Vital and Health Statistics

Plan and Operation of the Third National Health and Nutrition Examination Survey, 1988–94

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This report describes the plan and operation of the third National Health and Nutrition Examination Survey. The sample for this study of the U.S. population was selected from households in 81 counties across the United States. About 40,000 persons 2 months of age and over were selected, including large samples of both young and old persons. About 12,000 of the sample persons were black Americans, 12,000 were Mexican-Americans, and the remaining 16,000 were of all other race and ethnicity groups. All selected persons were asked to complete an extensive interview and an examination in a large mobile examination center. The survey period is 1988–94, consisting of two phases of equal length and sample size. Both Phase 1 and Phase 2 were random samples of the U.S. population living in households.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service Centers for Disease Control and Prevention National Center for Health Statistics

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Preface and acknowledgments

Planning and implementing the third National Health and Nutrition Examination Survey, 1988–94 (NHANES III), involved hundreds of people in numerous organizations. It is not possible to list all the individuals, but we thank every one of them. Without their diligent efforts, the national resource represented by the NHANES III data would be significantly diminished in scope and quality.

The outstanding work of the staff of the Division of Health Examination Statistics whose involvement began in the conceptualization phase of the study and continues through the analysis and release of the information is clear and commendable. We also thank the staffs of other units of the National Center for Health Statistics: the Office of Research and Methodology, whose technical consultation has been invaluable; the Office of Data Processing and Services, who aided in the processing of the data and the publication of this report; and the Office of Analysis and Epidemiology, who contributed at each stage of the study. Special recognition is given to staff of the National Center for Environmental Health, most particularly those in the Division of Environmental Health Laboratory Sciences, Nutritional Biochemistry, Molecular Biology, and Toxicology Branches, who have provided valuable advice and developed and maintained outstanding systems to produce comparable analyses of biological materials over the years of the study.

The NHANES III was truly a collaborative effort with more than 20 organizations and their staffs. Without their support, the study could not have been undertaken. The following organizations supported the program in major ways—funding, staff support, intellectual development and consultation, or direct contractual arrangements:

Department of Health and Human Services

Centers for Disease Control and Prevention, Agency for Toxic Substance and Disease Registry:

- National Center for Chronic Disease Prevention and Health Promotion
- National Center for Environmental Health
- National Center for Infectious Diseases
- National Center for Preventive Services
- National Institute for Occupational Safety and Health
- Agency for Toxic Substance and Disease Registry

Food and Drug Administration:

- Center for Biologics Evaluation and Research
- Center for Devices and Radiological Health
- Center for Food Safety and Applied Nutrition

Health Resources and Services Administration:

• Division of Maternal and Child Health

National Institutes of Health:

- National Institute on Aging
- National Institute of Arthritis and Musculoskeletal and Skin Diseases
- National Institute of Allergy and Infectious Diseases
- National Institute of Child Health and Human Development
- National Institute on Deafness and other Communication Disorders
- National Institute of Dental Research
- National Institute of Diabetes and Digestive and Kidney Diseases
- National Heart, Lung, and Blood Institute
- National Library of Medicine
- National Institute on Drug Abuse
- National Institute on Mental Health

Substance Abuse and Mental Health Services Administration:

• Center for Substance Abuse Prevention

Social Security Administration:

Office of Disability

Department of Agriculture

Human Nutrition Information Service Agricultural Research Service

Environmental Protection Agency

Office of Health Research

Department of Commerce

National Institute of Standards and Technology

Recognition for the contractors and consultants who have been associated with all phases of the study from design through final editing and processing of the data is warranted. We embarked upon a mammoth national study that required attention to minute detail and engaged with them in a process of continuous improvement and evaluation. The completeness and quality of the final products are a tribute to their organizations and staffs. Special thanks to the headquarters and field staff of Westat, Inc., who were the primary contacts with the communities and individuals who participated in the study. They interviewed, they measured, they transmitted the information and materials to the central processing unit, and they worked with us to ensure the highest quality of data.

We thank the contract diagnostic centers and laboratories and their staffs for working with us so diligently. They performed, documented the quality of, and aided us in the interpretation of measures and tests; these organizations are listed in appendix table III.

We thank the community leaders who helped us set up and operate our examination centers in each of our study sites; they helped us establish credibility among those selected for the study. Finally, we thank those who participated in the study. Their personal contribution of time and effort will help us better understand and possibly improve the health and nutritional status of all Americans.

Introduction

The third National Health and Nutrition Examination Survey (NHANES III) is the seventh in a series of national examination studies conducted in the United States beginning in 1960. Three of these studies, the National Health Examination Surveys (NHES) (1–3) were conducted in the 1960's. Beginning in 1970 a large nutrition component was added to the basic design, and the name was changed to the National Health and Nutrition Examination Survey (4–6). A special study of Hispanic populations in the United States was conducted in 1982–84 (7). These studies have contributed to our knowledge of public health in the United States and have contributed to the formulation and conduct of public health policy.

Planning for the NHANES III began in 1985 with a broad solicitation for topics to be considered for inclusion in the survey. Announcements were published in professional journals and newsletters, and letters were sent to all parts of the Public Health Service and other parts of the Federal Government. As a result of this solicitation for topics, about 100 suggestions were received. All of these suggestions were considered and some were developed into 30 detailed proposals by the National Center for Health Statistics (NCHS) staff and collaborators and were peer-reviewed by 20 staff members at the NCHS. Evaluation criteria were: scientific worth, public health importance, practical utility, and feasibility. Protocols for the worthy proposals were developed by NCHS staff and Federal collaborators, and these projects were tested during the three pilot studies and the dress rehearsal. The topic areas included in the NHANES III and their rationale, aims, and methods are described in this report.

As a result of the broad solicitation for topics, many parts of the Public Health Service and other parts of the Federal Government displayed great interest in collaborating with NCHS on the design and operation of the NHANES III and the analysis of the data. The NHANES III Research Consortium of Federal Agencies resulted from this interest.

