington JAT, Young BE. Iron, zinc, copper, manganese, selenium, and iodine in foods from the U.S. Total Diet Study. J Food Comp Anal 3:166–84. 1990.

Vitamin and Mineral Supplement Intake Survey

Sponsoring Agency: Food and Drug Administration

Purpose: The survey was conducted to quantitatively assess the nutrient intake of vitamin and mineral supplements in the United States and to examine the characteristics of supplement users by supplement intake patterns. The survey was used as the model for the 1986 National Health Interview Survey on Vitamin and Mineral Supplements. Data from the two surveys may be useful to establish trends in supplement usage patterns (see the 1986 National Health Interview Survey on Vitamin and Mineral Supplements on page 37).

Conducted: 1980

Target Population: Civilian, noninstitutionalized adults (ages 16 years and over) in the United States.

Sample Size and Response Rate(s):

Residential telephone sample size	*Number screened for vitamin and mineral supplement use*	*Number of vitamins and mineral supplement users interviewed*
7,986	6,409(80%)	2,991 (47%)

(The interview completion rate for vitamin and mineral supplement users was 95 percent.)

Design and Methods: Telephone interviews with a national probability, age-stratified sample.

Descriptive Variables:

Individual—Date of birth, age, sex, race, and education.

Household—Household income and Census region.

Outcome Variables of Interest: Assessment of supplement intake and behaviors among supplement users.

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Selected Key Publications:

Bender MM, Levy AS, Schucker RE, Yetley EA. Trends in the prevalence and magnitude of vitamin and mineral supplement usage and correlation with health status. Accepted by J Am Diet Assoc.

Levy AS, Schucker RE. Patterns of nutrient intake among dietary supplement users: Attitudinal and behavioral correlates. J Am Diet Assoc 87:754–60. 1987.

Stewart ML, McDonald JT, Levy AS, et al. Vitamin mineral supplement use: A telephone survey of adults in the United States. J Am Diet Assoc 85:1585–90. 1985.

Nutritional Evaluation of Military Feeding Systems and Military Populations

Sponsoring Agency: U.S. Army Research Institute of Environmental Medicine, Department of Defense

Purpose: The results of these studies are used to determine the nutritional adequacy of the diet consumed by male and female military personnel in a peacetime garrison situation and during sustained physically demanding military training exercises at all climatic extremes. Based upon the results, standardized recipes and menus, the cook's training program, and specifications for food items and combat rations purchased by the DOD are modified to improve nutritional health and maintain optimal physical and mental performance of military personnel.

Conducted: Continuously since 1917

Target Population: Primarily male and female enlisted personnel of the Army, Navy, Marine Corps, and Air Force assigned to military installations in the continental United States, Alaska, Hawaii, and overseas. Populations studied to date have included Army basic trainees at Fort Jackson, South Carolina; Noncommissioned Officer Academy trainees at Fort Riley, Kansas; enlisted personnel assigned to Fort Lewis, Washington, and Fort Devens, Massachusetts; Army units training at Pohakuloa Training Area, Hawaii; Fort Wainwright and Fort Greely, Alaska; Fort Chaffee, Arkansas; Special Forces units training in the White Mountains of Vermont; Marine units training at the Mountain Warfare Training Area, Pickle Meadows, California; cadets at the U.S. Army Military Academy, West Point, New York; Ranger trainees at Fort Benning, Georgia; and a cohort of military families (military personnel, their spouses and children) at Fort Polk, Louisiana. Future studies planned include nutritional assessment of women and ethnic minority groups within military populations.

Sample Size and Response Rate(s): The sample size has varied between 20 and 240 personnel depending on objectives of each specific study. Usually 90–99 percent of all subjects who voluntarily participate complete all aspects of data collection. The response rate is defined as the total number of potential test subjects who volunteered, divided by the number of test subjects who complete all aspects of data collection.

Design and Methods: The experimental design varies with the specific objectives of each study and with the location and activity of the military unit being studied. Total daily food and fluid intake are usually measured for 7–14 days (sometimes 4–6 weeks) using a combination of visual estimation and dietary record interview techniques. Nutrient intakes are derived from all sources of food consumed, using a specially designed data base that includes military and civilian food items. Nutrient intakes are derived using food intake and from chemical analyses of food items and rations, monitoring recipes as prepared by cooks in dining facilities, and USDA-derived foods composition data files. Military Recommended Dietary Allowances (based upon RDA's) are used as reference to assess nutritional adequacy of diets consumed. Other measures usually included are body weight and body composition changes, hydration status, blood lipid profile, and food acceptability (hedonic rating) data. Frequently, muscle strength and aerobic endurance, cognitive function, energy expenditure (doubly labeled water method), physical activity patterns (wrist accelerometer), biochemical assessment of vitamin status, and nutritional knowledge and attitude data are also measured.

Descriptive Variables:

Feeding system—Garrison dining facility, field feeding system, and type of combat ration or supplement.

Training environment—Hot-dry, hot-humid, cold and temperate climates, and mountain terrain.

Population descriptions—Gender, race, physical activity level, age; active, reserve, trainee, and special operations personnel.

Outcome Variables of Interest: Nutrient intakes, biochemical assessment of nutritional status, anthropometry, energy expenditure, metabolic balances, hedonic rating of food items, human factor measurements, and physical and mental performance.

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Selected Key Publications:

Schnakenberg DD, Carlson DE, Sawyers M, et al. Nutritional evaluation of a new combat field feeding system for the Army. In: Army Science Conference Proceedings 4:69–80. 1986.

Askew EW, Munro I, Sharp MA, et al. Nutritional status and physical and mental performance of special operations soldiers consuming the ration, lightweight or the meal, ready-to-eat military field ration during a 30-day field training exercise. USARIEM Technical rep no T/7–87. 1987.

Rose RW, Baker CJ, Wisnaskas W, et al. Dietary assessment of U.S. Army basic trainees at Fort Jackson, SC. USARIEM Technical rep no T/6–89. 1989.

Edwards JSA, Askew EW, King N, et al. An assessment of the nutritional intake and energy expenditure of unacclimatized U.S. Army soldiers living and working at high altitude. USARIEM Technical rep no T/10–91. 1991.

Rose MS, Buchbinder JC, Dugan TB, et al. Determination of nutritional intakes by a modified visual estimation method and computerized nutritional analysis for dietary assessments. USARIEM Technical rep no T/6–88. 1987.

Rose MS, Radovsky C, Benson M, et al. Computerized analysis of nutrients (CAN) system. USARIEM Technical rep no T/2–90. 1990.

Edwards JSA, Roberts DE, Edinberg J, Jones TE. The meal, ready-to-eat consumed in a cold environment. USARIEM Technical rep no T/9–90. 1990.

Jones TE, Hoyt RW, Baker CJ, et al. Voluntary consumption of a liquid carbohydrate supplement by special operations forces during a high altitude cold weather field training exercise. USARIEM Technical rep no T/20–90. 1990.

Feeding the Homeless: Does the Prepared Meals Provision Help?

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: This survey was designed to assess the effects of the Prepared Meal Provision and to gather information on the characteristics and diets of the homeless. The Prepared Meal Provision permitted the homeless to purchase prepared meals at authorized soup kitchens.

Conducted: March 1987

Target Population: Nationally representative sample of homeless adults and providers of food and shelter for the homeless in U.S. cities of 100,000 or more.

Sample Size and Response Rate(s): 1,704 homeless service users, 381 providers, and 142 homeless persons who had not used meal or shelter services.

Design and Methods: A three-stage sample design was used involving the stratified random selection of cities over 100,000, providers (distributed among soup kitchens, shelters with meals, and shelters without meals) within those cities and homeless selected from those providers. In person interviews were conducted with providers and homeless users and nonusers; meal observations were made and a 1-day food and beverage list was obtained by recall.

Descriptive Variables: Sex, race, income, education, marital status, work status, reported health problems, servings of alcohol, and perceived healthfulness of diet.

Outcome Variables of Interest: Average nutrient content of meals offered by soup kitchens and shelters, meal patterns of homeless, perceptions of food adequacy, frequency of eating, eating patterns, and variety and types of food groups consumed.

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Selected Key Publications:

U.S. Department of Agriculture, Food and Nutrition Services, Office of Analysis and Evaluation. Feeding the homeless: Does the Prepared Meal Provision Help? Report to Congress on the Prepared Meal Provision. 1988.

Cohen B, Chapman N, Burt M. Food sources and intake of homeless persons. J Nutr Educ 24:455–515. 1992.

Evaluation of the Food Distribution Program on Indian Reservations (FDPIR)

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The overall purpose of this evaluation was to collect descriptive data on recipient households and program operations. This included demographic and socio-economic characteristics of FDPIR households; descriptions of program practices; identification of dietary needs and preferences of low-income Indians; the ways in which FDPIR addresses them; and a preliminary comparison of the acceptability of FDPIR and the Food Stamp Program for Indian households.

Conducted: October 1989

Target Population: Households in each of the 30 sample programs that received FDPIR commodities during September 1989.

Sample Size and Response Rate(s):

Sample size	*Response rate*
827 households	92%

Design and Methods: Multistage, stratified sample included 30 FDPIR programs that were stratified by size and by region. Participants were selected from caseloads of the first-stage sample of programs. Data were collected by in person-interview and through focus groups.

Descriptive Variables: Age, sex, education (highest grade completed), relationship to household respondent, primary activity last month, tribe, income and assets, and housing arrangements.

Outcome Variables of Interest: Household size and composition, travel distances and means of transportation to obtain groceries and commodities, individuals reporting diagnosed nutrition-related health problems and prescribed diets, and participants' preferences for and satisfaction with commodity items in FDPIR food packages.

Adequacy of household food supply, which included food expenditures, sources of food that had not been purchased or obtained through FDPIR; perceived food needs; and adequacy of food storage and preparation facilities.

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Selected Key Publications:

U.S. Department of Agriculture, Food and Nutrition Service, Office of Analysis and Evaluation. Evaluation of the Food Distribution Program on Indian Reservations vols I and II. Final Report. 1990.

Child Nutrition Program Operations Study, Year 2

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The second year of the 3-year Child Nutrition Program Operations Study contained an on-site meal observation substudy at a limited number of schools. This substudy examined the food and nutrient content of meals in the National School Lunch Program (NSLP) and School Breakfast Program (SBP) as well as meals selected and consumed by participating students. It served as a precursor to the School Nutrition Dietary Assessment Study, a nationally representative study currently being conducted by the Food and Nutrition Service.

Conducted: Spring 1990

Target Population: Average NSLP and SBP meals offered, selected, or consumed in each of the 60 schools. This substudy is not designed to be representative of all NSLP lunches.

Sample Size and Response Rate(s):

	Number of meals observed		
	Offered	*Selected*	*Consumed*
NSLP lunches	297	16,571	3,470
SBP breakfasts	176	8,539	2,024

Design and Methods: Meal service was observed in a total of 60 schools, 3 schools within each of 20 school districts (2 elementary schools and 1 middle or secondary school) for 5 consecutive days. Direct observation produced detailed data on meals offered (meals that were made available to children on the day of observation), meals selected (actual food selections for approximately 60 children at each meal), and meals consumed (at each meal, plate waste was observed for 12 of the 60 selected children). Meal observation data were aggregated to produce daily, and then weekly measures of the nutrient content of meals for each school.

Descriptive Variables: No individual descriptors were obtained. Data are differentiated by type of school (elementary, middle, or secondary), type of meal (lunch or breakfast), and whether it was offered, selected, or consumed.

Outcome Variables of Interest: The overall nutritional adequacy of NSLP and SBP meals at each level (that is, offered, selected, and consumed) is examined in comparison with the Recommended Dietary Allowances for essential nutrients. In addition, the fat, cholesterol, and sodium content of school meals are evaluated. Finally, food-level analyses are described that provide insight into the types of food offered to students, the foods that students typically select from those available, and the foods that students tend to waste.

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Selected Key Publications:

St. Pierre RG, Fox MK, Puma M, et al. Child Nutrition Program Operations Study: Second Year Report. Cambridge, MA: Abt Associates, Inc. 1992.

School Nutrition Dietary Assessment Study (SNDA)

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The purpose of the study is to provide information on the nutrient content of USDA and non-USDA meals offered in U.S. schools, on the foods selected by students, and on the dietary intakes of students; to assess the effects of the School Nutrition Programs on students' dietary intakes and to compare the results with estimates obtained from data collected in 1980 as part of the first National Evaluation of the School Nutrition Programs.

Conducted: January–May 1992

Target Population: 325 nationally representative schools in the 48 conterminous States and the District of Columbia and children who attend those schools.

Sample Size and Response Rate(s):

Target size—3,200 children in grades 1–12

Design and Methods: A three-stage sample design will be used, involving the stratified random selection of districts, schools within the selected districts, and students within the selected schools, to produce a nationally representative sample of schools and students. The dietary methodology will be an in-person, 24-hour dietary recall for students in grades 3–12 and parent and/or child recall for students in first and second grades.

Descriptive Variables: Age, sex, grade, ethnicity, family size, whether mother works outside of home, family income, and program participation.

Outcome Variables of Interest: Nutrients by food groups, relative to RDA and Dietary Guidelines, by meals, source of meals, nutrient content of USDA meals as offered and as served, and plate waste.

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Selected Key Publications: None to date. (Final report due in winter 1992)

The National Evaluation of School Nutrition Programs (NESNP)

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The purpose of the study was to identify the determinants of participation in the School Lunch and Breakfast Programs and to determine the impact of these programs on students and their families.

Conducted: Student interview, October–December 1980 Household survey of parents, October 1980–February 1981

Target Population: Nationally representative sample of the U.S. public school age population grades 1–12.

Sample Size and Response Rate(s): Target sample of 7,585 students: Actual sample resulted in 6,556 students and their parents in 276 schools and 90 districts. Response rate of 86 percent.

Design and Methods: Nested sample (stratified 3-stage) in which school districts were selected, then schools within those districts that cover grades 1–12 were selected, and finally students within each grade were selected.

In-person interview of parents and in-person interview of students to obtain 24-hour recall of dietary intake and anthropometric measurements.

Descriptive Variables: Family income, family size, race and ethnicity, age of children, activity level of students, special diet, education, participation in food assistance programs, household head, parents self-reported height and weight, meal decision-maker, and working status of heads of household.

Outcome Variables of Interest: Participation in USDA meal programs, family food expenditures at home and away from home, student dietary intake, nutrient adequacy ratios, mean adequacy ratios and indices of nutritional quality, and student anthropometric measures: height for age, weight for age, weight for height, and triceps fatfold.

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Selected Key Publications:

Symposium on National Evaluation of the School Nutrition Programs, Am J Clin Nutr 40(suppl):363–464. 1984.

The National Evaluation of School Nutrition Programs: Review of research, vols I and II. Contract No. Santa Monica, California: System Development Corporation. 1981.

An Evaluation of the Special Supplemental Food Program for Women, Infants, and Children (An Evaluation of WIC)

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: This survey was designed to evaluate the effects of participation in the WIC program on nutrition and health during pregnancy and early childhood.

Conducted: 1983

Target Population: Pregnant women in the first two trimesters of pregnancy and their children who were participating in WIC, and WIC-eligible but nonparticipating women from the same geographical areas.

Sample Size and Response Rate(s): Initial and followup 24-hour dietary recalls were collected from 3,473 women and one 24-hour dietary recall for 2,370 of their children.

Design and Methods: A three-stage probability sample (PSU's, WIC clinics, and pregnant women within the selected clinics who met study criteria) yielded a nationally representative sample of pregnant women who were participating in WIC. A control sample of women of comparable economic status were recruited from the same areas. One child was randomly selected from all participating women's children younger than 5 years for a separate child study. (A retrospective study used extant data to relate perinatal outcome and quality of prenatal care to WIC benefits.)

An in-person initial questionnaire and examination were administered to those women who met the criteria for study eligibility and who gave informed written consent. An initial 24-hour dietary recall and one followup recall were administered to a 75 percent random subsample of those women and their randomly selected child. A stratified random sample (control women were oversampled) was selected to complete a 1-week food expenditures diary of all food costs.

Descriptive Variables: Age, sex, ethnicity, marital status, education, occupational status and current employment status of parents, family income, height, weight, arm circumference, triceps and subscapular skinfold of the women, height and weight of children, cigarette use, program participation, and breast-feeding behavior.

Outcome Variables of Interest: Total nutrient intake and intake from WIC foods, mean nutrient intake as percentage of the RDA, pregnancy outcome, and effect of WIC on family food expenditures.