The goals of the NHANES III are in many respects similar to those of earlier NHANES:

- 1. to estimate the national prevalence of selected diseases and risk factors
- 2. to estimate national population reference distributions of selected health parameters
- 3. to document and investigate reasons for secular trends in selected diseases and risk factors
- 4. to contribute to an understanding of disease etiology
- 5. to investigate the natural history of selected diseases

Previous NHANES have shared the first three of these goals, but the last two are new for the NHANES III. The previous NHANES were designed as descriptive surveys and sometimes used for analytic purposes. The NHANES III has been designed to be both a descriptive survey and an analytic study as well, and the last two goals in the list reflect this new analytic intent of the study design. The NHANES III was also intended to be a longitudinal study enhancing the analytic goals of the study.

The sample for the NHANES III was selected from households in 81 counties across the United States. The survey period is 1988–94, consisting of two phases of equal length and sample size. Both Phase 1 and Phase 2 comprise random samples of the U.S. population living in households. About 40,000 persons 2 months of age and over were selected and asked to complete an extensive interview and an examination in a large mobile examination center.

The goals of the NHANES III included the need for precise descriptive information on the health status of selected population groups of the United States and required that these groups be sampled in large proportions to ensure the precision of the information. Children aged 2 months to 5 years and persons 60 years of age and over comprised two of these groups. Children in this age group represent about 23 percent of the NHANES III sample but only 9 percent of the U.S. population. Growth charts were produced from the NHANES I, NHES II, and NHES III (8) and have been used worldwide as a reference standard, although with some known methodological limitations. Revised growth charts, which required about 9,400 children aged 2 months to 5 years to obtain estimates of the required precision, will be produced from the NHANES III data and will correct these limitations. The U.S. population is aging, and health issues regarding the elderly have grown in importance in recent years. Therefore, a large number of elderly persons was also selected for the survey. Persons 60 years of age and over (about 8,200 persons) represent 20 percent of the NHANES III sample and 16 percent of the population.

The previous NHANES II and the Hispanic HANES have shown that some minority groups in the United States can have very different health status and characteristics, and thus black Americans (12,000) and Mexican-Americans (12,000) were selected for the NHANES III in large numbers also. Each of these groups separately comprises 30 percent of the sample but only 12 percent and 5 percent of the population, respec-

tively. These data will allow the investigation of risk factors that may explain ethnicity or racial differences in health and nutritional status.

As previously mentioned, growth charts were produced from the earlier NHANES I and have been adopted by the World Health Organization as the standard for comparison (8). The National High Blood Pressure Education Program and the National Cholesterol Education Program, both programs of the National Heart, Lung, and Blood Institute, use data from the NHANES to track secular trends in high blood pressure (9) and blood cholesterol (10-12) and to evaluate the progress in reducing the U.S. population's risk for heart disease. In the 1980's the data on blood lead from the NHANES II (1976–80) were instrumental in persuading policymakers to eliminate lead from gasoline (13). The NHANES is the cornerstone of the Department of Health and Human Services efforts to meet the requirements of the National Nutrition Monitoring and Related Research Act of 1990 (14), and the Surgeon General's Report on Nutrition and Health makes liberal use of the data from the NHANES (15). Thirty-three of the National Health Promotion and Disease Prevention Objectives of the Healthy People 2000, including six objectives in the nutrition priority area, rely on the data collected in the NHANES to evaluate the Nation's progress in meeting these objectives (16). Although this is a short list of the contributions of the NHANES, many more could be listed. A bibliography of articles using the NHANES surveys lists nearly 750 articles published by university researchers and Public Health Service staff in the period 1980-92. The breadth and depth of topics covered in the NHANES III are greater than found in previous studies. As a result, the NHANES III should make an even greater contribution to the Nation's dialogue on public health issues.

This report is an overview of the plan and operation of the NHANES III. Health policymakers that use the information obtained in the NHANES III will gain better insight into the strengths and limitations of the study and therefore, its applicability to the policy issues under their consideration. Those who use the public release data sets for the NHANES III will find this report to be useful and to provide information that will allow them to use the data sets intelligently. (NCHS

requests that researchers using the NHANES III include this acronym or the full study name in their abstracts for their published papers to facilitate identification in health bibliographic data bases.) Others may wish to design studies using the methods employed in the NHANES III for comparability purposes and will need to reference the data collection instruments. The aims of the study and the rationales will also be helpful to these other study planners.

Using the NHANES III methods and instruments in other studies conducted in the United States and other countries allows the comparison of the results from these studies with data collected nationwide in the NHANES III. In 1992 the Division of Health Examination Statistics (DHES) within NCHS was appointed as a World Health Organization (WHO) Collaborating Centre for Health and Nutrition Examination Surveys. The terms of reference for the center are: (1) to support the World Health Organization's programs in noncommunicable diseases; (2) to give advice and technical assistance and to provide training to developed and developing countries that wish to carry out national or subnational health and nutrition examination surveys; (3) to serve as an archive for methods and data from national and subnational health and nutrition examination surveys; and (4) to coordinate and facilitate efforts to integrate data from surveys by other WHO member states to provide more useful data for health policy, planning, or epidemiologic analyses.

The section entitled "Health status assessment" briefly describes the rationale, aims, and methods for each of the study components for the health status assessment; the next section is similarly organized for nutritional status assessment. "Sample design and analysis guidelines" briefly describes the sample design for the NHANES III, which is more completely described elsewhere (17), and issues related to the analysis of the data. "Data collection and reports of findings" describes the operational plan for the survey, including safety and ethical issues. Several appendixes are also included that contain the data collection instruments and lists of the examination components and laboratory measurements. Detailed descriptions of the data collection procedures are available from NCHS in an extensive set of data collection manuals.

Health status assessment

Because of the variety and complexity of the data collected in NHANES III, the information in this section is presented in different ways. The first part provides overviews of some of the main areas of special interest addressed in NHANES III and highlights some of the public health and scientific issues covered by the survey in each of these areas. The second part provides a more detailed account of the data collected by examination and interview for each of the major health topic areas included in the survey. The third part describes the risk factors and health behaviors measured in NHANES III, and the fourth part describes three special studies.

Health of population subgroups and topics of special interest

In this section some of the major contributions made by NHANES III in assessing and monitoring the health of population subgroups of interest, including children and adolescents, the elderly, women, and minorities, are described. Also covered are contributions in providing information on special topics, including environmental and occupational health and the assessment of health care coverage and needs. NHANES III is a national survey, designed to collect information to assess the health status of the entire U.S. civilian, noninstitutionalized population. Within that framework, however, the survey was also designed to sample large numbers of young children, older persons, black persons, and Mexican-Americans, so that reliable estimates of health status can be produced for these population subgroups.

Child and adolescent health

NHANES III is the first NHANES to include children as young as 2 months of age. The survey was designed to oversample children aged 2 months to 5 years so new growth charts could be created for use in assessing children's growth and development. To increase the response rates among infants aged 2–11 months, the option of a home examination was offered to parents unwilling to bring very young children to the mobile examination center (MEC).

NHANES III data on child health are relevant to many key areas of public health for children in the United States. Environmental lead exposure and progress in reducing children's lead exposure were assessed by questionnaire data and measurements of blood lead levels for all children 1 year of age and over. Information on children's exposure to tobacco smoke was gained by questionnaire data on smoking by household members, coupled with measurement of serum cotinine levels. Measurements of hepatitis B markers, tetanus antitoxin, diphtheria antibody, and rubella antibody levels serve to assess and monitor immunization levels in children. The use of NHANES III data in the creation of new growth charts is discussed in more detail in the section "Nutritional health assessment." Also relevant to child health is the knowledge gained from NHANES III about the health status of women of childbearing age, including folate status and susceptibility to the rubella virus.

The content of the survey varied for children of different ages. However, in general, for infants and young children (2 months to 5 years of age), the survey included information on oral health, growth, and motor and social development. For older children and adolescents, NHANES III collected data on varied conditions that include asthma and allergy, pulmonary function, oral health, hearing, cognitive function, blood pressure, and stage of sexual maturation as well as questionnaire data on physical activity and tobacco use and many laboratory determinations. In addition, adolescents were asked in private interviews about tobacco, drug, and alcohol use, reproductive history, and mental health.

Health of older persons

NHANES III is the first NHANES to include persons 75 years of age and over. In order to address scientific and policy issues pertinent to the older population in the United States, NHANES III included an oversample of older persons (aged 60 years and over). To minimize nonresponse in older persons, a home examination was developed for those persons who were unable or unwilling to come to the MEC for a complete examination. This home examination included an abbreviated set of measures parallel to those performed in the MEC.

The survey content of NHANES III is particularly useful for the study of the contribution of multiple diseases to disability in old age. As covered in other sections of this report, this content included nutritional status, cardiovascular disease, pulmonary disease, dental disease, diabetes, retinopathy, osteoarthritis, and osteoporosis. Besides these specific diseases, the survey included measures of functional status in older persons to ascertain the prevalence of disability and limitations in function and the correlations of patterns of disease with functional health status. The survey addressed

three major areas of function: social, cognitive, and physical function. Much of the content of NHANES III in these areas was shaped by a special workshop, "Innovations in the Measurement of Function for Older Persons: A Focus on National Surveys," held in September 1985.

Minority health

NHANES III is the first NHANES to include planned oversampling of the two largest minority groups in the United States. The black and Mexican-American populations were oversampled to obtain statistically reliable estimates for the two largest minority groups in the United States. In previous national surveys, although these groups were included in the sample according to their representation in the national population, sample sizes were often too small to provide adequate estimates. As a result, it was decided to include planned oversampling of these two groups in NHANES III.

The content of the examination is targeted to the national population as a whole and to specific age ranges, rather than to specific minority groups. However, many health conditions studied in the survey occur at high rates in minority populations, including diabetes mellitus among Mexican-Americans and hypertension among black persons. The survey provides extensive data for minorities on chronic diseases, renal function, pulmonary function, environmental exposures, immunization status, risk factors, and health behaviors. In addition, because the survey included oversampling of children and the elderly, NHANES III provides information on the health of black and Mexican-American children and older persons. In many of these areas, NHANES III provides the first comprehensive national data and reference standards for the black and Mexican-American populations. Further, NHANES III data allow for valid comparisons among different race-ethnic groups because data were collected in a standardized manner for all survey participants. Race-ethnic groups were defined based upon combinations of the reported race and reported ethnicity of survey participants. These data can be used to provide insight into the causes and concomitants of the disparities in health status among race-ethnic groups in the United States.

Women's health

Women's health has traditionally referred primarily to issues related to reproduction. In recent years there has been a heightened awareness that women's health encompasses a wide range of conditions, for many of which adequate data are lacking. Although NHANES III does not include oversampling of the female population, it was designed to include equal numbers of males and females in each age and race-ethnic subgroup. Thus the survey provides extensive data on the health status of girls and women in the United States. Because the survey included special emphasis on the health of older persons, as well as oversampling of minority populations, data will be available on older women and on black and Mexican-American women. Many of the components in NHANES III were also included in previous surveys, allowing study of trends over time.

The survey content includes extensive information on reproductive health as well as on many conditions that are either of high prevalence in women or that occur more frequently in women than in men. These conditions include cardiovascular disease, the leading cause of death in women (18), osteoporosis, diabetes, arthritis, thyroid dysfunction, obesity, gallbladder disease, and mental conditions.

Environmental and occupational health

NHANES III provides new national population data relevant to occupational and environmental health. Markers of exposure to toxic metals and assessments reflecting indoor air quality were the focus of the environmental health data collected in the survey. These activities were, in part, a response to Title IV (Radon Gas and Indoor Air Quality Research) of the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99–499).