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Selected Key Publications:

The National WIC Evaluation, vols I–V. Contract No 53–3198–9–87. North Carolina: Research Triangle Institute and New York: New York State Research Foundation. 1986.

The National WIC Evaluation: Evaluation of the Special Supplemental Food Program for Women, Infants and Children, Am J Clin Nutr 48(suppl):389–512. 1988.

Food Stamp Supplemental Security Income/Elderly Cash-out Demonstration Evaluation

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The purpose of this survey is to evaluate the effects on administrative costs and processes, participation and food expenditures, and nutrient intake of providing food assistance in the form of checks rather than food coupons to food stamp-eligible Supplemental Security Income (SSI) recipients age 65 years and over.

Conducted: June–October 1981

Target Population: Households whose members were all 65 years of age or over and/or participated in SSI in six sites.

Sample Size and Response Rate(s): Total sample included 13,218 individuals eligible for the eligibility or participation interview. The 24-hour dietary recall interview was completed for 82 percent of the randomly selected respondents who had completed the eligibility or participation interview and who were eligible for food stamp benefits (total recalls = 2,203: 1,736 by phone and 467 in person).

Design and Methods: Three demonstration and three comparison sites were selected for a mixed-mode telephone and in-person survey. A 24-hour recall food intake survey was attempted with a member of each food stamp-eligible household, participants and nonparticipants.

Descriptive Variables: Age, sex, race (black, white, and other), education of head of household, number of persons in household, monthly income, and food stamp benefit amount.

Outcome Variables of Interest: Usual monthly food expenditures, perceived effects of food stamp benefits on food buying (quality and amount), differences in nutrient intake by comparison sites (cash compared with coupons), and by participation.

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Selected Key Publications:

Final report Food Stamp SSI/Elderly Cash-Out Demonstration Evaluation, vols I–III. Princeton, New Jersey: Mathematica Policy Research, Inc. 1982.

Butler JS, Ohls J, Posner B. The effect of the Food Stamp Program on the nutrient intake of the eligible elderly. J Hum Resour 20:405. 1985.

Adult Day Care Program Study

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The purpose of this survey is to determine the characteristics of adults and adult day care centers participating and not participating in the adult day care component of the Child and Adult Care Food Program (CACFP), the dietary intakes of clients attending centers participating in the CACFP, and State agency regulations and procedures concerning center participation in the CACFP.

Conducted: Planned for 1992

Target Population: Adult day care centers and adults participating and not participating in the CACFP.

Sample Size and Response Rate(s):

	Sample	*Expected response rate*
Adult day care centers (equally divided-participating, nonparticipating in CACFP)	542	80%
Participating adults	752	65%

Design and Methods: The sample of adults will be a 3-stage sample including 40 Primarily Sampling Units (PSUs), 85 CACFP's, and 752 adults. Adults will be sampled to describe the dietary intake of CACFP participants in terms of their nutrient intake from specific CACFP reimbursable meals consumed, all CACFP meals consumed during the day, and all meals consumed. Descriptive data on adult day care centers will be collected by a mail survey.

Descriptive Variables: Wide range of demographic information and meal consumption patterns of adults participating in CACFP; descriptive information on participating and nonparticipating adult day care centers (for example, size, population served, and structure).

Outcome Variables of Interest: Organizational and operating characteristics of adult day care centers participating and not participating in the CACFP. Nutrient intake of CACFP participants and the contribution of the CACFP to their total daily nutrient intake. Potential future growth of adult portion of CACFP.

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Selected Key Publications: None to date.

Consumer Expenditure Survey

Sponsoring Agency: U.S. Bureau of Labor Statistics

Purpose: The objective of this survey is threefold: (1) to provide information on consumer expenditures to support the Consumer Price Index revisions of the market basket; (2) to provide a flexible set of data serving a wide variety of social and economic analyses; and (3) to provide a continuous body of detailed expenditure and income data for research purposes.

Conducted: Continuously since 1980

Target Population: Civilian, noninstitutionalized population and a portion of the institutionalized population in the United States.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
1990:		
Interview survey	6,000	86%
Diary survey	6,000	86%

Design and Methods: Ongoing household survey consisting of two parts, each with a different data collection technique and sample. In the Interview Survey, each consumer unit in the sample is interviewed every 3 months over 5 calendar quarters. The Diary Survey is completed at home by the respondent family for two consecutive 1-week periods.

Descriptive Variables: Published demographic variables include quintiles of income before taxes, income before taxes, age, size of consumer unit, region, composition of consumer unit, number of earners in consumer unit, housing tenure, and race. Other demographic variables are collected.

Outcome Variables of Interest: No direct nutrition-related indicators collected. Average annual food expenditures collected at a detailed item level in the Diary Survey. Food stamp participation collected in the Interview Survey.

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Selected Key Publications:

U.S. Bureau of Labor Statistics. Consumer Expenditure Survey, 1990. News Release USDL 91–607. 1991.

U.S. Bureau of Labor Statistics. Consumer Expenditure Survey, 1988–89. BLS Bulletin 2383. 1991.

Survey of Income and Program Participation (SIPP)

Sponsoring Agency: U.S. Bureau of the Census

Purpose: The U.S Bureau of the Census collects source and amount of income, labor force information, program participation and eligibility data, and general demographic characteristics to measure the effectiveness of existing Federal, State, and local programs. Data are used to estimate future costs and coverage for government programs such as Food Stamps and to provide improved statistics on the distribution of income in the Nation.

Conducted: Continuously since 1983

Target Population: Civilian, noninstitutionalized population of the United States.

Sample Size and Response Rate(s): A continuous series of panels with sample size ranging from 11,600 to 20,000 interviewed households. Standard panel duration is 2½ years. Sample loss is around 7 percent at the first interview and increases to about 21 percent by the last interview.

Design and Methods: Longitudinal household interview survey. Multistage, stratified, and probability clustered sample of households throughout the United States.

Descriptive Variables: Age, race, sex, marital status, education, veteran status, ethnic origin, and housing tenure status.

Outcome Variables of Interest: The content of the SIPP is developed around a "core" labor force, program participation, and income questions designed to measure the economic situation of persons in the United States. These core questions are repeated at every 4 months for 2½ years. The survey also has "topical modules" containing questions on a variety of topics not covered in the core section. Previous health-related modules have included health status and utilization of health care services, long-term care, and disability status of children. Variables of interest from the topical modules include estimates of: the proportion of children with physical, mental, or emotional disabilities; the number of persons in the population who have a work disability; and the number of persons who need personal assistance to perform the activities of daily living. Topical modules are not repeated at every interview.

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Selected Key Publications:

Frankel DT. Summary of the content of the 1984 Panel of the Survey of Income and Program Participating. SIPP Working Paper Series No. 8504. Washington: U.S. Bureau of the Census. 1985.

Herriot RA, Kasprzyk D, eds. Some aspects of SIPP. SIPP Working Paper Series No. 8601. Washington: U.S. Bureau of the Census. 1986.

Kaspryzk D. The Survey of Income and Program Participation: An overview and discussion of research issues. SIPP Working Paper Series No. 8830. Washington: U.S. Bureau of the Census. 1988.

King K, Petroni R, Singh R. Quality profile for the Survey of Income and Program Participation. SIPP Working Paper Series No. 8708. Washington: U.S. Bureau of the Census. 1987.

Nelson D, McMillen DB, Kasprzyk D. An overview of the Survey of Income and Program Participation, Update 2. SIPP Working Paper Series No. 8401. Washington: U.S. Bureau of the Census. 1984.

Short KS. The Survey of Income and Program Participation: Uses and applications. SIPP Working Paper Series No. 8501. Washington: U.S. Bureau of the Census. 1985.

Survey of Income and Program Participation User's Guide. Washington: U.S. Bureau of the Census. 1991.

III. Knowledge, Attitudes, and Behavior Assessments

Behavioral Risk Factor Surveillance System (BRFSS)

Sponsoring Agency: Office of Surveillance and Analysis, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control

Purpose: The State-based BRFSS assesses the prevalence of personal health practices that are related to the leading causes of death. BRFSS has been used by State health departments to plan, initiate, guide health promotion and disease prevention programs, and to monitor their progress over time.

Conducted: Continuously since 1984 (Optional modules for the assessment of dietary fat and fruit and vegetable consumption were added to the system in 1990.)

Target Population: Adults 18 years and over residing in households with telephones in participating States.

Sample Size and Response Rate(s):

Year	*Average State sample size*	*Total number of States*	*Response rate*
1988	1,537	37	84%
1989	1,625	40	82%
1990	1,772	45	82%

Design and Methods: Multistage, cluster telephone survey based on Waksberg's random digit-dialing method.

Descriptive Variables: State, age, sex, race and ethnic origin, education, employment status, and income.

Outcome Variables of Interest: Height, weight, smoking, alcohol use, weight control practices, diabetes, preventive health problems, mammography, pregnancy, cholesterol screening practices, awareness, treatment, and modified food frequencies for dietary fat, fruit, and vegetable consumption.

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Selected Key Publications:

Serdula M, Williamson DF, Kendrick JS, et al. Trends in alcohol consumption by pregnant women. JAMA 265(7):876–9. 1991.

Smith PF, Remington PL, Williamson DF, Anda RF. A comparison of alcohol sales data with survey data on self-reported alcohol use in 21 States. Am J Public Health 80(3):309–12. 1990.

Centers for Disease Control. Weight-loss regimens among overweight adults—Behavioral Risk Factor Surveillance System, 1987. Morbid Mortal Wkly Rep 38(30):519–28. 1989.

Smith PF, Remington PL, et al. The epidemiology of drinking and driving: Results from the Behavioral Risk Factor Surveillance System, 1986. Health Educ Q 16(3):345–58. 1989.

Williamson DF, Serdula MK, Kendrick JS, Binkin NJ. Comparing the prevalence of smoking in pregnant and nonpregnant women, 1985–86. JAMA 261(1):70–4. 1989.

Bradstock K, Forman MR, Binkin NJ, et al. Alcohol use and health behavior lifestyles among U.S. women: The Behavioral Risk Factor Surveys. Addict Behav 13(1):61–71. 1988.

Youth Risk Behavior Survey (YRBS)

Sponsoring Agency: National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control

Purpose: The State-based behavioral risk factor surveillance system periodically measures the prevalence of priority health-risk behaviors among youth through comparable national, State, and local surveys.

Conducted: Initiated in 1990. (Will be conducted periodically to reassess youth behavior change.)

Target Population: Youths attending school in grades 9–12 in the 50 States, District of Columbia, Puerto Rico, and the Virgin Islands.

Sample Size and Response Rate: In 1990, a representative sample of 11,631 students in grades 9–12 were included in YRBS.

Design and Methods: Three-stage sample design. Self-administered questionnaires.

Descriptive Variables: State, age, sex, race, and ethnic origin.

Outcome Variables of Interest: Smoking, alcohol use, weight control practices, exercise, and minimal eating practices information.

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Selected Key Publications:

Centers for Disease Control. Participation of high school students in school physical education—United States, 1990. Morbid Mortal Wkly Rep 40(35):607–15. 1991.

Centers for Disease Control. Attempted suicide among high school students—United States, 1990. Morbid Mortal Wkly Rep 40(37):633–5. 1991.

National Adolescent Student Health Survey (NASHS)

Sponsoring Agency: Office of Disease Prevention and Health Promotion, Public Health Service; National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control; National Institute on Drug Abuse, Alcohol, Drug Abuse, and Mental Health Administration; American School Health Association; Association for the Advancement of Health Education; and Society for Public Health Education, Inc.

Purpose: This survey is the first national survey since the 1960's (the School Health Education Study) to assess the extent to which adolescent students in the United States may be at risk for several important health problems and their perceptions of these risks. The survey covers the following health areas: injury prevention; suicide; AIDS; sexually transmitted diseases; violence; tobacco, drug, and alcohol use; nutrition; and consumer skills.

Conducted: 1987

Target Population: Two grade levels, eighth and tenth, were chosen to be the focus of the study. The eighth grade was selected at the junior high school level, and the tenth grade was selected at the high school level. The survey provides a national profile of students at these two grade levels.

Sample Size and Response Rate(s): Of the original sample of schools, 76 percent agreed to participate. Each school unit equaled a selected grade level from each participating school. The final sample for the study consisted of 224 school units representing 217 different junior and senior high schools. Completed questionnaires were obtained from 89 percent of the students enrolled in the selected classes at the eighth-grade level and 86 percent at the tenth-grade level. Data was acquired from 12,067 students. After cases with missing data for grade or sex were deleted, the remaining 11,419 cases were weighted to reflect national estimates.

Number of Students Completing Survey by Age, Grade, and Gender:

8th grade		*10th grade*	
Male	2,887	Male	2,795
Female	2,972	Female	2,765

Design and Methods: The sampling and weighting procedures for the study were designed and conducted to obtain a nationally representative cross-section of eighth- and tenth-graders. Data collection were by survey of self-reports of personal behaviors and attitudes.

Descriptive Variables: Age, grade, gender, race, and ethnicity.

Outcome Variables of Interest: The survey items dealing with nutrition focused on behaviors and knowledge related to the Dietary Guidelines for Americans; specifically those guidelines that call for Americans to reduce fat, sugar, and salt consumption and to increase fiber intake. Frequency of dieting and the methods students use to control their weight were also explored. Survey questions related to nutrition knowledge, dieting patterns, weight loss knowledge, eating practices, snacking behavior, and meal patterns. Sex differences and grade differences are noted.

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Selected Key Publications:

American School Health Association, Association for the Advancement of Health Education, Society for Public Health Education, eds. The National Adolescent Student Health Survey: A report on the health of America's youth. Oakland, California: Third Party Publishing Co. 1989.

Nationwide Survey of Nurses' and Dietitians' Knowledge, Attitudes, and Behavior Regarding Cardiovascular Risk Factors

Sponsoring Agency: National Heart, Lung, and Blood Institute, National Institutes of Health

Purpose: This survey was conducted to assess the knowledge, attitudes, and reported practices of registered nurses and registered dietitians related to high blood pressure, high blood cholesterol, and cigarette smoking.

Conducted: Fall and winter 1990–spring 1991

Target Population: Registered nurses, including an oversample of occupational health nurses (OHN's), and registered dietitians currently active in their profession.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
Registered nurses	7,200	63%
Occupational health nurses oversample	1,621	N/A
Registered dietitians	1,782	76%

Design and Methods: Mail survey. Systematic random sampling of dietitians, stratified cluster sampling for registered nurses, and simple random sampling for OHN's.

Descriptive Variables: Age, sex, race, education, professional position, and practice setting.

Outcome Variables of Interest: Knowledge, attitudes, and reported practices related to high blood cholesterol and high blood pressure; personal health practices related to changes in diet to lower blood cholesterol.

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Selected Key Publications: None to date.

Infant Feeding Practices Survey

Sponsoring Agency: Food and Drug Administration

Purpose: The survey is designed to obtain detailed information about infant feeding practices during the first 12 months of life. Data will be obtained on the initiation, extent, and duration of breast-feeding; initiation of formula-feeding; selection of formula brand; type and timing of introduction of solid foods; use of commercial baby foods; food safety practices for infant formula, baby foods, and expressed milk, infant health measures; health promotion practices; and sources of information about infant feeding.

Conducted: Planned for 1992

Target Population: New mothers and healthy, full term infants from birth to 1 year.

Sample Size and Response Rate(s): 1,200 mothers and infants, response rate not applicable.

Design and Methods: Eligible pregnant women will be identified from a large commercial mail panel (200,000 households). Data collection will be longitudinal by mail questionnaires sent prenatally and at baby's age 1–7, 9, and 12 months.

Descriptive Variables: Demographic characteristics; parity; prior infant feeding experiences; feeding expectations; baby's social situation, including age at which the mother begins working; day care situation; and number of people in the household.

Outcome Variables of Interest: Characteristics associated with duration of breast-feeding and with food intolerance and allergy development. The longitudinal design will enable researchers to examine the effect of prior feeding patterns on subsequent patterns and on food intolerance and allergy development.

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Selected Key Publications: None to date.

Consumer Food Handling Practices and Awareness of Microbiological Hazards

Sponsoring Agency: Food and Drug Administration

Purpose: The purpose of this survey is to collect data about consumers' practices regarding food handling, food storage, and food shopping; knowledge of food safety principles and of microbiological hazards in foods; perceived sources of food contamination from chemicals and pesticides; sources of information about food handling principles; and foodborne illness experience.

Conducted: Planned for 1992

Target Population: Civilian, noninstitutionalized individuals 18 years of age or over in households with telephones.

Sample Size and Response Rate(s): 1,500 adults, response rate not available.