In NHANES III, blood lead level, a key indicator of exposure to environmental lead, was measured for the second time in the U.S. population. NHANES II (1976–80) lead data were used extensively to assess the extent of exposure to lead in the United States, to identify correlates of exposure (e.g., urbanization, age), to monitor trends in exposure, to support policy and regulatory decisions regarding lead in gasoline, and to identify health effects resulting from lead exposure (e.g., blood pressure elevations, diminished height in children) (19). It is expected that the lead data from NHANES III will serve a similar purpose during the 1990's. Cadmium, a toxicologic concern ranking close to that of lead (20), was measured for the first time in NHANES III.

In 1985, the Interagency Committee for Indoor Air Quality identified NHANES III as providing an important opportunity to examine the relation of indoor pollutant exposures to potential health effects on a national basis (21). Although levels of indoor air pollutants were not directly measured in the NHANES III homes, data were collected on housing characteristics, water sources, and cooking and heating fuel systems. Information on health outcomes related to the indoor environment included data on respiratory symptoms and smoking history, measurements of allergic reactivity to mites (house dust), pulmonary function testing, and the physician's assessment of bronchial sounds. Tobacco smoke is a significant indoor air pollutant, and passive exposure to tobacco smoke has been determined to be a major health hazard by the Environmental Protection Agency (22). In NHANES III, serum cotinine levels were measured to determine active and passive exposure to tobacco smoke and other sources of nicotine.

A report by the House Committee on Government Operations entitled "Occupational Health Hazard Surveillance—72 Years Behind and Counting" (23) provided the impetus for the NHANES III collection of more data related to occupational health. Three examination components were designed to assess potential health effects that may result from occupational exposure: the neurobehavioral evaluation system (NES) for central nervous system testing, the physician's examination for assessing hand blistering and redness, and the spirometry test for measuring pulmonary function. Questions on current

and longest held occupation, use of protective equipment at work and passive exposure to smoke at work were also included.

Health care coverage and health care needs

NHANES III provides a unique opportunity to assess the prevalence of unrecognized disease and unmet health care needs. Because this is an examination survey, it allows for objective determination by examination and measurement of many health conditions. Thus it is possible to assess the degree to which these conditions are recognized and the implications for health care needs.

For example, NHANES III measurements of blood pressure, combined with information on prior diagnosis and on the use of antihypertension medications or nonpharmacologic therapy can be used to estimate the extent to which persons with high blood pressure are aware of their condition, the extent to which those who are aware are receiving treatment, and the extent to which those receiving treatment have reduced their blood pressure to acceptable levels. National data on blood cholesterol levels from NHANES III were used to estimate the numbers of people requiring intervention and treatment under the Adult Treatment Panel guidelines of the National Cholesterol Education Program and to monitor changes since similar data were collected in NHANES II. Dental examination data can be used to describe the extent of population needs for dental care, the extent to which existing conditions have been treated, and, coupled with information on dental care utilization, the degree of access to dental care for people with differing needs. Immunization data obtained from blood samples can be used to assess the level of protection in the population.

As part of NHANES III, data on health care utilization, health insurance coverage for all family members, and income assistance, including Medicaid, Social Security, and Supplemental Security Income, were collected to assess health care needs and participation in public assistance programs. Participants were asked detailed questions about coverage by Medicare, other forms of health insurance or reasons for lack of coverage, and about their use of health services and medications, established relationships with providers, and history of health conditions and hospitalizations. These data can be used in conjunction with the other information collected in the survey to determine the relationships between access to care and health status.

Health status components

This part provides a brief account of the data collected by examination and interview for each of the major target conditions and physiological measurements in NHANES III. In the survey, data were collected on dietary intake and nutritional status (described in the section "Nutritional health assessment"), anthropometric measurements (described in that same section), reproductive history and sexual behaviors, use of vitamin and mineral supplements and medications, tobacco and alcohol use, physical activity, and sociodemographic

characteristics. These data, although not mentioned specifically, are relevant to many of the components. A list of topics included in the questionnaires administered during the household interview and in the questionnaires and procedures administered in the examination can be found in appendix tables I and II. Other summary information is included in appendix I and appendix tables III—XII and the data collection forms are in appendixes III and IV.

The examination teams, described more fully in the section "Data collection and reports of findings," included a physician, a dentist, a certified ultrasound technician, health technicians, medical technologists, a phlebotomist, a health interviewer, and dietary interviewers, as well as other personnel. Except as noted under specific components, a health technician administered all MEC examination procedures, and the health interviewer administered the MEC adult, youth, and proxy questionnaires. Examinees were excluded from each of the examination components for specific safety, health, or logistical reasons. These exclusion criteria are specified in appendix table VIII.

Fasting instructions were common to all components. For morning examinations, examinees aged 12–19 years were instructed to fast at least 8.5 hours preceding the examination, and those 20 years of age and over were instructed to fast 12 hours. For afternoon or evening examinations, all examinees 12 years of age and over were instructed to fast for 6 hours preceding the examination. Children under age 12 and persons of any age who reported using insulin were instructed not to fast.

Many laboratory determinations were conducted on blood and urine specimens obtained during the MEC examination. Most of these determinations are mentioned briefly under the relevant topic headings. However, the laboratory methods are not described in any detail in this section. Full procedural descriptions of the laboratory methods are available from NCHS, and a summary of the assay methods is provided in appendix I. For the convenience of the reader, the laboratory analyses conducted in all three of the NHANES and the Hispanic HANES are provided in appendix table VI. A complete list of all the laboratory determinations on blood and urine specimens can be found in appendix table IV. The laboratories and diagnostic centers are also listed in appendix table III.

Cardiovascular disease

Cardiovascular disease, including coronary heart disease and stroke, is the leading cause of death in the United States for both men and women (18). Since the first National Health Examination Survey in 1960–62, the assessment of cardiovascular disease-related risk factors and, to a lesser extent, cardiovascular disease have been a central component of the NHANES program (1). The main elements of the cardiovascular disease component in NHANES III were measurements of blood pressure, measurements of blood lipid levels, and electrocardiograms (ECG's).

For the first time in any NHANES, blood pressure was measured on two separate occasions to reduce misclassifica-

tion error. For adults 17 years of age and over, a total of six seated blood pressure measurements were obtained: three by the interviewer in the household interview and three by the physician during the MEC examination. For children 5–16 years of age, three blood pressure measurements were made in the MEC by the physician. In the MEC, the first, fourth, and fifth Korotkoff sounds (K1, K4, and K5) were recorded for those 5–19 years of age, and K1 and K5 were recorded for those 20 years of age and over. Blood pressure measurements were conducted according to the standardized measurement protocols recommended by the American Heart Association (24).

ECG's were done on all examinees 40 years of age and over. The ECG's were interpreted by computer using the Minnesota Code (25). The physician's examination in the MEC included assessment of systolic and diastolic heart murmurs for all examinees.

Blood lipid levels were determined on a specimen obtained by venipuncture during the MEC or home examination. Serum total cholesterol, high-density lipoprotein (HDL) cholesterol, and serum triglycerides were measured on all examinees 4 years of age and over. Measurements of total and HDL cholesterol and fasting triglyceride levels permit low-density lipoprotein (LDL) cholesterol levels to be calculated using the equation developed by Friedewald, Levy, and Fredrickson (26). Phase 1 of the survey also included measurements of apolipoproteins A₁ and B, and Phase 2 included measurements of Lp(a), both for all examinees 4 years of age and over.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included questions on family history of heart attack; history, knowledge, and treatment of high blood pressure and high blood cholesterol; and history of heart attack, stroke, transient ischemic attacks, and congestive heart failure. The questionnaire also included three sections from the London School of Hygiene Cardiovascular Questionnaire (27), including the Rose Angina, Possible Infarction, and Intermittent Claudication questions. During the household interview, the interviewer made three seated blood pressure measurements (K1 and K5) for adults aged 17 years and over.

The Household Youth Questionnaire included questions on history of rheumatic fever and heart disease for children aged 2 months to 16 years and questions on history of high blood pressure and high blood cholesterol for children aged 4–16 years.

Respiratory disease

Respiratory disease has a substantial effect on morbidity and mortality rates in the United States. It is estimated that up to 20 percent of the adult population suffer from one of the chronic obstructive pulmonary diseases (asthma, chronic bronchitis, or emphysema) (28).

The respiratory disease component for NHANES III was designed to measure pulmonary function and chronic obstructive pulmonary disease. The main element of the component was assessment of pulmonary function by spirometry. Respondents were also tested for skin-test reactivity to selected standardized allergens.

Spirometry was conducted for all examinees 8 years of age and over in the MEC or home examinations. Procedures for testing were based on the current recommendations and standards of the American Thoracic Society (29). A customized Ohio Censored 822 or 827 dry rolling seal spirometer was used in the MEC and a portable spirometer was used in the home examination. Examinees performed five to eight blows to obtain curves acceptable according to the protocol. The National Institute for Occupational Safety and Health (NIOSH) was responsible for training the technicians, providing the equipment, and processing the spirometry data.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on the medical history of respiratory and allergic symptoms and conditions. Additional questions ascertained previous diagnosis of asthma, chronic bronchitis, or emphysema. The Household Youth Questionnaire included a similar set of questions for children aged 2 months to 16 years.

Diabetes mellitus

Diabetes mellitus is well recognized as a major public health problem in the United States. The disease affects virtually every organ system in the body, and the rates of such conditions as kidney disease, blindness, hypertension, ischemic heart disease, stroke, and disability are significantly higher in persons with diabetes. The direct and indirect costs of diabetes in the United States were estimated to be more than \$20 billion in 1987 (30), and diabetes ranks as the seventh leading cause of death (18).

The diabetes component was designed to assess glucose tolerance and diabetes. The main elements of the component were an oral glucose tolerance test and other diabetes-related laboratory determinations. Related information includes the data collected in the diabetic retinopathy and vision component.

The MEC examination included a 2-hour 75-gram oral glucose tolerance test (OGTT). Adults 40–74 years of age examined in the morning session were given the OGTT after being instructed to fast for 12 hours prior to the examination. After a fasting blood specimen was obtained by venipuncture, examinees were then administered a glucose challenge (Dextol-75) containing the equivalent of 75 grams of glucose. A second blood specimen was drawn 2 hours after the fasting blood specimen. Measurements of fasting and 2-hour plasma glucose levels permit identification of diabetes and impaired glucose tolerance according to World Health Organization (WHO) criteria (31).

Adults 40–74 years of age who were examined in the afternoon or evening were given the OGTT after being instructed to fast for 6 hours prior to the examination. This procedure does not follow exactly the WHO recommendations. However, the National Diabetes Data Group of the National Institute of Diabetes and Digestive and Kidney Diseases strongly recommended that all adult participants 40–74 years of age be screened for glucose tolerance in order to have sufficient numbers of subjects to ascertain the natural history of glucose intolerance and to quantify risk factors for the development of diabetes.

Fasting blood specimens obtained by venipuncture during the MEC examination from adults 20 years of age and over were tested for glucose, levels of insulin, and C-peptide. Glycated hemoglobin concentration (Hb_{A1c}) was determined in all individuals 4 years of age and over as a measure of glucose levels over time. In Phase 2, insulin and C-peptide levels were also measured on the 2-hour blood specimens for adults 40–74 years of age.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included questions designed to ascertain those individuals with a medical history of diabetes. Information collected included family history and age at diagnosis; use, frequency, and amount of insulin taken; use of oral hypoglycemic agents or diet to lower blood glucose levels; and reported retinopathy. The Household Youth Questionnaire included questions on diabetes and insulin use for safety screening purposes only.

Diabetic retinopathy and vision

The diabetic retinopathy and vision component of NHANES III was designed to assess diabetic retinopathy and macular degeneration, two of the major causes of severe visual handicap and blindness among adults in the United States (32). The main element of the component was retinal photography carried out in the MEC. Related information includes the data collected in the diabetes component.