Design and Methods: The questionnaire will be administered by telephone. A national probability sample will be selected using a modified Waksberg random digit dialing procedure.

Descriptive Variables: Demographic characteristics and eating habits, including where meals are prepared and where eaten.

Outcome Variables of Interest: Prevalence of unsafe food handling practices, extent of knowledge of food safety principles and of microbiological hazards in foods, perceptions of food contamination from chemicals and pesticides, use of various sources for information about food safety, and incidence of self-reported foodborne illness.

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Selected Key Publications: None to date.

Point of Purchase Labeling Studies

Sponsoring Agency: Food and Drug Administration in cooperation with Giant Food, Inc.

Purpose: The purpose of these two studies was to determine whether shoppers would alter their food purchases if presented with brand-specific information that flags products with reduced amounts of sodium, calories, or fat and cholesterol. A secondary objective was to determine whether altered purchase behavior, if observed, would be replicated in a second market.

Conducted: 1981–86

Target Population: Giant Food Store shoppers in Washington, DC, and Baltimore, Maryland.

Sample Size and Response Rate(s): A total of 20 supermarkets, consisting of 10 matched pairs of stores, each pair consisting of 1 store selected from Washington, DC (test area) and 1 store from Baltimore, Maryland (control area). Stores were matched on size, type of shopping location, and demographic characteristics of the immediate shopping area. All stores produced usable data for analysis. Convenient samples of 100 shoppers per store were interviewed by Giant store personnel before and after introduction of the labeling program. This was done in test and control markets for both studies in order to determine awareness of and interest in the labeling program.

Design and Methods: Shelf tags were attached to 400 qualifying products in 16 product categories in Washington, DC test stores during 1981–83. Baltimore stores served as controls and received no shelf flags. During 1984–86, shelf flags were also placed in Baltimore stores and the number of flagged products was increased to 1,200, representing 49 product categories. During the second study Baltimore served as the test area and Washington as the control area.

Weekly unit sales were analyzed using a repeated measure analysis of covariance design.

Descriptive Variables: Shoppers' surveys were analyzed by gender, age, and special diet status of the household.

Outcome Variables of Interest: Percent of sales (share of market) achieved by nutritionally flagged products (store data); claimed use of shelf flags (shopper data).

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Selected Key Publications:

Levy A, Mathews O, Tenney J, Schucker R. The impact of a nutrition information program on food purchases. J Public Policy Marketing 4:1–13. 1985.

Levy A, Schucker R, Tenney J, Mathews O. Nutrition shelf-labeling and consumer purchase behavior. J Nutr Educ. In press.

Survey of Weight-Loss Practices

Sponsoring Agency: Food and Drug Administration (Cosponsor National Heart, Lung, and Blood Institute, National Institutes of Health)

Purpose: The survey will provide detailed information about types and combinations of weight-loss practices being used by individuals trying to lose weight. The data will be used to estimate the prevalence of specific practices, both appropriate and inappropriate, in the general population, and to evaluate progress toward achieving the national health objectives requiring weight loss.

Conducted: October–November 1991

Target Population: Individuals currently trying to lose weight, ages 18 and over.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
Current dieters	1,228	*
Black oversample	203	*
Nondieting controls	218	*

* Not yet available

Design and Methods: A probability sample of telephone households was screened for the presence of a current dieter. Current dieters and nondieting controls were interviewed on the telephone about current weight-loss practices.

Descriptive Variables: Body mass index, sex, age, race, income, diet history, other health behaviors, and self-perception of overweight.

Outcome Variables of Interest: Current health practices, sources of health information, inventory of current weight-loss practices, self-reported height and weight, dieting, and weight history.

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Selected Key Publications:

Stephenson MG, Levy AS, Sass NL, McGarvey WE. 1985 NHIS findings: Nutrition knowledge and baseline data for weight-loss objectives. Public Health Rep 102(1):61–7. 1987.

Levy A, Heaton A. Characteristics of weight-loss regimens: Weight Loss Practices Survey. In Preparation.

Diet and Health Knowledge Survey (DHKS)

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The survey provides continuing information with which to assess relationships between individuals' knowledge and attitudes about dietary guidance and food safety, their food-choice decisions, and their nutrient intakes. This survey is a "followup" survey to the Continuing Survey of Food Intakes by Individuals (CSFII, page 80).

Conducted: 1989, 1990, and 1991; Planned for 1993–95 (Data collection for each year began in May and continued through April of the following year.)

Target Population: 1989–91: Main-meal planner/preparer in households in the 48 conterminous States who participated in the CSFII. The survey included two separate samples: households with incomes at any level (basic survey) and households with incomes at or below 130 percent of the poverty thresholds (low-income survey).

1993–95: Adults in households and noninstitutional group quarters in the 50 States who complete the CSFII. The low-income population and some categories may be oversampled.

Sample Size and Response Rate(s):

Year	*Sample size*	*Response rate**
1989:		
Basic sample	1,280	86%
Low-income sample	626	86%
1990:		
Basic sample	1,284	87%
Low-income sample	614	80%
1991:		
Basic sample	**	**
Low-income sample	**	**

*Preliminary. Response rate is number of completed DHKS interviews divided by number of housing units participating in the CSFII.
** Not yet available

Design and Methods: The 1989–91 DHKS was a telephone followup to the 1989–91 CSFII. Data were collected by computer-assisted telephone interviews. In-person interviews were conducted with targeted respondents who did not have telephones. For details regarding the sampling scheme and food intake methodology, see 1989–91 CSFII. The 1993–95 DHKS is currently in the planning stage, but will be similar to the 1989–91 DHKS.

Descriptive Variables:

Individual—Sex, age, race, education and employment of persons 15 years of age and over, pregnancy/lactation/nursing status, height, weight, and ethnicity (Hispanic or non-Hispanic).

Household—Income, size, cash assets, region, urbanization, tenancy, participation in Food Stamp and WIC programs.

Outcome Variables of Interest: 1989–91: Self-perceptions of relative intake levels, awareness of diet health relationships, use of food labels, perceived importance of following dietary guidance for specific nutrients and food components, beliefs about food safety, and knowledge about food sources of nutrients. These variables can be linked to data on individuals' food and nutrient intakes from the CSFII. See 1989–91 CSFII for additional information. Similar data will be collected for the 1993–95 DHKS.

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Selected Key Publications: None to date.

Health and Diet Survey

Sponsoring Agency: Food and Drug Administration; periodically cosponsored by National Heart, Lung, and Blood Institute, National Institutes of Health

Purpose: The survey is conducted to assess public knowledge, attitudes, and practices about food and nutrition, particularly as they relate to such health problems as hypertension, hypercholesterolemia, coronary heart disease, and cancer. The survey also assesses consumer use of food labels, including the ingredient list and nutrition label. In conjunction with the National Heart, Lung, and Blood Institute, attitudes and knowledge about heart disease risk from high blood cholesterol levels and the public's efforts to lower blood cholesterol levels are assessed. Trends are used to help plan for and evaluate the National Cholesterol Education Program. With passage of the Nutrition Labeling and Education Act of 1990, the survey data will also be used to track trends in consumer understanding and use of food labels and the role of labels in dietary management.

Conducted: 1982, 1983–84, 1986, 1988, and 1990; planned for 1992–93 and 1994–95. In 1983–84 and 1986, the survey was cosponsored by NHLBI and included the Cholesterol Awareness Survey—Public Survey.

Target Population: Civilian, noninstitutionalized adults ages 18 years and over, in the conterminous United States.

Sample Size and Response Rate(s):

	Sample size	*Response rate*
1982	4,000	65%
1984	4,000	56%
1986	4,000	67%
1988	3,200	65%
1990	3,700	67%

Design and Methods: Telephone interviews with a national probability sample selected by Waksberg's random digit-dialing method. One adult from each contacted household was randomly selected to participate in the survey.

Descriptive Variables:

Individual descriptors—age, race, sex, ethnicity, and education.

Household descriptors—household income, number of adults in household, and Census region.

Outcome Variables of Interest: Awareness, beliefs, attitudes, knowledge, and reported behaviors regarding food, nutrition, and health; self-reported height and weight, health history, and status.

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Selected Key Publications:

Schucker B, Wittes JT, Santanello NC, et al. Change in cholesterol awareness and action: Results from national physician and public surveys. Arch Intern Med 151:666–73. 1991.

Bender M, Derby BM. Prevalence of reading nutrition and ingredient information on food labels among adult Americans: 1982–88. J Nutr Educ. In press. 1992.

Levy AS, Stephenson M. Nutrition knowledge levels about dietary fats and cholesterol: 1983–88. J Nutr Educ. In press. 1992.

Heimbach JT. Cardiovascular disease and diet: The public view. Public Health Rep 100:5–12. 1985.

Heimbach JT. Risk avoidance in consumer approaches to diet and health. Clin Nutr 6:159–62. 1987.

Heimbach JT. The growing impact of sodium labeling of foods. Food Tech 40:102–4, 107. 1986.

Heimbach JT, Orwin RG. Public perceptions of sodium labeling. J Am Diet Assoc 84:1217–19. 1984.

Schucker BH, Bailey K, Heimbach JT, et al. Change in public perspective on cholesterol and heart disease: Results from two national surveys. JAMA 258:3527–31. 1987.

Haines JT, Gordon DJ, Cutler JA, et al. Change in public perspective on cholesterol and heart disease: Results from two national surveys. JAMA 258(240):3527–31. 1987.

Cholesterol Awareness Survey—Physicians' Survey

Sponsoring Agency: National Heart, Lung, and Blood Institute, National Institutes of Health

Purpose: The Physicians' Cholesterol Awareness Survey is conducted to assess physician knowledge and attitudes regarding the modification of elevated cardiovascular risk factors, especially the serum cholesterol level and to assess physician management of hypercholesterolemia. Trends in survey data are used to help plan for and evaluate the National Cholesterol Education Program.

Conducted: 1983, 1986, and 1990 (Currently there are no specific plans for a future survey.)

Target Population: Physicians practicing in the conterminous United States with specialties in general and family practice, internal medicine, and cardiology.

Sample Size and Response Rate(s):

	Respondent sample size	*Response rate*
1983	1,610	56%
1986	1,277	62%
1990	1,604	68%

Respondent sample equals number of physicians completing an interview. Response rate equals respondents divided by the sum of respondents plus those who refused.

Design and Methods: Telephone interviews with a random sample of practicing physicians (with specialties in general practice, family practice, internal medicine, and cardiology) listed in the master files of the American Medical Association and the American Osteopathic Association. Physicians were further subdivided according to their age (less than 40 years and 40 years and over).

Descriptive Variables: Physician age, specialty, and type of practice.

Outcome Variables of Interest: Physician knowledge and attitudes toward various risk factors for coronary heart disease, serum cholesterol and diet, and patient motivation for diet change; physician practices related to dietary and drug therapy for elevated serum cholesterol level.

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Selected Key Publications:

Schucker B, Wittes JA, Cutler JA, et al. Change in physician perspective on cholesterol and heart disease: Results from two national surveys. JAMA 258(24):3521–6. 1987.

Schucker B, Wittes JA, Santanello NC, et al. Change in cholesterol awareness and action: Results from two national physician and public surveys. Arch Intern Med 151:666–73. 1991.

Cancer Prevention Awareness Survey

Sponsoring Agency: National Cancer Institute, National Institutes of Health

Purpose: This survey was designed to measure progress on knowledge, attitudes, and behaviors regarding lifestyle and cancer prevention and compare the results to baseline data collected in Wave 1 (1983).

Conducted: 1983 and 1985

Target Population: Civilian, noninstitutionalized population ages 18 years and over in the United States, in 1985 survey an oversample of 263 black Americans was included.

Sample Size and Response Rate(s):

	Eligible contacts	*Respondents*	*Response rate*
1983	2,479	1,876	75%
1985	2,601	1,898	73%
Black supplement	154	103	67%

Design and Methods: National probability sample selected by random-digit dialing technique. Self-reports on a set of basic knowledge, attitudes and behavior items related to health, cancer, and cancer risk.

Descriptive Variables: Age, gender, race, education, and geographic region.

Outcome Variables of Interest:

Nutrition-related variables—attitudes and behavior regarding eating red meat, fruits and vegetables, whole grains, sugar, salt, and preservatives.

Other health-related variables—self-perceptions of health, awareness of health risks, actions taken to maintain and improve health, or decrease cancer risk.

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Selected Key Publications:

National Cancer Institute. Management Summary: Cancer Prevention Awareness Survey, Wave I, 1984. Bethesda, Maryland: Public Health Service. 1984.

National Cancer Institute. Technical Report: Cancer Prevention Awareness Survey, 1984. Bethesda, Maryland: Public Health Service. 1984.

National Cancer Institute. Management Summary: Cancer Prevention Awareness Survey, Wave II, 1986. Bethesda, Maryland: Public Health Service. 1986.

National Cancer Institute. Technical Report: Cancer Prevention Awareness Survey, 1986. Bethesda, Maryland: Public Health Service. 1986.

National Knowledge, Attitudes, and Behavior Survey

Sponsoring Agency: National Cancer Institute, National Institutes of Health

Purpose: This survey was designed to measure current changing trends regarding cancer knowledge, attitudes, and behaviors. Respondents' knowledge and perception of cancer risk factors (for example, obesity and improper diet) are addressed as well as actions that can be taken to reduce risk (for example, lowering fat intake).

Conducted: April 1989–February 1990

Target Population: General civilian, noninstitutionalized population ages 18 years and over in the conterminous United States with a supplement for blacks and Hispanics to permit generalization to these populations.

Sample Size and Response Rate(s): From April 1989–February 1990, a total of 4,023 eligible individuals were contacted. This resulted in 2,630 completed interviews, 217 incomplete interviews, and 1,176 refusals for an overall response rate of 65 percent.

Design and Methods: National probability sample of telephone interviews conducted on continuous basis: 7 days per week, approximately 220 interviews per month, and 2,600 per year. Data were weighted by ethnicity, gender, age, and education to agree with national totals. Self-reported frequency of food intake by categories was assessed.

Descriptive Variables: Age, gender, race and ethnicity, education, household size and income, and marital status.

Outcome Variables of Interest:

Nutrition-related variables—awareness and knowledge of fiber; attitudes and behavior toward eating red meat, vegetables, fruits, whole grains and poultry; and use of various fats in food preparation.

Other health-related variables—self-perceptions of health, awareness of health risks, awareness of behaviors that increase or decrease cancer risk, and sources of cancer information.

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Selected Key Publications: None to date.

Nutrition Label Format Studies

Sponsoring Agency: Food and Drug Administration

Purpose: The purpose of these two studies was to evaluate alternative formats for a revised nutrition label in controlled-use situations so that the relative performance characteristics of alternative formats and of specific label features could be identified.

Conducted: October–November 1990 and November 1991

Target Population: Primary food shoppers 18 years and over.

Sample Size and Response Rate(s): The sample size for the first study was 1,460. The sample size for the second study was 1,216. Because of the design, response rates are not applicable.

Design and Methods: The sample was selected by shopping mall intercept methods for both studies. Both were conducted at eight geographically diverse shopping malls. For the first study, the sample was quota-controlled for age, race, income, and education.

Subjects were randomly assigned to a predetermined sequence of format-product category combinations based on a 5 x 5 Greco-Latin Square to counterbalance the order of presentation of formats and format-product category combinations. Subjects were shown alternative formats and interviewed in interview facilities in the mall.

Formats tested in the first study were the following: Control, Control/Daily Recommended Value (DRV), Adjective, Numeric (percent of daily value), and Bar Graph. Formats tested in the second study were the following: Control, Control/DRV, Percent DRV with DRV listed, Percent DRV without DRV listed, Adjective, Highlighting, and Grouping.

Descriptive Variables: Demographic characteristics; frequency of food label reading; health status of household members with respect to heart disease, diabetes, high blood pressure, stroke, and cancer; household members' dieting practices with respect to weight control and intake of sodium, and cholesterol and fat.

Outcome Variables of Interest: Variables of interest were objective performance measures and preference measures for the various formats. All formats in the second study were also tested on the measures used in the first study. Objective measures in the first study were based upon comparison of two products: accuracy, false positives, task time, and judgement of which product was more nutritious.

For the objective measures in the second study, the subject saw a label for one product at a time. Measures were based on evaluating front panel claims, daily dietary management, judgement of general nutritiousness, and use of the DRV concept. For the measure of daily dietary management, the subject was asked which nutrients they would try to get more and less of in the other foods eaten that day, after eating three servings of the target food. Use of the DRV concept was tested by asking how many servings of the food would be needed to get all of the carbohydrates needed in a day.