The MEC examination included a nonmydriatic fundus photograph of either the right or left eye for all examinees 40 years of age and over (33–35). The eye to be photographed was randomly selected according to the last digit of the examinee's identification number. Photographic fields were graded by masked, trained graders for macular degeneration, for the presence and severity of retinopathy and for the presence of specified diabetic lesions using the Modified Airlie House Classification scheme (36). The training of photographers and the grading of photographic slides was done by the staff of the Department of Ophthalmology, University of Wisconsin Medical School.

In the physician's examination, examinees aged 2 months to 18 years were evaluated for a missing globe or blindness; children 2 months—4 years of age were examined for ability to track light; and those 5–18 years of age were examined for strabismus. No funduscopic examination was included in the physician's examination and no vision examination was included in the survey.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on problems with vision and presence of blindness, cataracts, or retinopathy. The Household Youth Questionnaire included an abbreviated set of vision questions for children aged 2 months—16 years.

Thyroid function

The thyroid component of NHANES III was designed to provide information on the prevalence of autoimmune thyroid disease, thyroid function, iodine intake, and population estimates for normal hormone levels through laboratory measurements. Measurement of serum thyroid-stimulating hormone (TSH), thyroxine (T_4) , and antithyroglobulin and antimicrosomal antibodies were conducted on blood specimens obtained by venipuncture during the MEC examination from examinees 12 years of age and over. Urinary iodine and creatinine were also measured for examinees 12 years of age and over to evaluate the relationship between iodine intake and thyroid dysfunction.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included questions regarding history of goiter or other thyroid diseases.

Reproductive health

The reproductive health component of NHANES III was composed of questions on the menstrual cycle, pregnancy history, menopause, use of contraception, and sexual experience among women, as well as laboratory determinations of follicle-stimulating hormone (FSH), luteinizing hormone (LH), and pregnancy and lactation status. Related information includes data collected in the immunization and infectious disease component.

In the MEC Proxy Questionnaire, data were collected on age of menarche for girls 8–9 years of age. In the MEC Youth Questionnaire, girls 10–16 years of age were asked about age of menarche and were asked to estimate the time since their last period. Girls aged 12–16 years were asked about pregnancy history, breast feeding, use of oral contraceptives, and sexual experience. In the MEC Adult Questionnaire, women 17 years of age and over were asked about age at menarche, pregnancy history, breast feeding, natural and surgical menopause, use of NORPLANT[®], use of estrogen, sexual experience, and whether they had ever had genital herpes. A similar set of reproductive history questions was included in the home examination for women 20 years of age and over.

FSH and LH levels were determined on blood specimens obtained by venipuncture during the MEC examination from women 35-60 years. In addition, a urine pregnancy test was administered in the MEC to women 20-59 years of age.

Kidney disease

Kidney diseases constitute a major public health problem with rapidly increasing visibility because of the fast-growing numbers of patients with end stage renal disease (ESRD). The number of patients enrolled in the Medicare ESRD program increased from 113,542 in 1984 to more than 170,000 in 1989 (37). The annual costs of the ESRD program have continued to increase since 1974. The annual expenditures for 1974 were reported to be \$229 million and had reached almost \$3 billion in 1989 for this program (38). Based on both the escalating costs and increasing numbers of patients being served by the ESRD program, cost-effective preventive measures must be implemented.

The kidney disease component of the NHANES III was designed to assess renal function. The main elements of the component were laboratory determinations on blood and urine specimens. Urinary albumin (microalbuminuria) and creatinine levels were measured in urine specimens collected during the MEC examination from examinees aged 6 years and over.

Measurements of serum creatinine and blood urea nitrogen (BUN) were made on blood specimens obtained by venipuncture from examinees 12 years of age and over.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included questions on the history of kidney and urologic disorders.

Gallstone disease

Approximately 600,000 patients undergo cholecystectomy each year, making it the most common abdominal surgical procedure. As a cause of hospitalization, gallstone disease is the most common and most costly digestive disease, with an annual overall cost of well over \$5 billion (39).

The gallbladder component for the NHANES III was designed to determine the prevalence of diagnosed and undiagnosed gallstone disease. The main element of the component was real-time ultrasonography, a noninvasive technique for detecting gallstones. The ultrasound examination of the gallbladder was administered by a certified abdominal ultrasound technician to all examinees 20-74 years of age. Examinations were conducted with examinees in both supine and left decubitus positions. A diagnosis of gallstone disease was made by commonly used criteria of echoes within the gallbladder with shadowing in two views. Diagnoses were first made by the ultrasound technician in the MEC and later confirmed by radiologists. If a right upper quadrant or epigastric scar was observed and the gallbladder was not seen, it was concluded that a cholecystectomy had been performed. Data for other abnormal pathologies observed in the surrounding areas, such as the liver or the right kidney, were also recorded.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on previous diagnosis of gallstone disease, surgery for gallstones, or other gallbladder disease. Further questions ascertained occurrence, frequency, and character of pain in the abdomen or lower chest.

Arthritis and related musculoskeletal conditions

Arthritis and related musculoskeletal disorders are frequently chronic, disabling, and painful. It is estimated that the total economic cost to the United States of musculoskeletal conditions was more than \$126 billion in 1988 (40).

The arthritis component of NHANES III was designed to identify rheumatoid arthritis and osteoarthritis in adults 60 years of age and over. The main elements of the component were radiographs and physician's examination of joints. Related information includes data collected in the osteoporosis and functional health status of the elderly components.

During the MEC examination, straight posterior-anterior x rays of the hands and wrists and straight anterior-posterior non-weight-bearing views of the knees were obtained for examinees aged 60 years and over. The knee position was selected because of safety considerations related to the space limitations in the MEC. Additional data were collected during the physician's examination for those 60 years of age and over. Hand, knee, and great toe joints were examined for tenderness, swelling, and pain on passive motion. The pres-

ence of hand and foot deformities was also recorded. Abnormalities in gait were evaluated by the physician for all examinees 3 years of age and over.