Preference was measured in both studies by asking the subject which format they found most helpful and least helpful.

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Selected Key Publications: (For the first study only)

Levy AS, Fein SB, Schucker RE. Nutrition labeling formats: Performance and preference. Food Tech 45(7):116–21. 1991

IV. Food Composition and Nutrient Data Bases

National Nutrient Data Bank (NNDB)

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The National Nutrient Data Bank is a computerized system used to compile, evaluate, summarize, and disseminate data on the nutrient composition of foods. Data from the National Nutrient Data Bank are used in the Survey Nutrient Data Base for analysis of national dietary intake surveys and are also made available in published tables of food composition and as computerized data bases. Periodic updates to the data are also available on the Nutrient Data Bank Electronic Bulletin Board.

Conducted: Continuously since 1892.

Target Population: NA

Sample Size and Response Rate(s): NA

Design and Methods: NA

Descriptive Variables: NA

Outcome Variables of Interest: NA

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Phone number: (301) 436–5078
Parameters: no parity, 8 bits, stop bit = 1 (n/8/1)
Baud rates: 1200 or 2400
Internet access
Telnet info.umd.edu
Logon ID: info
Menu selections: Government, US, Nutrient Data

Selected Key Publications:

U.S. Department of Agriculture. Composition of foods, raw, processed, prepared. Washington: U.S. Government Printing Office. 1976–92.

Agriculture Handbook 8*:

AH-8–1 Dairy and Egg Products, 1976 (Stock No. 001–000-03635–1)

AH-8–2 Spices and Herbs, 1977 (Stock No. 001–000-03646–7)

AH-8–3 Baby Foods, 1978 (Stock No. 001–000-03900–8)

AH-8–4 Fats and Oils, 1979 (Stock No. 001–000-03984–9)

AH-8–5 Poultry Products, 1979 (Stock No. 001–000-04008–1)

AH-8–6 Soups, Sauces, and Gravies, 1980 (Stock No. 001–000-04114–2)

AH-8–7 Sausages and Luncheon Meats, 1980 (Stock No. 001–000-04183–5)

AH-8–8 Breakfast Cereals, 1982 (Stock No. 001–000-04283–1)

AH-8–9 Fruits and Fruit Juices, 1982 (Stock No. 001–000-04287–4)

AH-8–10 Pork and Pork Products, 1983 (Stock No. 001–000-04368–4)

AH-8–11 Vegetables and Vegetable Products, 1984 (Stock No. 001–000-04427–3)

AH-8–12 Nut and Seed Products, 1984 (Stock No. 001–000-004429–0)

AH-8–13 Beef Products, 1990 (Stock No. 001–000-04482–6)

AH-8–14 Beverages, 1986 (Stock No. 001–000-04468–1)

AH-8–15 Finfish and Shellfish Products, 1987 (Stock No. 001–000-04497–4)

AH-8–16 Legumes and Legume Products, 1986 (Stock No. 001–000-04488–5)

AH-8–17 Lamb, Veal, and Game Products, 1989 (Stock No. 001–000-04541–1)

AH-8–18 Baked Products, (In press)

AH-8–19 Snacks and Sweets, 1991 (Stock No. 001–000-04577–6)

AH-8–20 Cereal Grains and Pasta, 1989 (Stock No. 001–000-04549–1)

AH-8–21 Fast Foods, 1988 (Stock No. 001–000-04524–5)

Supplements to Agriculture Handbook No. 8 containing looseleaf pages for inserting into published handbook sections:

1989 Supplement (Stock No. 001–000-04554–7)

1990 Supplement (Stock No. 001–000-04571–7)

1991 Supplement (In press)

* Stock Numbers are provided for ordering from the U.S. Government Printing Office. For ordering information see page 102.

Haytowitz, DH. USDA's Nutrient Data Bank—A National Resource. Cereal Foods World 35(7):654–5. 1990.

Matthews RH, Pehrsson PR, Farhat-Sabet M. Sugar content of selected foods: Individual and total sugars. Home Econ Res Rep 48. 1987.

Nutrient Composition Laboratory

Sponsoring Agency: Agricultural Research Service, U.S. Department of Agriculture

Purpose: This survey designs and develops new and/or improved measurement systems for the analysis of nutrients and other important constituents in foods by conducting appropriate research in chemistry, biochemistry, and biology. The researchers develop and utilize sound sampling techniques for the U.S. food supply to ensure that representative samples are analyzed for their nutrient content. The laboratory facilitates the transfer of new technologies to industrial, academic, and government laboratories in the United States and worldwide.

Conducted: Continuously since 1892

Target Population: NA

Sample Size and Response Rate(s): NA

Design and Methods: Research is focusing on the analyses of sugars, carbohydrates, fiber fractions, trace minerals, lipids, carotenoids, and water-soluble and fat-soluble vitamins. Research is ongoing to support development of statistically-based food sampling plans and analytical reference materials for improving accuracy of food analyses.

Descriptive Variables: NA

Outcome Variables of Interest: Scientists at the laboratory have developed several dependable new assay techniques, reference materials, and statistically based food sampling strategies (see key publications). Staff collaborate with food associations and Federal agencies to improve quality of nutrient composition data. Collaborators include Human Nutrition Information Service, National Cancer Institute, and National Heart, Lung, and Blood Institute and associations; Egg Nutrition Center, National Livestock and Meat Board, and others. Reference materials research is in collaboration with the National Institute of Science and Technology.

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Selected Key Publications:

Beecher GR, Matthews RH. Nutrient composition in the United States. In: Brown ML, ed. Present knowledge in nutrition. Washington: International Life Sciences Institute—Nutrition Foundation. 1990.

Harnly JM, Moulton GP, O'Haver TC. Continuum source atomic absorption spectrometry. U.S. Patent No. 5, 108, 856. 1991.

Holden JM, Davis CS. Use of cholesterol reference materials in a nationwide study of the cholesterol content of eggs. Frezenius J Analyt Chemie 338:476–8. 1990.

Khachik F, Beecher GR, Goli MB, Lusby WR. Separation, identification and quantification of carotenoids in fruits, vegetables and human plasma by high performance liquid chromatography. Pure Appl Chem 63:71–80. 1991.

Li BW, Cardozo MS. Simplified method for the determination of total dietary fiber and its soluble and insoluble fractions in foods. In: Furda I, Brine CJ, eds. New developments in dietary fiber: Physicochemical and analytical aspects. New York: Plenum Publishing Corporation. 1990.

Miller-Ihli NJ. Slurry sampling for graphite furnace atomic absorption spectrometry. Frezenius J Analyt Chemie 337:271–4. 1990.

Riby PG, Harnly JM, Styris DL, Ballou NE. Emission characteristics of chromium in hollow anode-furnace atomization non-thermal excitation spectrometry. Spectrochemica Acta 46B:203–15. 1991.

Vanderslice JT, Higgs DJ. An improved chromatographic separation of ascorbic acid, dehydroascorbic acid and their isomers. J Micronutr Anal 7:67–70. 1990.

Wolf WR, Iyengar GV, Tanner JT. Mixed diet reference materials for nutrient analysis of foods: Preparation of SRM-1548 diet. Frezenius J Analyt Chemie 338:473–5. 1990.

Food Label and Package Survey (FLAPS)

Sponsoring Agency: Food and Drug Administration

Purpose: The survey is conducted to monitor labeling practices of U.S. food manufacturers. The survey also includes a surveillance program to identify levels of accuracy of selected nutrient declarations compared with values obtained from nutrient analyses of products.

Conducted: Biennially since 1977 (Last survey conducted in 1990.)

Target Population: All brands of processed foods regulated by FDA and distributed through grocery stores.

Sample size/Response rate: 1,200 food brands—see next section.

Design and Methods: Biennial probability survey of retail packaged foods using commercial market research data bases (A.C. Nielsen Company). The survey involves 1,200 individual food brands and represents about 70 percent of the packaged food supply in retail dollar terms. Label observations are interpreted on a share-of-the-market sales basis.

Biennial nutrient analysis of a representative sample of the 61 percent of packaged foods that bear nutrition labels. Approximately 300 foods are analyzed for an average of eight nutrients.

Descriptive Variables: 58 major supermarket food groups; approximately 234 product classes; brand importance (market leaders versus market followers).

Outcome Variables of Interest: Prevalence of nutrition labeling in general as well as declaration of selected nutrients and ingredients (for example, cholesterol and sodium content, fats and oils, and food additives); also prevalence of nutrition claims and other label statements and descriptors.

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Selected Key Publications:

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Status of nutrition and sodium labeling on processed foods: 1988. Washington: Food and Drug Administration. 1989.

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Unit weight cost comparisons of processed food products bearing lowered-sodium label claims versus regular products. Washington: Food and Drug Administration. 1989.

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Cholesterol labeling in the retail processed food supply: 1986. Washington: Food and Drug Administration. 1986.

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Fortification of the FDA-regulated food supply: 1988. Washington: Food and Drug Administration. 1988.

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Joint declaration of animal and/or vegetable fats in ingredient lists of processed foods. Washington: Food and Drug Administration. 1986.

Division of Consumer Studies, Center for Food Safety and Applied Nutrition, Food and Drug Administration. Voluntary nutrition information disclosure: 1978–84. Washington: Food and Drug Administration. 1986.

LANGUAL/CFSAN'S Food Monitoring Data Base

Sponsoring Agency: Center for Food Safety and Applied Nutrition (CFSAN), Food and Drug Administration.

Purpose: The purpose of the Food Monitoring Data Base is to facilitate computerized retrieval of foods (and the data associated with these foods) from food files and data bases relative to 14 characteristics that affect the safety and/or nutritional quality of foods. Retrieval from these food files and data bases is possible using the Langual Vocabulary (formerly called the Factored Food Vocabulary). Langual is intended to support the retrieval needs of users having different points of view and to facilitate the comparison or linkage of data between various food files.

Conducted: Initiated in 1973

Target Population: NA

Sample Size and Response Rate(s): NA

Design and Methods: Langual is a standardized vocabulary for food product description. It is composed of 14 different viewpoints or factors:

- Product type
- Food source
- Part of plant or animal
- Physical state, shape, or form
- Extent of heat treatment
- Cooking method
- Treatment applied
- Preservation method
- Packing medium
- Container or wrapping
- Food contact surface
- Consumer group and dietary use
- Geographic places and regions
- Adjunct characteristics of food

A food product is described by one or more terms from each of these factors. That information is stored in the Food Monitoring Data Base. Each stored descriptor may be used as a retrieval term for food product names. The bibliographic, nutritional, or toxicological data associated with those food names may then be accessed. Langual provides definitions to explain what a term is or how it is used and synonyms for scientific nomenclature or vernacular usage. Retrieval terms are arranged in a hierarchy, which arrays terms conceptually from broader to narrower.

Nine diverse food data bases are indexed using Langual. Six of these files are from sources outside the FDA. They are the USDA Nutrient Data Base for Standard Reference (Handbook 8); the 1987–88 Nationwide Food Consumption Survey; food names from the Codex Alimentarius; a carotenoid food file; and a French food file and a Greek food file. The three remaining food files are FDA-based. They are the Total Diet Study (TDS); the Food Labeling and Package Survey (FLAPS); and the Scientific Information Retrieval and Exchange Network (SIREN). More than 24,000 food products are indexed by Langual and searchable in the Food Monitoring Database.

Descriptive Variables: NA

Outcome Variables of Interest: NA

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Selected Key Publications:

Center for Food Safety and Applied Nutrition. Langual vocabulary users' manual. Washington: U.S. Food and Drug Administration, Center for Food Safety and Applied Nutrition, Division of Information Resources Management. 1992.

Smith E. Langual for database users. In: Murphy SP, ed. Nutrient databases for the 1990's: Excellence in diversity. Proceedings of the 16th National Nutrient Databank Conference. Ithaca, New York: The CBORD Group, Inc. 1991.

Rosenthal B. Langual. CODATA Bulletin: Scientific Program and Abstracts, Twelfth International CODATA Conference. Columbus, Ohio: CODATA. 22(1). 1990.

McCann A, Pennington J, Smith E, et al. FDA's factored food vocabulary for food product description. J Am Diet Assoc 88(3):336–41. 1988.

Survey Nutrient Data Base

Sponsoring Agency: Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The Survey Nutrient Data Base is used for analysis of nationwide dietary intake surveys. This data base includes data for food energy and 28 food components for over 6,000 food items. Public releases on electronic media are made periodically through the National Technical Information Service (NTIS), and the latest release is available through the Nutrient Data Bank Bulletin Board (see page 71). Recipes, retention factors, and other data used in calculations to derive the data base values are also available from NTIS.

Conducted: Continuously since 1977

Target Population: U.S. population

Sample Size and Response Rate(s): NA

Design and Methods: The data base is updated continuously to include new foods reported in USDA's Continuing Survey of Food Intakes by Individuals and DHHS' National Health and Nutrition Examination Survey. An electronic system links the data base to the National Nutrient Data Bank (NNDB) and generates new versions of the data base to incorporate improved nutrient values that are released from the NNDB. Values not available from the NNDB are imputed from data for other forms of the food or from data for similar foods.

Descriptive Variables: NA

Outcome Variables of Interest: NA

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Selected Key Publications:

Perloff BP, Rizek RR, Haytowitz DH, Reid PR. Dietary intake methodology II: USDA's Nutrient Data Base for nationwide dietary intake surveys. J Nutr 120:1530–4. 1990.

V. Food Supply Determinations

U.S. Food and Nutrition Supply Series

Sponsoring Agency: Economic Research Service and Human Nutrition Information Service, U.S. Department of Agriculture

Purpose: The Food and Nutrition Supply Series estimates levels of foods and nutrients available for consumption in the U.S. food supply. Important uses of these data are as follows:

- to assess the potential of the U.S. food supply to meet the nutritional needs of the U.S. population;
- to monitor trends in per capita food and nutrient availability over time;
- to study relationships between diet and disease over time;
- to estimate complete demand systems that measure price and income elasticities of demand in a consistent way; and
- to facilitate management of Federal marketing, food assistance, nutrition education, and public health programs.

Conducted: Annually since 1909

Target Population: U.S. population.

Sample Size and Response Rate(s): NA

Design and Methods: ERS provides annual estimates on amounts of major food commodities that disappear into the food distribution system at either the wholesale or retail level. Quantities are derived by deducting data on exports, year-end inventories, and nonfood use from data on production, imports, and beginning inventories. HNIS derives nutrient levels in the food supply by multiplying the per capita quantities of each food by the nutrient composition of the edible portion per pound of food. Results from all foods are totaled for each nutrient and converted to a per day basis.

Descriptive Variables: NA

Outcome Variables of Interest: Quantities of foods available for consumption on a per capita basis and quantities of food energy, nutrients, and food components provided by these foods.

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Selected Key Publications:

Harp H, Bunch K. Major statistical series of the U.S. Department of Agriculture, vol 5: Consumption and utilization of agriculture products. Handbook no 671, U.S. Department of Agriculture, Economic Research Service. 1989.

Putnam JJ. Food consumption, 1970–90. Food Review 14(3):2–12, 18. 1991.

Putnam JJ, Allshouse JE. Food consumption, prices, and expenditures, 1968–89. Statistical Bulletin no 825, U.S. Department of Agriculture, Economic Research Service. 1991.

Raper N. Nutrient content of the U.S. food supply. Food Review 14(3):13–7. 1991.

Raper N, Zizza C, Rourke J. Nutrient content of the U.S. food supply, 1909–88. Home Economics Research rep no 50, U.S. Department of Agriculture, Human Nutrition Information Service. 1992.

A.C. Nielsen Scantrack

Sponsoring Agency: Economic Research Service and Food and Nutrition Service, U.S. Department of Agriculture

Purpose: This survey measures grocery store sales and physical volume of all scannable packaged food products.

Conducted: Monthly since 1985

Target population: U.S. grocery store universe.

Sample Size and Response Rate(s): Before 1988, sample size included 150 supermarkets. Since 1988, sample size increased to about 2,000 supermarkets.

Design and Methods: Proprietary data purchased from A.C. Nielsen Company. Gives monthly and annual data on total U.S. grocery store sales and volume for 4 digit food product classes. Product class data are on diskette and hard copy. Monthly data at the individual brand and package size level of detail are available on tape. Individual brand data cannot be used outside sponsoring agencies because they are proprietary.

Descriptive Variables: NA

Outcome Variables of Interest: Sales and physical volume of specific package grocery items sold through supermarkets. For each item, the sales, physical volume, selling price, and percent of stores selling the product.

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Selected Key Publications: NA

Fisheries of the United States

Sponsoring Agency: National Marine Fisheries Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

Purpose: This survey provides annual estimates of seafood disappearance in the distribution system.

Conducted: Annually since 1909

Target population: U.S. civilian resident population.

Sample Size and Response Rate(s): NA

Design and Methods: DOC's National Marine Fisheries Service provides annual estimates on amounts of finfish and shellfish that disappear into the food distribution system. Quantities are derived by deducting exports, year-end inventories, and nonfood use from data on production, imports, and beginning inventories. The U.S. edible supply time series extends back to 1909 and is used to express consumption in pounds, edible meat weight, per capita (civilian resident population) for fresh, frozen, canned, and cured commodities, with limited detail at the species level.

Descriptive Variables: NA

Outcome Variables of Interest: Consumption in pounds, edible meat weight, per capita for fresh, frozen, canned, and cured commodities.

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Selected Key Publications:

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services. Fisheries of the United States: 111 pp. 1990 and 1991.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services. Imports and Exports of Fishery Products Annual Summary: 17 pp. 1990 and 1991.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services. Frozen Fishery Products Annual Summary: 12 pp. 1990 and 1991.

U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Services. Processed Fishery Products Annual Summary, 1987: 23 pp. 1991.

Food Needs Assessment Project

Sponsoring Agency: U.S. Agency for International Development

Purpose: The U.S. Agency for International Development provided technical assistance in food needs assessment to USAID field missions and host governments that receive food aid. Topics addressed include:

- linking national with in-depth local assessments of food needs;
- development of techniques for estimating food deficits not caused by climatic factors or production shortfalls;
- treatment of closing stock balances;
- appropriate approaches in analyses of nutritional need and nonemergency situations;
- inclusion of more diverse diets in non-African countries; and revision of methodology for assessing food needs in a variety of countries.

Conducted: 1987–90

Target Population: Assessments of the following countries were made: Ethiopia, Sudan, Kenya, Mozambique, Angola, Ecuador, Ghana, Mauritania, Guinea, Madagascar, Zaire, Rwanda, and El Salvador. Information from some assessments is classified and not available.

Design and Methods: Determination of food deficit or surplus was made by collection and analysis of food sector data. Information was collected by commodity, composition of diet, aggregate gross production data, feed and waste, and milling extraction rates.

Descriptive Variables: NA

Outcome Variables of Interest: Major variables analyzed include population, historical per capita consumption, opening and closing stock data, commercial imports and exports, and foreign exchange and financial data.

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Center for Development Information and Evaluation
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Selected Key Publications:

Bureau for Food and Humanitarian Assistance, U.S. Agency for International Development. Manual for Food Needs Assessment: Conceptual framework and software documentation for version 2.0. U.S. Agency for International Development. 1988. (Order #PNABB175)

To order the above manual contact the Center for Development Information and Evaluation.

VI. Nutrition Monitoring Activities in States

Nutrition Monitoring activities are conducted at State and local levels to complement the Federal Nutrition Monitoring activities and to enhance the effectiveness of the National Nutrition Monitoring Program. A number of surveys are coordinated by the National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control: the Behavioral Risk Factor Surveillance System (see page 57), the Pediatric Nutrition Surveillance System (see page 32), the Pregnancy Nutrition Surveillance System (see page 31), and the Youth Risk Behavior Survey (see page 58). On the previously noted pages, descriptive information can be found for each of these surveys. Two surveys were conducted at the State level by the Human Nutrition Information Service and the Food and Nutrition Service of USDA. The following pages contain descriptions of these surveys, which evaluate food assistance programs in Puerto Rico, San Diego, Alabama, and Washington.

The table following these descriptions summarizes the States, territories, and American Indian tribes that conduct these surveys. The table indicates whether a State or locality has any data for a particular survey, it does not indicate **continuous** data. Forty-six States and the District of Columbia have participated in the BRFSS, 27 States and the District of Columbia and 2 territories have participated in the PNSS, and 44 States and the District of Columbia, and 2 American Indian tribes have participated in the PedNSS. All States, the District of Columbia, and three territories participated in the YRBS. The States, territories, and tribes are organized by Census regions. Following the table are rosters of contacts for the surveys.

Puerto Rico Nutrition Study

Sponsoring Agency: Human Nutrition Information Service and Food and Nutrition Service, U.S. Department of Agriculture

Purpose: USDA was charged by the U.S. Congress to investigate and report back by March 1985 on the food assistance program operations in Puerto Rico. Public Law 98–204 and accompanying language on the House report required that the program be assessed from (1) the nutritional adequacy of home foods available to participating households and (2) the household food expenditure levels among program participants.

Conducted: August–December 1984

Target Population: The sample was designed to yield approximately 2,500 housekeeping households in Puerto Rico with a disproportionate number of current, former, and nonnutrition program participants. Housekeeping households are those households with at least 1 member eating 10 or more meals from the household food supply.

Sample Size and Response Rate(s): Screeners were used to determine eligibility (housekeeping) of the households.

Of the 3,699 total housing units, 3,249 were occupied.

Of the 2,943 total housing units screened, 2,759 were identified as eligible.

Of the 2,759 eligible households, 2,437 participated for a response rate of 88 percent of eligible households.

Design and Methods: The design and methods were directed by the Congress to replicate the household portion of the NFCS 1977–78, Puerto Rico, with adjustments to account for the disproportionate number of current, former, and nonnutrition program participants.

Information on food used by surveyed households was obtained in an at-home interview with the person identified as most responsible for food planning and preparation. Trained Puerto Rican interviewers used an aided recall schedule (Spanish or English) and recorded the kind, form, and cost, if purchased, of each food and beverage used in the household during the 7 days before the interview. Nutrient availability and dietary levels were derived using food composition data files.

Descriptive Variables: Household characteristics, such as income, household size, sex and age of members, number of meals eaten by members, number of guest meals and snacks, education and employment of household heads, participation in food programs, and other factors that might affect food consumption patterns are included in the survey.

Outcome Variables of Interest: Money value (dollars), quantity (pounds), and nutritive values of food used by participants and nonparticipants in the Nutrition Assistance Program (NAP) and the Food Stamp Program (FSP) are of interest in determining the effectiveness of NAP compared to FSP.

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Selected Publications:

Mathematica Policy Research, Inc. Evaluation of the Nutrition Assistance Program in Puerto Rico, Vol. I: Environment,. Participation, Administrative Costs, and Program Integrity, A Report to the U.S. Congress. Washington: 1985.

Mathematica Policy Research, Inc. Evaluation of the Nutrition Assistance Program in Puerto Rico, Vol. II: Effect on Food Expenditure and Diet Quality, A Report to the U.S. Congress. Washington: 1985.

Devaney B, Fraker TM. Cashing out food stamps: Impacts on food expenditures and diet quality. J Policy Analysis and Management 5(4)725–41. 1986.

Fraker TM, Devaney B, Cavin ES. An evaluation of the effect of cashing out food stamps on food expenditures. American Economics Association Paper and Proceedings 76(2):230–4. 1986.

Food Stamp Program Cash-Out Evaluation in San Diego, Alabama, and Washington

Sponsoring Agency: Food and Nutrition Service, U.S. Department of Agriculture

Purpose: The evaluations were conducted to assess the effects of providing Food Stamp benefits in the form of cash rather than coupons on a Food Stamp recipient's household food purchases, food use and nutrient availability, household expenditures by major budget categories, and on food assistance program participation and administrative costs.

Conducted: San Diego, May–August 1990
Alabama, August–November 1990
Washington State, July–October 1990

Target Population: Households receiving check or coupon benefits in the three sites.

Sample Size and Response Rate(s):

	Sample size	*Response rate**
San Diego County . . .	1,078 households	78%
Alabama	2,291 households (½ rural; ½ urban)	78%
Washington State. . . .	1,184 households	75%

* Percent of eligible households completing the interview.

Design and Methods: San Diego and Alabama—Experimental design.
Washington State—Matched site design.

In-person interviews were conducted using an aided 7-day recall instrument similar to the NFCS household food use questionnaire.

Descriptive Variables: Race, age, sex, relationship to sampled person, household size, income, education, employment status, household expenditures, and participation in food assistance programs.

Outcome Variables of Interest: Quantity, total money value of purchased and nonpurchased food used at home per household and equivalent nutrition units (ENU), nutrients available to household per ENU, percent of RDA's and nutrient density for food used at home, nutrient availability per dollar, expenditures for food used at home and away from home, perceived adequacy of household food supplies, and days or meals with no food.

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Selected Key Publications: None to date. (Final Reports due: San Diego and Alabama—Spring 1992; Washington State—Summer 1992)

Surveillance Systems in States

States	Surveys			
	BRFSS	*PNSS*	*PedNSS*	*YRBS*
New England				
Maine	BRFSS		PedNSS	YRBS
New Hampshire	BRFSS	PNSS	PedNSS	YRBS
Vermont	BRFSS	PNSS	PedNSS	YRBS
Massachusetts	BRFSS	PNSS	PedNSS	YRBS
Rhode Island	BRFSS			YRBS
Connecticut	BRFSS		PedNSS	YRBS
Middle Atlantic				
New York	BRFSS	PNSS	PedNSS	YRBS
New Jersey	BRFSS	PNSS	PedNSS	YRBS
Pennsylvania	BRFSS	YRBS		
Puerto Rico		PNSS	PedNSS	YRBS
U.S. Virgin Islands				YRBS
East North Central				
Ohio	BRFSS			YRBS
Indiana	BRFSS	PNSS	PedNSS	YRBS
Illinois	BRFSS	PNSS	PedNSS	YRBS
Michigan	BRFSS	PNSS	PedNSS	YRBS
Wisconsin	BRFSS	PNSS		YRBS
West North Central				
Minnesota	BRFSS	PNSS	PedNSS	YRBS
Iowa	BRFSS	PNSS	PedNSS	YRBS
Missouri	BRFSS	PNSS	PedNSS	YRBS
North Dakota	BRFSS	PNSS	PedNSS	YRBS
South Dakota	BRFSS			YRBS
Nebraska	BRFSS	PNSS	PedNSS	YRBS
Kansas		PNSS	PedNSS	YRBS
South Atlantic				
Delaware	BRFSS		PedNSS	YRBS
Maryland	BRFSS		PedNSS	YRBS
District of Columbia	BRFSS	PNSS	PedNSS	YRBS
Virginia	BRFSS		PedNSS	YRBS
West Virginia	BRFSS			YRBS
North Carolina	BRFSS	PNSS	PedNSS	YRBS
South Carolina	BRFSS			YRBS
Georgia	BRFSS	PNSS	PedNSS	YRBS
Florida	BRFSS	PNSS	PedNSS	YRBS
East South Central				
Kentucky	BRFSS		PedNSS	YRBS
Tennessee	BRFSS	PNSS	PedNSS	YRBS
Alabama	BRFSS		PedNSS	YRBS
Mississippi	BRFSS	PNSS	PedNSS	YRBS
West South Central				
Arkansas			PedNSS	YRBS
Louisiana	BRFSS		PedNSS	YRBS
Oklahoma	BRFSS		PedNSS	YRBS
Texas	BRFSS			YRBS
Mountain				
Montana	BRFSS		PedNSS	YRBS
Idaho	BRFSS		PedNSS	YRBS
Wyoming		PNSS	PedNSS	YRBS
Colorado	BRFSS		PedNSS	YRBS
New Mexico	BRFSS		PedNSS	YRBS
Arizona	BRFSS	PNSS	PedNSS	YRBS
Navajo Nation			PedNSS	
Intertribal Council			PedNSS	
Utah	BRFSS	PNSS	PedNSS	YRBS
Nevada			PedNSS	YRBS
Pacific				
Washington	BRFSS		PedNSS	YRBS
Oregon	BRFSS		PedNSS	YRBS
California	BRFSS		PedNSS	YRBS
Alaska		PNSS	PedNSS	YRBS
Hawaii	BRFSS	PNSS	PedNSS	YRBS
American Samoa		PNSS		
Guam		PNSS		

Behavioral Risk Factor Surveillance System

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Fax# 301–333-2379

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617–770-7575
Fax# 617–770-7332

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Luetisha Newby (517) 373–1486
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Ottawa South Building, 2nd Floor
608 West Allegan, Box 30008
Lansing, Michigan 48909
Fax# 517–373-1233

Barbara Yates
Department of Education
AIDS Prevention/Risk Reduction
Capitol Square Building, Room 519
550 Cedar Street
St. Paul, Minnesota 55101
612–296-8415
Fax# 612–296-3272

Donna Lander (601) 359–3768
Anne Jordan (601) 359–3778
Bureau of School Improvement
550 High Street
Suite 804
P.O. Box 771, Sillers 1304
Jackson, Mississippi 39205
Fax# 601–359-2326

Nancee Allen
Department of Elementary and Secondary Education
Special Federal Instructional Programs
205 Jefferson Street
P.O. Box 480
Jefferson City, Missouri 65102
314–751-3805
Fax# 314–751-9434

Spencer Sartorius (406) 444–4434
Rick Chiotti (406) 444–1963
Office of Public Instruction
Curriculum Services Unit
Capitol Building
Helena, Montana 59620
Fax# 406–444-3924

JoAnne Owens-Nausler (402) 471–4334
Autumn Koch (402) 471–4342
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301 Centennial Mall South
Box 94987
Lincoln, Nebraska 68509
Fax# 402–471-2701

Robbie Bacon
Department of Education
Basic Education
Capitol Complex
400 West King Street
Carson City, Nevada 89710
702–687-3187
Fax# 702–687-5660

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101 Pleasant Street
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CN 500
225 West State Street
Trenton, New Jersey 08625
609–984-1890
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964 EBA
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518–474-1491
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65 South Front Street, Room 1005
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Department of Education
Bureau of Curriculum and Instruction
333 Market Street
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P.O. Box 759
Hato Rey, Puerto Rico 00919
809–753-0989
Fax# 809–250-8094

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School Support Services
22 Hayes Street
Providence, Rhode Island 02908
401–277-2651
Fax# 401–277-2734

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Department of Education
801 Rutledge Building
1429 Senate Street
Columbia, South Carolina 29201
803–734-8490
Fax# 803–734-8624

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Division of Instructional Services
700 Governors Drive
Pierre, South Dakota 57501–2293
605–773-3261
Fax# 605–773-6139

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Division of Curriculum and Instruction
4th Floor North Wing
Cordell Hull Building
Nashville, Tennessee 37243–0379
615–741-0874
Fax# 615–741-6236

Mary Ann Ricketson (512) 463–9501
B. J. Gibson (512) 463–9269
Education Agency
Division of General Education
1701 North Congress Avenue
Austin, Texas 78701
Fax# 512–475-3667

Laurie Lacy
Board of Education
Operations
250 East 500 S
Salt Lake City, Utah 84111
801–538-7864
Fax# 801–538-7521

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Department of Education
Basic Education
120 State Street
Montpelier, Vermont 05620
802–828-3124
Fax# 802–828-3140

Fran Meyer
Department of Education
Health, Physical Education, and Driver Education Service
101 North 14 Street, Box 6Q
Richmond, Virginia 23216–2060
804–225-3210
Fax# 804–225-2819

Pamela Tollefson
Education Department
Special Services and Professional Programs
Old Capitol Building, P.O. Box 47200
Olympia, Washington 98504–7200
206–586-0245
Fax# 206–586-0247

Lenore Zedosky (304) 348–8830
Nancy Parr (304) 348–8830
Department of Education
Office of Educational Support Services
Capitol Complex, Room B-309
Charleston, West Virginia 25305
Fax# 304–348-0048

Louise Root-Robins
Department of Public Instruction
Bureau of Pupil Services
125 South Webster Street
P.O. Box 7841
Madison, Wisconsin 53707–7841
608–267-3750
Fax# 608–267-1052

Bronwen Anderson
AIDS Education
1000 West 8th Street
Gillette, Wyoming 82716
307–686-0317
Fax# 307–682-6619

VII. Searching AGRICOLA and MEDLINE

What are AGRICOLA and MEDLINE?

AGRICOLA (AGRICultural OnLine Access) and MEDLINE are bibliographic data bases that include information about food and nutrition. AGRICOLA consists of citations for journal articles, monographs, theses, audiovisual materials, and technical reports relating to all aspects of agriculture, while MEDLINE is a biomedical data base consisting of citations from journal articles only. There are currently over 2.5 million records in the AGRICOLA data base and over 6.5 million records in MEDLINE. Most of the items listed in AGRICOLA are available at the U.S. Department of Agriculture's National Agricultural Library (NAL) located in Beltsville, Maryland. Journals from citations on MEDLINE can be found at the U.S. Department of Health and Human Services' National Library of Medicine (NLM) located in Bethesda, Maryland.