Serologic analyses of rheumatoid factor for examinees aged 60 years and over and of C-reactive protein for examinees 4 years of age and over were conducted on blood obtained by venipuncture during the MEC examination.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on joint pain, stiffness and swelling in hands, wrists, and knees, back pain, and medical history of arthritis.

Osteoporosis

The growing recognition of the public health significance of osteoporosis coupled with the lack of prevalence estimates based on a nationally representative sample motivated the inclusion of the osteoporosis component in NHANES III. The cost of hip fractures was estimated to be \$3.5 billion per year in the United States (41). Those who survive hip fracture are often permanently disabled and must be institutionalized. The extent of problems associated with hip fracture is likely to increase in the future as the population ages, so that the number of hip fractures may double or triple by the year 2050 (42). The NHANES osteoporosis component was designed to assess many of the suspected risk factors for osteoporosis and hip fracture in a nationally representative sample of adults over 20 years of age.

Although osteoporosis cannot currently be defined by bone density alone, low bone density is a primary risk factor for osteoporotic fracture, with the risk of fracture increasing as bone density decreases (43, 44). The cornerstone of the osteoporosis component was the measurement of bone density at the proximal femur of adults 20 years of age and over. Related information includes data collected in the functional health status of the elderly and arthritis and related musculosk-eletal conditions components. Several bone-related biochemistries were also measured.

Bone density measurements were made with dual-energy x-ray absorptiometry or DXA (45). The equipment measured areal bone density (bone mass per unit of area scanned) in five regions of interest in the proximal femur: femoral neck, trochanter, intertrochanter, Ward's triangle, and total region. Scans were reviewed by consultants at the Mayo Clinic for the purpose of quality control.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included an extensive series of questions on history of falls and fractures and on maternal history of fractures and osteoporosis. Data on historical milk intake and use of antacids and calcium supplements were also collected as part of the dietary section. Data were also collected on tobacco use, physical activity, reproductive health, medication use, and family history of osteoporosis.

Functional health status in the elderly

The functional health status component was designed to ascertain the prevalence of disability and limitations in func-

tion among the elderly. This component addressed three major areas: cognitive, physical, and social function.

Cognitive and physical function were assessed in the MEC and home examination for persons 60 years of age and over. Cognitive assessment consisted of a short paragraph given as an immediate and delayed recall task as part of the MEC Adult Questionnaire or the home examination. Physical function was assessed with a short battery of physical performance tests chosen to test different aspects of physical function important in everyday life. The measures included: range of motion of the shoulder, timed task of hand function (using a key to open a lock), rising out of a chair without the use of arms and timed rising five times from a chair in similar fashion, mobility of the hip and knee, timed task of balance (tandem stand), and timed walk with counting of steps on an 8-foot course.

Cognitive function among persons 60 years of age and over was assessed in the Household Adult Questionnaire through administration of a modified version of the Mini-Mental State Examination (46). The questions included counting backward from 20 by 3's and immediate and delayed recall of 3 items. In addition, all persons 17 years of age and over were assessed for orientation to location and date in the Household Adult Questionnaire.

For persons aged 60 years and over, the Household Adult Questionnaire contained standard questionnaire items on physical function derived from the NHANES I Epidemiologic Followup Study and the Supplement on Aging to the 1984 National Health Interview Survey. These items included questions on performance of activities of daily living and need for help and several questions directed to instrumental activities of daily living and need for help. Questions directed toward higher level function such as walking distances and climbing stairs were also included.

For adults aged 17 years and over, the Household Adult Questionnaire contained questions on social support. The questions included information on contact with friends and family members, attendance at organized religious activities, and involvement in other types of organizations.

Allergy

The primary element of the allergy component consisted of assessment of skin-test reactivity to standardized allergens. Related information includes data collected in the respiratory disease component.

Skin-prick tests were administered in the MEC to all examinees 6–19 years of age and to a random half-sample of examinees 20–59 years of age who were assigned to receive the allergy tests if their identification number ended in an even digit. Immediate hypersensitivity to any of 10 licensed commercially available allergens (mite, cat, short ragweed, perennial rye, alternaria, Bermuda grass, cockroach, Russian thistle, white oak, peanut) was determined. Histamine phosphate was used as a positive control and 50-percent glycerol saline was used as a negative control. The skin reactions were read 15–20 minutes after the skin was punctured and the allergens applied. Both the length and width of the wheal and flare were measured.

The Household Adult Questionnaire, administered to adults aged 17 years and over, included an extensive series of questions on respiratory symptoms related to allergies. The questions were designed to obtain information on trigger factors, severity, medication use, and hospitalization. An additional question ascertained previous diagnosis of asthma. The Household Youth Questionnaire included a similar set of questions for children aged 2 months—16 years.

Immunization and infectious diseases

Almost all infectious agents—bacteria, viruses, and parasites—elicit long-lasting and detectable immunity in the host. Therefore, NHANES III provides an important opportunity to study the seroepidemiology of the following infectious diseases: hepatitis A, B, C, and delta, herpes simplex I and II, human immunodeficiency virus (HIV), varicella, hantavirus, and Toxoplasma gondii. In addition, antibodies to the following microbial agents have been determined to assess the level of protective antibody in the population: tetanus, diphtheria, and rubella. Finally, antibody to Cryptosporidia parvum will be determined in sample persons from selected communities to assess exposure to this water-borne pathogen based on water source.

Serologic tests for antibodies will provide national estimates of exposure to hepatitis A, B, C, delta, and E and will assist in validating surveys that are more localized or that involve samples with potential sources of bias not found in NHANES. Because hepatitis A, B, and delta were performed on NHANES II (1976–80) sera, trends over time in the prevalence of infection can be determined (47). Hepatitis C virus is the name assigned to a newly detected virus that is thought to be the primary cause of transfusion-associated non-A, non-B hepatitis in the United States (48, 49). Testing of the NHANES III sera provides the unique opportunity to produce a baseline measure of the extent of infection in the U.S. population by this agent.