Access to AGRICOLA and MEDLINE

You can access AGRICOLA and MEDLINE through on-line vendors and on CD-ROM. For example, DIALOG Information Services, Inc., and BRS Information Technologies offer on-line access to AGRICOLA and MEDLINE. MEDLARS, the National Library of Medicine's Online Information Retrieval System, offers MEDLINE. MEDLINE and AGRICOLA on CD-ROM are produced by SilverPlatter, Inc., and are available at many libraries.

Searching AGRICOLA and MEDLINE—Some general tips

Before beginning to search a database, it is important to develop a search strategy. A search strategy contains the key words, phrases, or terms that you wish to search; synonyms for these terms; and how you want to combine the terms. Your search strategy should contain several terms for each aspect of the search. You can refer to the index on the CD-ROM version or use the EXPAND feature on-line to find related terms. AGRICOLA is indexed using terms from Great Britain's Commonwealth Agricultural Bureau (CAB) Thesaurus and Library of Congress subject headings and MEDLINE is indexed using terms from the National Library of Medicine's controlled vocabulary, MeSH (Medical Subject Headings).

Combining terms for your search strategy is based upon Boolean Logic which uses the operators AND, OR, and NOT. When you combine two terms with AND, you will get only citations that contain both terms. For example, if you use **pumpkin AND pie**, you will get all citations containing the words pumpkin and pie. When you use OR you will get citations containing either one term or the other. For example, if you use **pumpkin OR pie,** some of the citations will contain pumpkin and others will contain pie. If you use NOT, you will eliminate citations containing that term. For example, if you search **pumpkin NOT pie**, you will eliminate all citations containing the word pie. NOT is especially useful for eliminating unrelated terms.

Searching techniques differ for AGRICOLA and MEDLINE and depending on whether the search is done on-line or on a CD-ROM. For example, some sytems allow you to search consecutive words like **National Health and Nutrition Examination Survey,** while others only allow you to search using controlled vocabulary. In some cases, certain words cannot be used as part of your key words or phrases. These words are called stop words and include the Boolean operators AND, OR, and NOT, as well as other simple prepositions, such as FOR and BY. When these occur in the title of a survey, they need to be replaced with a code. The data base vendors, a librarian, staff at the Food and Nutrition Information Center (FNIC) of the National Agricultural Library, or at the MEDLARS Management Section at the National Library of Medicine can help you with these codes and with additional searching tips. The CD-ROM version contains an extensive set of help screens. Training for searching AGRICOLA on-line is available through the National Agricultural Library and for MEDLINE through the National Library of Medicine. Call for information about upcoming training sessions (see page 100 for telephone numbers).

Searching for Nutrition Monitoring Information (AGRICOLA only)

To search for citations about the nutrition monitoring surveys using AGRICOLA, it is best to search using the survey name. If the survey is sometimes referred to by a second or shortened name, you should also search for those terms. For example, if information is needed about the National Health and Nutrition Examination Survey, use Health and Nutrition Examination Survey. This will bring up both citations including the word National and those without it. Also use HANES and NHANES. When you combine these terms with OR, the duplicates will be removed.

If the name of the survey contains a range of years or a version number, add this information to the search separately from the name of the survey. For example, for information about NHANES III, combine your set of

survey names with **(III or THIRD)**. Most of the citations will be relevant.

When searching for a supplement or followup to a survey, do NOT include these terms as part of the name of the survey. For example, for the National Health Interview Survey—Supplement on Aging, use **National Health Interview Survey AND supplement**. You may also want to add **AND aging**, but wait to see how many references you retrieve. It is best to begin with a less specific search first, and then narrow your search as needed by adding more key words. Often just the survey name will bring up the relevant citations.

For some activities without a specific survey name, such as the U.S. Food and Nutrition Supply Series or the Nutrient Composition Laboratory, you need to search differently. For the U.S. Food and Nutrition Supply Series, you can find Economic Research Service publications by using the terms **(food AND consumption AND expenditures)** and limiting them to the title. Limiting the publishing agency to USDA will make the results more relevant. You can also use **food consumption United States or food prices United States**, but beware of items unrelated to the Federal activities.

Searching for the Nutrient Composition Laboratory and National Nutrient Data Bank is more difficult. For the best results, search by the name of a specific researcher as an author. You can also search for **(food composition OR composition tables)** and USDA as the publishing agency for citations published by USDA as a result of these activities.

For the Vital Statistics System, reports can be retrieved by entering **(vital AND health statistics)** in the subtitle. Many of these reports are about other Federal monitoring surveys. Using **vital statistics** brings up citations unrelated to the Vital Statistics System.

For More Information

For more information about how to search AGRICOLA or MEDLINE, contact the following:

AGRICOLA only:
Food and Nutrition Information Center (FNIC)
Room 304, National Agricultural Library Bldg.
10301 Baltimore Blvd.
Beltsville, Maryland 20705–2351
(301) 504–5719

MEDLINE only:
MEDLARS Management Section
National Library of Medicine
Building 38A, Room 4–421
8600 Rockville Pike
Bethesda, Maryland 20894
(800) 638–8480

VIII. Data Set Availability

As the previous chapters indicate, much data are generated by the surveys of the National Nutrition Monitoring Program. For selected surveys, agencies produce data sets for public use. The two cornerstone nutrition monitoring surveys, the Health and Nutrition Examination Surveys, and the Nationwide Food Consumption Surveys, offer a number of public-use data sets from their surveys. In addition, the Human Nutrition Information Service offers data sets on food composition.

In the following pages, the data sets available are listed, with pertinent ordering information. More complete information is available on data sets and information on how to order data sets in the following references:

National Center for Health Statistics. Catalog of electronic data products. Hyattsville, Maryland: Public Health Service. 1992.

U.S. Department of Agriculture. Machine-readable data sets on composition of foods and results from food consumption surveys. Administrative rep no 378. Hyattsville, Maryland: Human Nutrition Information Service. 1991.

The data sets are available through a number of routes. NCHS and HNIS distribute their data sets through the National Technical Information Service (NTIS). Other agencies use an internal data services office. For the data sets presented, information on all of these ordering routes have been included.

Most of the data sets are available on track tape, 1,600 or 6,250 bytes per inch (bpi), in extended binary coded decimal interchange code (EBCDIC), or American Standard Code for Information Interchange (ASCII) format. Some are available on 5¼ inch or 3½ inch floppy diskettes.

How to Order Publications from the U.S. Government Printing Office

Many reports and documents referenced in this Directory are available from the U.S. Government Printing Office (USGPO). For the USDA food composition publication, *USDA Handbook No. 8, Composition of Foods... Raw, Processed, Prepared* the USGPO stock numbers have been included (see page 71).

To order a publication from USGPO, you must have the publication title and publication stock number. Requests may be sent to:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
(202) 783–3238.
(Include name, address, and ZIP Code with requests.)

Publications can also be ordered by telephone, by calling (202) 783–3238. Again orders must include the publication's stock number and may be charged to Mastercard or VISA.

Because prices on publications are subject to change without notice, check with USGPO before ordering.

Additionally, 23 different statistical tabulations of the purchase and attitudinal data from the National Marine Fisheries Service National Seafood Consumption Survey (see page 42). The cost ranges from $.15–76.80. Requests may be sent to:

National Marine Fisheries Service
Fisheries Statistics Division- F/RE1
1335 East-West Highway
Silver Spring, MD 20910

The National Center for Health Statistics has catalogs listing publications and their USGPO stock numbers. The catalogs can be obtained by calling or writing to the following:

Scientific and Technical Information Branch
Division of Data Services
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, MD 20782
(301) 436–8500

National Center for Health Statistics. Catalog of Publications 1980–89. Washington: National Center for Health Statistics. 1990.

National Center for Health Statistics. Catalog of Publications 1990. Washington: National Center for Health Statistics. 1991.

How to order from NTIS

The costs for computer products in this catalog are identified with a price code. The National Technical Information Service (NTIS) price schedules convert price codes into actual prices. The price schedule shows the current price of each tape and diskette as of October 1991. Prices are expected to remain constant through December 1992. Then a current price quote will be available from NTIS or NCHS. The purchase price listed includes the cost of the magnetic tape and/or diskette and the printed documentation. Price codes are shown for tapes at 1600 bpi. NTIS also offers data stored on IBM 3480 cartridge tape. For price quotations for data stored on cartridge tape inquire at the NTIS Sales Desk (703) 487-4650. For those wishing to review a file before purchasing it, documentation can also be purchased separately. Requestors should contact the NTIS Sales Desk to order the documentation for any magnetic tape number.

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Discounts and credits are available for multiple copy purchases, to be mailed to the same address, academic libraries, State government organizations, and universities. For further information about discounts and credits contact the NTIS Sales Desk.

NTIS price schedules

The following schedules convert price codes into actual prices. (The prices quoted in this catalog are for 9 track, 1600 bpi, multi-reel data files. To order tapes at 9 track, 6250 bpi, contact NTIS for a price quote).

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T03	360	720	D03	140	280
T04	480	960	D04	195	390
T05	590	1,180	D05	250	500
T06	710	1,420	D06	300	600
T07	820	1,640	D07	360	720
T08	940	1,880	D08	410	820
T09	1,050	2,100	D09	460	920
T10	1,160	2,320	D10	520	1,040
T11	1,270	2,540	D11	570	1,140
T12	1,390	2,780	D12	630	1,260
T13	1,500	3,000	D13	680	1,360
T14	1,620	3,240	D14	740	1,480
T15	1,740	3,480	D15	790	1,580
T16	1,850	3,700	D16	840	1,680
T17	1,960	3,920	D17	890	1,780
T18	2,080	4,160	D18	950	1,900
T19	2,190	4,380	D19	1,000	2,000
T99	Contact NTIS for price	Contact NTIS for price	D99	Contact NTIS for price	Contact NTIS for price

NTIS® Order Form

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National Technical Information Service
Springfield, VA 22161

FAX this form (703) 321-8547

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Add $15 per report for the U.S., Canada, and Mexico or $25 for other countries. Rush is also available for computer products. *Do not mail rush orders.*

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Data Sets from the Surveys of the National Center for Health Statistics

Vital Statistics, Natality, Detail, 1968–88

Data year	Accession no.	Price code
1968	PB-238700	T07
1969	PB-238698	T13
1970	PB80-107006	T12
1971	PB80-107741	T12
1972	PB80-107766	T12
1973	PB80-107642	T12
1974	PB80-107683	T13
1975	PB80-107808	T15
1976	PB80-117153	T16
1977	PB-301360	T18
1978	PB80-188618	T16
1979	PB82-132325	T14
1980	PB83-154831	T14
1981	PB84-136159	T14
1982	PB85-153633	T14
1983	PB86-106275	T14
1984	PB86-233129	T19
1985	PB87-230694	T19
1986	PB88-241302	T19
1987	PB89-213524	T19
1988	PB90-504168	T19

Vital Statistics, Natality, Local Area Summary, 1968–88

Data year	Accession no.	Price code
1968	PB-238701	T02
1969	PB80-186299	T02
1970	PB80-107550	T03
1971	PB80-107709	T03
1972	PB80-107576	T03
1973	PB80-107519	T03
1974	PB80-107535	T03
1975	PB80-107725	T04
1976	PB80-107667	T04
1977	PB80-107782	T04
1978	PB80-186372	T03
1979	PB82-132283	T04
1980	PB83-154872	T04
1981	PB84-136118	T04
1982	PB85-153625	T04
1983	PB86-105897	T04
1984	PB86-233087	T04
1985	PB88-102322	T04
1986	PB88-241286	T04
1987	PB89-213508	T04
1988	PB90-504150	T04

Vital Statistics, Natality, State Summary, 1968–88

Data year	Accession no.	Price code
1968	PB-235643	T02
1969	PB-235644	T02
1970	PB-300426	T02
1971	PB-300428	T02
1972	PB-300430	T02
1973	PB-300584	T02
1974	PB-300588	T02
1975	PB-300586	T02
1976	PB-300590	T02
1977	PB-300592	T02
1978	PB80-186315	T02
1979	PB82-132309	T02
1980	PB83-154856	T02
1981	PB84-136134	T02
1982	PB85-153591	T02
1983	PB86-105608	T02
1984	PB86-233103	T02
1985	PB88-100433	T02
1986	PB88-241260	T02
1987	PB89-213482	T02
1988	PB90-504176	T02

Vital Statistics, Mortality, Detail, 1968–88

Data year	Accession no.	Price code
1968	PB-300800	T11
1969	PB-299676	T10
1970	PB-299679	T10
1971	PB-300802	T10
1972	PB-300885	T06
1973	PB-300805	T11
1974	PB-300807	T11
1975	PB-300809	T11
1976	PB-300811	T11
1977	PB-300798	T10
1978	PB81-125106	T09
1979	PB83-132357	T09
1980	PB83-261552	T09
1981	PB84-213016	T09
1982	PB85-163897	T09
1983	PB86-120441	T09
1984	PB87-129706	T09
1985	PB88-101316	T09
1986	PB89-121180	T09
1987	PB90-500133	T09
1988	PB91-506626	T09

Vital Statistics, Mortality, Local Area Summary, 1968–88

Data year	Accession no.	Price code
1968	PB-238827	T02
1969	PB80-126618	T02
1970	PB80-108749	T02
1971	PB80-126642	T02
1972	PB80-126667	T02
1973	PB80-133374	T02
1974	PB80-126683	T02
1975	PB80-134158	T02
1976	PB80-134117	T02
1977	PB80-131675	T02
1978	PB81-100232	T02
1979	PB83-143230	T04
1980	PB83-261636	T04
1981	PB84-212992	T04
1982	PB85-163913	T04
1983	PB86-120482	T04
1984	PB87-125639	T04
1985	PB88-101357	T04
1986	PB89-121586	T04
1987	PB90-500158	T04
1988	PB91-506642	T04

Vital Statistics, Mortality, Cause-of-Death Summary, 1968–88

Data year	Accession no.	Price code
1968	PB80-126550	T03
1969	PB80-133358	T03
1970	PB80-133333	T03
1971	PB80-133317	T03
1972	PB80-133275	T02
1973	PB80-126576	T03
1974	PB80-133291	T03
1975	PB80-134133	T03
1976	PB80-134091	T03
1977	PB80-126592	T03
1978	PB81-100257	T03
1979	PB83-132373	T04
1980	PB83-261578	T05
1981	PB84-213032	T05
1982	PB85-163764	T05
1983	PB86-120466	T06
1984	PB87-129680	T06
1985	PB88-101332	T06
1986	PB89-121602	T05
1987	PB90-500141	T05
1988	PB91-506634	T05

Vital Statistics, Mortality, Multiple Cause-of-Death, Detail, 1968–88

Data year	Accession no.	Price code
1968	PB82-191800	T11
1969	PB82-155011	T11
1970	PB82-121716	T11
1971	PB82-142654	T11
1972	PB82-191966	T08
1973	PB82-191644	T11
1974	PB82-186164	T11
1975	PB82-157322	T11
1976	PB81-186827	T14
1977	PB81-217382	T14
1978	PB82-105743	T14
1979	PB83-153031	T17
1980	PB84-112200	T17
1981	PB85-153617	T17
1982	PB85-224202	T17
1983	PB86-138831	T17
1984	PB87-161030	T17
1985	PB87-235057	T17
1986	PB89-121461	T17
1987	PB90-500448	T99
1988	PB91-507343	T19

Vital Statistics, Marriage Data, 1968–88

Data year	Accession no.	Price code
1968	PB-235645	T02
1969	PB-235646	T02
1970	PB80-186331	T02
1971	PB80-186356	T02
1972	PB80-185887	T03
1973	PB80-186273	T03
1974	PB80-185846	T03
1975	PB80-185903	T04
1976	PB80-185861	T04
1977	PB80-185804	T04
1978	PB81-164733	T04
1979	PB81-238743	T04
1980	PB83-261610	T04
1981	PB84-164201	T04
1982	PB85-221646	T04
1983	PB86-185923	T04
1984	PB87-197109	T04
1985	PB88-181987	T04
1986	PB89-221709	T04
1987	PB90-501842	T04
1988	PB92-500743	T04

Vital Statistics, Divorce Data, 1968–88

Data year	Accession no.	Price code
1968	PB-238824	T02
1969	PB-238825	T02
1970	PB80-186745	T02
1971	PB80-187164	T02
1972	PB80-187180	T02
1973	PB80-187149	T02
1974	PB80-187123	T02
1975	PB80-186786	T02
1976	PB80-186760	T02
1977	PB80-186729	T03
1978	PB81-100216	T03
1979	PB81-238800	T02
1980	PB83-242644	T02
1981	PB84-164185	T02
1982	PB85-179430	T02
1983	PB86-165248	T02
1984	PB87-125506	T02
1985	PB88-127865	T02
1986	PB89-209415	T02
1987	PB90-501891	T02
1988	PB91-507731	T02

Fetal Death Data, 1982–88

Data year	Accession no.	Price code
1982	PB89-164453	T02
1983	PB89-164479	T02
1984	PB89-164438	T02
1985	PB89-159487	T02
1986	PB89-164495	T02
1987	PB90-501883	T02
1988	PB92-501378	T02

Linked Birth and Infant Death Data, 1983–86

Data year	Accession no.	Price code
1983	PB89-158836	T09
1984	PB90-500174	T09
1985	PB90-502048	T11
1986	PB91-507442	T11

National Natality Surveys, 1964–66, 1967–69, and 1972

Data year	Accession no.	Price code
1964–66	PB-237326	T02
1967	PB-300997	T02
1968	PB-301157	T02
1969	PB-300999	T02
1972	PB-301358	T02

National Infant Mortality Survey, 1964–66

Data year	Accession no.	Price code
1964–66	PB-238560	T02

National Mortality Survey, 1966–68

Data year	Accession no.	Price code
1966–68	PB80-117138	T02

National Natality Survey and National Fetal Mortality Survey, 1980

Data year	Accession no.	Price code
1980	PB84-177310	T02

National Mortality Followback Survey, 1986

Data year	Accession no.	Price code
1986	PB90-501800	T03

National Maternal and Infant Health Survey, 1988

Data year	Accession no.	Price code
1988 (Mother's segment)	PB92-500081	T05

National Survey of Family Growth, 1973, 1976, 1982, and 1988

Data year	Accession no.	Price code
1973	PB-277054	T02
1976	PB-294480	T02
1976 couple	PB80-168206	T02
1976 combined	PB80-219702	T02
1982 combined respondent and interval file	PB85-100022	T02
1988	PB90-501248	T02

Compressed Mortality File, 1968–85

Data year	Accession no.	Price code
1968–85	PB88-246566	T02

Hispanic Health and Nutrition Examination Survey, 1982–84

	Title	Accession no.	Price code
HHANES –	Adolescent and Adult History Questionnaire, Ages 12–74 years, Version 2 (Tape No. 6521)	PB87-182440	T02
HHANES –	Alcohol Consumption, Ages 12–74 years (Tape No. 6533)	PB87-231304	T02
HHANES –	Blood and urine assessments, Ages 6 months–74 years, Version 3 (Tape No. 6511)	PB92-501691	T02
HHANES –	Body Measurements, Ages 6 months–74 years, Version 2 (Tape No. 6501)	PB87-152757	T02
HHANES –	Child History Questionnaire, Ages 6 months–11 years, Version 2 (Tape No. 6522)	PB87-182424	T02
HHANES –	Dental Health, Ages 6 months–74 years, Version 2 (Tape No. 6505)	PB88-103643	T02
HHANES –	Depression Measures, Ages 20–74 years, Version 2 (Tape No. 6523)	PB88-100391	T02
HHANES –	Diabetes and OGTT Data, Ages 20–74 years (Tape No. 6506)	PB89-121644	T02
HHANES –	Dietary Practices, Food Frequency, and Total Nutrient Intake, Ages 6 months–74 years, Version 3 (Tape No. 6525)	PB92-501279	T02
HHANES –	Drug Abuse, Ages 12–74 years (Tape No. 6543)	PB87-231288	T02
HHANES –	Gallbladder Ultrasound Data, Ages 20–74 years (Tape No. 6504)	PB89-164511	T02
HHANES –	Hearing, Ages 6 months–74 years (Tape No. 6502)	PB89-121669	T02
HHANES –	24-Hour Recall, Ages 6 months–74 years (Tape No. 6526)	Contact NCHS	
HHANES –	Physician's Examination, Version 2 (Tape No. 6509)	PB87-158416	T02
HHANES –	Vision, Ages 6–74 years, Version 1 (Tape No. 6507)	PB89-121628	T02

First National Health and Nutrition Examination Survey, 1971–75

	Title	Accession no.	Price code
NHANES I–	Anthropometry, Goniometry, Skeletal Age, Bone Density, and Cortical Thickness, Ages 1–74 years (Tape No. 4111)	PB-295908	T02
NHANES I–	Arthritis, Ages 25–74 years (Tape No. 4121)	PB-296018	T02
NHANES I–	Audiometric Test, Ages 25–74 years (Tape No. 4241)	PB-297337	T02
NHANES I–	Biochemistry, Serology, Hematology, Peripheral Blood Slide and Urinary Findings, Ages 1–74 years (Tape No. 4800)	PB-297344	T02
NHANES I–	Computer Measurement and Interpretations of Electrocardiograms, Ages 25–74 years (Tape No. 4140)	PB80-168222	T02
NHANES I–	Dental, Ages 1–74 years (Tape No. 4235)	PB-296023	T02
NHANES I–	Dermatology, Ages 1–74 years (Tape No. 4151)	PB80-130255	T02
NHANES I–	Dietary Frequency and Adequacy, Ages 1–74 years (Tape No. 4701)	PB-295906	T02
NHANES I–	General Well-Being, Ages 25–74 years (Tape No. 4171)	PB-296020	T02
NHANES I–	Health Care Needs, General Medical History, Sample Person Supplement, and Respiratory and Cardiovascular Supplements, Ages 25–74 years (Tape No. 4091)	PB-296029	T02
NHANES I–	Medical Examination, Ages 1–74 years (Tape No. 4233)	PB-296035	T02
NHANES I–	Medical History Questionnaire, Ages 1–11 years (Tape No. 4067)	PB-296031	T02
NHANES I–	Medical History Questionnaire, Ages 12–74 years (Tape No. 4081)	PB-296073	T02
NHANES I–	Model Gram and Nutrient Composition (Tape Nos. 4702 and 4703)	PB-296027	T03
NHANES I–	Near and Distant Vision, Ages 25–74 years (Tape No. 4163)	PB-295910	T02
NHANES I–	Ophthalmology, Ages 1–74 years (Tape No. 4161)	PB-296033	T02
NHANES I–	Pulmonary Diffusion, TB, Chest x-ray Planimetry, Heart Size, and Lung and Heart Pathology, Ages 25–74 years (Tape No. 4251)	PB87-126009	T02
NHANES I–	Spirometry best trials only, Ages 25–74 years (Tape No. 4250)	PB80-145931	T02
NHANES I–	24-Hour Food Consumption Intake, Ages 1–74 years (Tape No. 4704)	PB-297339	T05

Second National Health and Nutrition Examination Survey, 1976–80

	Title	Accession no.	Price code
NHANES II –	Allergy Skin Testing, Ages 6–74 years (Tape No. 5309)	PB86-121613	T02
NHANES II –	Anthropometric Data, Ages 6 months–74 years (Tape No. 5301)	PB82-191917	T02
NHANES II –	Audiometric Air Conduction Test, Ages 4–19 years (Tape No. 5306)	PB85-153609	T02
NHANES II –	Behavior Questionnaire, Ages 25–74 years (Tape No. 5317)	PB90-501578	T02
NHANES II –	Chest x-ray Examination, Ages 25–74 years (Tape No. 5252)	PB89-136667	T02
NHANES II –	Health History Supplement, Ages 12–74 years (Tape No. 5305)	PB83-256537	T02

Second National Health and Nutrition Examination Survey, 1976–80—Con.

	Title	Accession no.	Price code
NHANES II —	Hematology and Biochemistry Ages 6 months–74 years, Version 2 (Tape No. 5411)	PB90-500943	T02
NHANES II —	Medical History, Ages 6 months–11 years (Tape No. 5010)	PB83-215616	T02
NHANES II —	Medical History, Ages 12–74 years (Tape No. 5020)	PB83-154815	T02
NHANES II —	Model Gram and Nutrient Composition (Tape Nos. 5702 and 5703)	PB82-142613	T03
NHANES II —	Physician's Examination, Ages 6 months–74 years (Tape No. 5302)	PB86-242930	T02
NHANES II —	Total Nutrient Intake, Food Frequency, and Other Related Dietary Data, Ages 6 months–74 years (Tape No. 5701)	PB82-168261	T02
NHANES II —	24-Hour Recall-Specific Food Item, Ages 6 months–74 years (Tape No. 5704)	PB82-142639	T05

National Health Examination Survey, Cycle III, 1966–70

Title	Accession no.	Price code
NHES III—Extended Health Examination of Youths 12–17 years (Tape No. 3EDT)	PB-296025	T02

National Health Examination Survey, Cycle II, 1963–65

Title	Accession no.	Price code
NHES II—Integrated Data (Tape No. 21DT)	PB-293124	T02

National Health Examination Survey, Cycle I, 1959–62

Title	Accession no.	Price code
NHES I—Cardiovascular, Ages 18–79 years (Tape No. 1004)	PB-293138	T02
NHES I—Demographic Data Tape, Ages 18–79 years (Tape No. 1001)	PB-293134	T02
NHES I—Dental Findings, Ages 18–79 years (Tape No. 1006)	PB-293128	T02
NHES I—Diabetes, Ages 18–79 years (Tape No. 1007)	PB-293132	T02
NHES I—Osteoarthritis and Rheumatoid Arthritis, Ages 18–79 years(Tape No. 1005)	PB-293130	T02
NHES I—Physical Measurement, Ages 18–79 years (Tape No. 1003)	PB-293122	T02
NHES I—Summary of Psychological Distress, Ages 18–79 years (Tape No. 1002)	PB-293126	T02
NHES I—Vision data, Ages 18–79 years (Tape No. 1008)	PB-293136	T02

NHANES I Epidemiologic Followup Study, 1982–84, 1986 and 1987

Data year	Title	Accession no.	Price code
1982–84	Vital and Tracing Status	PB88-102264	T02
	Interview	PB88-121298	T03
	Health Care Facility Stay	PB88-102280	T02
	Mortality	PB88-102306	T02
1986	Vital and Tracing Status	PB90-501644	T03
	Interview	PB90-501677	T03
	Health Care Facility Stay	PB90-504077	T03
	Mortality	PB90-501651	T03
1987	Vital and Tracing Status	PB90-501162	T03
	Interview	PB92-501154	T03
	Health Care Facility Stay	PB92-501147	T03
	Mortality	PB92-501063	T03

National Health Interview Survey, 1969–90

Data year	Accession no.	Price code
1969	PB-235543	T07
1970	PB-237322	T07
1971	PB-238524	T07
1972	PB-285460	T08
1973	PB-285511	T07
1974	PB-285517	T07
1975	PB-281126	T07
1976	PB-300423	T07
1977	PB80-203953	T07
1978	PB81-179285	T07
1979	PB82-157173	T07
1980	PB83-248922	T07
1981	PB84-111657	T07
1982	PB85-236172	T06
1983	PB86-138856	T07
1984	PB87-121547	T07
1985	PB87-148144	T07
1986	PB88-146139	T06
1987	PB89-140651	T07
1988	PB90-501180	T07
1989	PB91-506279	T07
1990	PB92-501170	T07

Supplement on Aging, 1984

Data year	Accession no.	Price code
1984	PB92-501675	T02

Longitudinal Study of Aging, Version 3 and 4

Title	Accession no.	Price code
LSOA, Version 3	PB91-505388	T02
LSOA, Version 4	PB92-500099	T02
LSOA, Version 4 (Multiple cause-of-death diskette)	PB92-500115 (5¼ HD)	T02
	PB92-500123 (3½ HD)	T02

National Hospital Discharge Survey, 1970–90

Data year	Accession no.	Price code
1970	PB-270763	T02
1971	PB-270765	T02
1972	PB-270767	T02
1973	PB-270769	T02
1974	PB-270771	T02
1975	PB-270773	T02
1976	PB82-179227	T02
1977	PB82-179326	T02
1978	PB82-179342	T02
1979	PB82-179334	T02
1980	PB83-126318	T02
1981	PB85-152338	T03
1982	PB85-153658	T02
1983	PB85-152304	T02
1984	PB86-107737	T02
1985	PB87-125613	T02
1986	PB88-129440	T02
1987	PB89-121537	T02
1988	PB90-502329	T02
1989	PB91-507368	T02
1990	PB92-500818	T02

National Hospital Discharge Survey, Data Diskettes, 1985–90

Data Year	Title	Accession no.	Price code
1985	Data Access System	PB89-149637	D04
	All-Listed Diagnoses	PB89-149330	D01
1986	Data Access System	PB89-149629	D04
	All-Listed Diagnoses	PB89-149348	D01
1987	Multi-year Data Access System	PB89-138978	D04
	All-Listed Diagnoses	PB89-138986	D01
1988	Multi-year Data Access	PB90-502287	D04
	All-Listed Diagnoses	PB90-502261	D01
1989	Data Access System (5¼in 1.2M)	PB91-506857	D00
1989	All-Listed Diagnoses (5¼ inch 1.2M)	PB91-507079	D00
1989	Data Access System (5¼ inch 360K)	PB91-506865	D00
1989	All-Listed Diagnoses (5¼ inch 360K)	PB91-507087	D00
1989	Data Access System (3½ inch 1.44Mb)	PB91-506873	D00
1989	All-Listed Diagnoses (3½ inch 1.44Mb)	PB91-507111	D00
1989	Data Access System (3½ inch 720K)	PB91-506881	D00
1989	All-Listed Diagnoses (3½ inch 720K)	PB91-507103	D00
1990	Data Access System (All-listed files included) (5¼ inch 1.2Mb)	PB92-501071	D00
1990	Data Access System (All-Listed files included) (3½ inch 1.4Mb)	PB92-501089	D00

National Ambulatory Medical Care Survey, patient data, 1973, 1975–81,1985, and 1989–90

Data year	Accession no.	Price code
1973	PB-293900	T02
1975	PB-290478	T02
1976	PB-291152	T02
1977	PB80-130230	T02
1978	PB80-204092	T02
1979	PB82-122029	T02
1980	PB82-191941	T02
1981	PB84-188960	T02
1985	PB88-103676	T02
1989	PB91-509745	T02
1990	PB92-501683	T02

National Ambulatory Medical Care Survey, Drug Mentions, 1980–81, 1985, and 1989–90

Data year	Accession no.	Price code
1980	PB83-154799	T02
1981	PB83-199570	T02
1985	PB88-146113	T02
1989	PB92-500834	T02
1990	PB92-501840	T02

National Nursing Home Survey, 1969, 1973–74, 1977, and 1985

Data year	Accession no.	Price code
1969	Available from NCHS	
1973–74	PB89-159420	T05
1977	PB80-188030	T05
1977, 5-State	PB80-188717	T05
1985	PB89-159503	T02

National Nursing Home Survey: Next-of-Kin Component

Data year	Title	Accession no.	Price code
1986	Next-of-Kin Component	PB92-500826	T02

National Master Facility Inventory, Hospitals, 1971–76

Data year	Accession no.	Price code
1971	PB-284912	T02
1972	PB-284914	T02
1973	PB-284916	T02
1974	PB-284918	T02
1975	PB-284920	T02
1976	PB-284922	T02

Inventory of Long-Term Care Places, 1986

Data year	Accession no.	Price code
1986	PB88-110606	T02

National Master Facility Inventory, Nursing Homes and Other Health Facilities, 1971, 1973, 1976, 1980, and 1982

Data year	Accession no.	Price code
1971	PB-287270	T02
1973	PB-287268	T02
1976	PB-287230	T02
1980	PB83-178459	T02
1982	PB86-237872	T02

National Medical Care Utilization Expenditure Survey

Data year	Accession no.	Price code
1980 NMCUES	PB83-229542	T07
1980 NMCUES (diskettes)	PB86-167558	D12
1980 NMCUES family data tape	PB87-172326	T02

National Survey of Personal Health Practices and Consequences

Data year	Accession no.	Price code
Waves I and II	PB83-104323	T02
Waves I and II (diskettes)	PB86-167533	D04

National Health Interview Survey Public-Use Data Tapes—Current Health Topics, 1973–90

[Current health topics are added each year to the National Health Interview Survey's (NHIS) basic questionnaire. The current health topics generally change each year. These changes facilitate a response to the need for population-based data on current or emerging health issues and coverage of a wide variety of topics.

Data tapes on current health topics are only available for purchase from the Division of Health Interview Statistics, National Center for Health Statistics, 6525 Belcrest Road, Room 850, Hyattsville, Maryland 20782. Use the special National Health Interview Survey order form on the next page.]

Data year	Title	6250 bpi
1973	Prescribed Medicine	$160
1974	Currently Employed	160
	Hypertension	160
	Medical Care	160
1975	Accident	160
	HMO—All Persons	160[1]
	Physical Fitness	160
	HMO—Sample Person	160
	Family Medical Expenses	160
1976	Diabetes	160[1]
	Health Insurance	160[1]
	Health Habits	160
	Family Medical Expenses	160
1977	Disability	160[1]
	Health Insurance Supplement	160
	Hearing	160[1]
1978	Insurance	160[1]
	Smoking	160
1979	Home Care—Person Supplement	160[1]
	Smoking	160
	Residential Mobility	160
	Eye Care	160
1980	Smoking	160
	Health Insurance	160[1]
	Residential Mobility	160
	Home Care—Person Supplement	160[1]
1981	Child Health Supplement	160
1982	Preventive Care	160
	Health Insurance	160[1]
1983	Alcohol/Health Practices	160
	Bed Days and Dental Care	160
	Doctor Service Supplement	160
	Health Insurance (Quarters 3 and 4)	160
1984	Health Insurance	160
	Supplement on Aging	275
1985	Health Promotion and Disease Prevention—Sample Person Tape	160
	Smoking History During Pregnancy	160
	Child Safety/Infant Feeding	160
1986	Vitamin and Mineral Supplement Intake	200
	Dental Services	200
	Longest Held Job	200
	Functional Limitations	200
	Health Insurance	200
1987	Adoption	200
	AIDS Knowledge and Attitudes	200
	Cancer	200
	Cancer Control File	200
	Epidemiology Study File	200
	Both Cancer and Epidemiology Files	300
	Poliomyelitis	200
1988	Child Health	$200
	AIDS Knowledge and Attitudes	200
	Alcohol	200
	Medical Device Implants (MDI)	
	MDI Device File	200
	MDI Extended Person File	200
	Both Device and Extended Person	300
	Occupational Health	200
1989	AIDS Knowledge and Attitudes	200
	Dental Care	200
	Diabetes	200
	Digestive Disorders	200
	Health Insurance	200
	Immunization	200
	Mental Health	200
	Orofacial Pain	200
1990	AIDS Knowledge and Attitudes	200
	Health Promotion and Disease Prevention—Sample Person File	200
	Hearing	200
	Injury Control and Child Safety and Health	200
	Podiatry	200
	Pregnancy and Smoking	200

Special Studies

Longitudinal Study of Aging

The Longitudinal Study of Aging is a group of surveys based on the Supplement on Aging (SOA) to the 1984 National Health Interview Survey. The SOA was designed to obtain extensive information on family structure and frequency of contacts with children; housing, use of community and social supports; occupation and retirement; ability to perform work-related functions; conditions and impairments; functional limitations (activities of daily living and instrumental activities and providers of help in those activities).

Information was originally obtained for 16,148 persons 55 years of age and over. The survey was designed to follow up on subsamples of the original sample. Reinterviewing of the SOA cohort occurred in 1986, 1988, and 1990. Subsequent interviews were conducted to continue measuring changes over time. In addition, the records of the SOA sample persons are being linked with the National Death Index. As death is established through linkage, cause-of-death information is being obtained. A diskette containing cause-of-death information is available for use with the LSOA Version 4 and SOA public use tapes. Both the 1984 SOA and LSOA, Versions 3 and 4, are available from the Division of Health Interview Statistics and National Technical Information Service (NTIS). The Multiple Cause-of-Death diskettes are available only from NTIS. Ordering information is listed in the section, "Data Sets Available." The following prices are for tapes purchased directly from NCHS.

1986 – Longitudinal Study of Aging, Version - Reinterview	$220
1988 – Longitudinal Study of Aging, Version 2	200
1990 – Longitudinal Study of Aging, Version 3	220
1991 – Longitudinal Study of Aging, Version 4	240

[1]Unless otherwise stated, tape is at 6250 bytes per inch (bpi). Price of tape at 1600 bpi is $275.

ORDER FORM

NATIONAL HEALTH INTERVIEW SURVEY CURRENT HEALTH TOPIC DATA TAPES

DATA USE AGREEMENT—The Public Health Service Act (42 U.S.C. 242m(d)) provides that the data collected by the National Center for Health Statistics (NCHS) may be used only for the purpose for which they were obtained; any effort to determine the identity of any reported cases, or to use the information for any purpose other than for health statistical reporting and analysis, would violate this statutory restriction and the conditions of the data use agreement. NCHS does all it can to assure that the identity of data subjects cannot be disclosed; all direct identifiers, as well as characteristics that might lead to identifications, are omitted from the data set. Nevertheless, it may be possible in rare instances, through complex analysis, and with outside information, to ascertain from the data sets the identity of particular persons or establishments. Considerable harm could ensue if this were done.

Therefore, the undersigned gives the following assurances with respect to all NCHS data sets:

- I will not use nor permit others to use the data inthese sets in anyway except for statistical reporting and analysis;
- I will not release nor permit others to release the data sets or any part of them to any person who is not a member of this organization, except with the approval of NCHS;
- I will not attempt to link nor permit others to attempt to link the data set with individually identifiable records from any other NCHS or non-NCHS data set;
- I will not attempt to use the data sets to learn the identity of any person or establishment included in any set; and
- If the identity of any person or establishment should be discovered inadvertently, then (a) no use will be made of this knowledge, (b) the Director of NCHS will be advised of the incident, (c) the information that would identify an individual or establishment will be safeguarded or destroyed as requested by NCHS, and (d) no one else will be informed of the discovered identity.

My signature indicates my agreement to comply with the above-stated statutorily-based requirements with the knowledge that deliberately making a false statement in any matter within the jurisdiction of any department or agency of the Federal Government violates 18 U.S.C. 1001 and is punishable by a fine of up to $10,000 or up to 5 years in prison.

Signed:_____ Date:_____

Title:_____ Organization:_____

Data Tapes Ordered:_____

Proposed Use:_____

This form may be used for ordering data sets. Indicate the data sets you want, put your name and address below, enclose payment, and send to:

Division of Health Interview Statistics
National Center for Health Statistics
Centers for Disease Control
Presidential Building, Room 850
6525 Belcrest Road
Hyattsville, Maryland 20782
(301) 436-7087

Make check payable to:

U.S. Department of Health and Human Services for Statistical Studies

Send indicated data sets to:_____

USDA Data Sets on Composition of Foods and Results of Food Consumption Surveys

Food Composition Data Sets

USDA Nutrient Data Base for Standard Reference, Release 9, 1990*
PB90–502717
T02

USDA Nutrient Data Base for Standard Reference, Abbreviated Version, Release 9, 1990*
PB90–502568
T02

USDA Nutrient Data Base for Standard Reference, Update to Release 8; Section 13 from Agriculture Handbook No. 8*
PB90–502550
T02

Nutritive Value of Foods, in Home and Garden Bulletin No. 72, Revised 1990*
PB91–506956
T02

USDA Nutrient Data Base for Individual Food Intake Surveys
Release 1, 1980
PB82–138504/HBF
T02
Release 2, 1986
PB86–206299/HBF
T02
Release 2.1, 1986
PB87–181020
T02
Release for Hispanic Health and Nutrition Examination Survey, 1982–84. Available summer 1992.

Data Sets used to create Release 2 of USDA Nutrient Data Base for Individual Food Intake Surveys (four data sets on one tape)
PB86–206281/HBF
T02

1977–78 NFCS Food Codes (Release 1) Linked to 1985 Nutrient Data (Release 2)
PB87–142451
T02

USDA Nutrient Data Base for Household Food Use SurveysPB82–138496/HBF
T02

Data Set 102–1 (contains data on food yields and losses in preparation for 2,894 items)
PB81–146730/HBF
T02

Data Base for Pilot Study of Nutrient Content of School Lunches
PB84–196906/HBF
T02

Dietary Analysis Program for PC (on 5¼ inch diskettes- 360 KB or 1.2 MB or on 3½ inch diskettes- 720KB or 1.44MB)
PB90–501826 (5¼ inch, 360KB), PB90–504101 (5¼ inch, 1.2MB),
PB90–504085 (3½ inch, 720KB), PB90–504093 (3½ inch, 1.44MB)
N01

* Also available on 5 ¼ inch diskettes (360KB or 1.2MB) or on 3½ inch diskettes (720KB or 1.44MB)

Survey Data Sets

NFCS 1977–78 Household Data:
Spring Basic Household Food Consumption Survey, 1977–78
PB80–190176/HBF
T03

Summer Basic Household Food Consumption Survey, 1977–78
PB80–197411/HBF
T03

Fall Basic Household Food Consumption Survey, 1977–78
PB80–200215/HBF
T03

Winter Basic Household Food Consumption Survey, 1977–78
PB80–202542/HBF
T03

Puerto Rico Household Food Consumption Survey, 1977–78
PB82–138454/HBF
T03

Alaska Household Food Consumption Survey, 1977–78
PB81–146763/HBF
T02

Hawaii Household Food Consumption Survey, 1977–78
PB81–146755/HBF
T02

Elderly Household Food Consumption Survey, 1977–78
PB83–137281/HBF
T02

Low-Income I, Household Food Consumption Survey, 1977–78
PB81–114399/HBF
T02

Low-Income II, Household Food Consumption Survey, 1979–80
PB82–138470/HBF
T02

NFCS 1977–78 Individual Intake Data:
Spring Basic Individual Food Intake Survey, 1977–78
PB80–190218/HBF
T05

Summer Basic Individual Food Intake Survey, 1977–78
PB80–197429/HBF
T04

Fall Basic Individual Food Intake Survey, 1977–78
PB80–200223/HBF
T05

Winter Basic Individual Food Intake Survey, 1977–78
PB80–118853/HBF
T05

Puerto Rico Individual Food Intake Survey, 1977–78
PB82–138462/HBF
T04

Alaska Individual Food Intake Survey, 1977–78
PB81–162539/HBF
T02

Hawaii Individual Food Intake Survey, 1977–78
PB81–146771/HBF
T02

Low-Income I, Individual Food Intake Survey, 1977–78
PB81–118838/HBF
T06

Low-Income II, Individual Food Intake Survey, 1979–80
PB82–138488/HBF
T03

Spring Individual Food Intake, 1965
PB80–195415/HBF
T03

Spring and Summer Elderly Individual Food Intake Survey, 1977–78
PB83–134023/HBF
T02

Fall and Winter Elderly Individual Food Intake Survey, 1977–78
PB86–206307/HBF
T02

CSFII 1985 and 1986 (available on microfiche or paper copy of microfiche also):
Women 19 to 50 Years and Their Children 1 to 5 Years, 1 Day, 1985
PB86–171006
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 1 Day, 1985
PB87–197158
T03

Men 19 to 50 Years, 1 Day, 1985
PB87–197141
T03

Women 19 to 50 Years and Their Children 1 to 5 Years, 4 Days, 1985
PB88–201249
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 4 Days, 1985
PB88–245121
T03

Women 19 to 50 Years and Their Children 1 to 5 Years, 6 Waves of Data, 1985PB88–122411
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 6 Waves of Data, 1985
PB89–154330
T03

Women 19 to 50 Years and Their Children 1 to 5 Years, 1 Day, 1986
PB88–117767
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 1 Day, 1986
PB89–124382
T03

Women 19 to 50 Years and Their Children 1 to 5 Years, 4 Days, 1986
PB89–154355
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 4 Days, 1986
PB89–205520
T03

Women 19 to 50 Years and Their Children 1 to 5 Years, 6 Waves of Data, 1986
PB89–154371
T03

Low-Income Women 19 to 50 Years and Their Children 1 to 5 Years, 6 Waves of Data, 1986
PB89–205546
T03

NFCS 1987–88 Individual Intake:
Nationwide Food Consumption Survey, 1987–88
Individual Intake
PB90–504044
T05

NFCS 1987–88 Household Use of Food:
Nationwide Food Consumption Survey, 1987–88
Household Use of Food
PB92–500016
T04

National Marine Fisheries Service/ National Oceanic and Atmospheric Administration

NMFS Consumption Data Tapes
PBN294725
$240.00

Tapes Available From Sources Other Than NTIS

Department of Census

Survey of Income and Program Participation

To order microdata files or reports of SIPP data, users should call the Bureau of Census Data User Services Division on 301–763-4100.

Quarterly cross-sectional reports were released for the core data collected in 1983 and 1984. This series of quarterly reports was replaced by annual cross-sectional, topical module, and longitudinal reports.

Public use files containing the core data on income recipiency and program participation are currently available for all waves (1–9) of the 1984 Panel. Files containing core and topical module data (where applicable) are also available for all waves of the 1984, 1985 (Waves 1–8), 1986 (Waves 1–7), 1987 (Waves 1–7), and 1988 (Waves 1–6) Panels. Core data files are available for Waves 1–4 of the 1990 Panel. A topical module file is available for Wave 2 of the 1990 Panel.

A preliminary research longitudinal data file showing monthly data for the first three interviews from the 1984 Panel is available on a limited basis. Full 1984, 1985, and 1986, and 1987 Panel longitudinal research files are also available.

The Census Bureau also has a data extraction system called "SIPP On Call" which allows users to call and create extracts from a limited number of SIPP public use files. Users who would like more information about "SIPP On Call" should call 301–763-8378.

Bureau of Labor Statistics

Consumer Expenditure Surveys

The Bureau of Labor Statistics makes available micro-level data from the ongoing Consumer Expenditure Surveys on public use microdata tapes. The tapes contain information on consumer expenditures, income, demographic characteristics, and inventories of durable goods. Data records for each consumer unit participating in the quarterly interview and weekly diary surveys are on these computer tapes. Participants are not identified by names and addresses. The public use tapes contain expenditure and income information on each consumer unit, but certain restrictions have been applied to prevent identification of a respondent. These limitations include geographical and value restrictions. The ongoing survey consists of two separate components, each with a different data collection technique and sample. A description of the survey, including a detailed explanation of sample design, may be found in "Chapter 18 Consumer Expenditures and Income," from the BLS Handbook of Methods.

Tapes Available:

1984 to present
Single year tapes for the Interview and Diary survey are available from 1984 to present. The interview tapes contain 5 quarters of data. For example, the 1990 Interview tape has data collected in quarters, 1990-quarter 1 through 1991-quarter 1.

EXPN single year tapes are available from 1988 to present. The EXPN tape contains two major data files; a family characteristics and income file and a member characteristics and income file. The tape also includes 44 files from the interview questionnaire sections, one processing file, and a documentation file.

Prior to 1984
Two-year tapes for the Interview and Diary Survey are available for 1980–81 and 1982–1982. The Interview tapes contain 9 quarters of data. For example the 1980–81 Interview tape has data collected in quarters, 1980–quarter 1 through 1982–quarter 1.

1972–73 Consumer Expenditure Tapes
Interview tapes: Summary, Detailed, Inventory of Consumer Durables, Quantity of Clothing and Household Textiles
Diary Tapes: Original, Food quantity, Integrated adjusted

1960–61 Consumer Expenditure data
EBCDIC 1600 bpi tapes are available for 1960–61, 1972–73, and 1980–87 tapes.

For further technical information, contact:
Division of Consumer Expenditure Surveys
Bureau of Labor Statistics, Room 4216
600 E Street, NW.
Washington, DC 20212
Phone (202) 272–5060

For purchasing information, contact:
Division of Financial Planning and Management
Bureau of Labor Statistics, Room 2115
441 G Street, NW.
Washington, DC 20212
Phone (202) 523–1057

Food and Drug Administration

Division of Consumer Studies

Data tapes and documentation are available on a case-by-case basis for selected surveys at the Division of Consumer Studies. The data are available as SAS or EBCDIC files and generally consist of the raw questionnaire data. Tapes may be obtained for the 1982, 1986, 1988, and 1990 Diet and Health Surveys (see page 127). Tapes may also be obtained for the 1980 Vitamin and Mineral Intake Survey (see page 88) and the 1991 Survey of Weight Loss Practices (see page 125). To obtain more information or to order tapes write or call:

Alan S. Levy, Ph.D.
Division of Consumer Studies
Food and Drug Administration
200 C Street, SW. (HFF-240)
Washington, DC 20204
(202) 245–1457

Center for Food Safety and Nutrition

Langual

The Langual indexing vocabulary and indexed foods are available on the Parklawn computer system. Access to the system is available through NTIS. Government users may access the Parklawn Computer Center directly. The indexing vocabulary and indexed foods are also available on floppy disk. Contact the Langual contacts listed below and on page 75 for information on ordering.

Michele R. Chatfield
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