The presence of specific antibodies directed against herpes simplex I and II will also be determined by serology. The population prevalence estimate will be used as a comparison for validating reporting systems involving patient-based and other smaller studies. NHANES II surplus sera were also previously tested for antibodies to these viral agents (50). Continuation of herpes serologic testing in NHANES III will produce trend data that will help to delineate the extent of a possible herpes epidemic. Other information related to sexual behavior and history of genital herpes was collected in the MEC Youth and MEC Adult Questionnaires.

Human immunodeficiency virus (HIV) testing was performed on all sample people over the age of 18 years using an anonymous protocol. Serum collected for the many other laboratory tests was separated into a vial that had been randomly numbered and not linked to the sample person's identification number. The only demographic information attached to the HIV sample was: age in 20-year groups, sex, race or ethnic group, and sampling location. In Phase 2 of the survey, a basic sampling weight, an education variable, and the results of the urine drug testing were also linked to the

HIV result. Sample people were notified during the informed consent process that blood samples would be tested for HIV. As with any other component of the survey, the sample person had the right to refuse the test. The anonymous testing procedure was chosen for the HIV antibody testing to provide the maximum safeguard of the sample person's confidentiality. Anonymous testing was considered the only feasible method to provide unbiased estimates of seroprevalence of HIV antibody. The HIV prevalence estimate on a representative sample of the U.S. population will contribute further to the knowledge of the epidemiology of the disease previously obtained from select populations in the Center for Disease Control and Prevention's family of surveys (51, 52) and the distribution of reported cases.

A candidate vaccine for varicella has been developed and is currently undergoing final clinical trials prior to anticipated application for licensure for use in the United States. The seroprevalence and risk factors for varicella infection need to be established to better plan for wide use of this vaccine. NHANES III data will be used to target at-risk populations in the United States.

Because of the outbreak of adult respiratory disease syndrome caused by a newly described hantavirus during the summer of 1993, sera from NHANES III specimens were tested to determine the geographical distribution and prevalence of viruses in this family. These data will help quantify the extent of infection in the United States with these viruses to better assess the potential for additional cases of this often-fatal illness. The results of the testing will also immediately affect CDC educational efforts and surveillance activities directed against this virus.

Because congenital toxoplasmosis often leads to mental retardation, visual impairment, deafness, or death in an infected infant, prevention of maternal infection is critical. To look at the cost-benefit relationship of a screening program for women to prevent this infection, an accurate estimate of the prevalence of infection in the United States must be made. Determination of risk factors for women who become infected with T. gondii will help in targeting prevention strategies. The use of NHANES III serologic specimens to assess prevalence is essential to develop recommendations for prevention of congenital toxoplasmosis and to address the risk of exposure to acquired immunodeficiency syndrome (AIDS) patients.

The following serologic tests were performed to determine the level of protective antibody elicited by the respective vaccines. This is an important component of the U.S. immunization initiative. A tetanus antibody titer was determined to indicate the level of protection for all examinees 4 years of age and over. Children aged 2 months-16 years (or the parent or guardian) were asked if the children had ever had a diphtheria-pertussis-tetanus (DPT) shot and if so, when the last shot was given. In addition, diphtheria antitoxin levels were determined in sera specimens because of evidence that this component of the DPT vaccine may elicit a weaker immune response and provide reduced levels of protection against this bacterial toxin. Because of recent outbreaks of measles and rubella,

inclusion of a serologic test for rubella antibody using NHANES III specimens will provide information on populations at risk for these viruses.

Hearing

The principal elements in the hearing component were the measurements of pure tone air conduction audiometric thresholds and tympanic compliance in children. These examinations, pure tone audiometry and tympanometry, were conducted in a soundproof room in the MEC for examinees aged 6–19 years. Pure tone air conduction audiometry thresholds were obtained in both ears at 500, 1000, 2000, 3000, 4000, 6000, and 8000 hz. A screening questionnaire administered before the examination provided data on recent noise exposure and use of headphones. Because pure tone screening by itself may not be sensitive enough to detect middle ear disease, tympanometry was conducted to provide an estimate of tympanic membrane compliance.

The Household Adult Questionnaire, administered to adults aged 17 years and over, collected information on hearing status and use of hearing aids. The Household Youth Questionnaire included questions on frequency and treatment of ear infections, hearing status, and hearing aid use for children aged 2 months—16 years.

Lead exposure

The lead exposure component was designed to assess environmental lead exposure through measurement of blood lead levels. Blood lead levels were determined on examinees 1 year of age and over on specimens collected by venipuncture during the MEC or home examination. Analysis was performed by graphite furnace atomic absorption spectrophotometry. Erythrocyte protoporphyrin, a screening test only sensitive to high lead levels, was also measured.

The Household Youth Questionnaire included questions on history of testing and treatment for lead poisoning for children aged 2 months-16 years. Information on the age of the housing structure was also collected in the Family Questionnaire.

Mental health and neurobehavioral function

The primary elements of the mental health and neurobehavioral function component were conducted in the MEC and included assessment of depression and mania, cognitive function, and functioning of the central nervous system. Supplemental data were collected in the household interview.

The mental health and neurobehavioral function component of NHANES III included the depression and mania subsections from the Diagnostic Interview Schedule (DIS), developed by the National Institute of Mental Health (NIMH). Sections of the DIS have also been used in the Hispanic HANES and in several community studies (53–55). Trained interviewers administered the NHANES III DIS questions in the MEC, using automated data entry, as part of the MEC

Youth Questionnaire for examinees 15–16 years of age and as part of the MEC Adult Questionnaire for examinees 17–39 years of age. The data collected from the DIS permit diagnoses based on the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III)(56).

Intellectual function and academic performance were assessed for children aged 6–16 years with standardized cognitive tests. The examination included the block design and digit-span subtests from the Wechsler Intelligence Scale for Children, Revised (WISC-R) (57) and the reading and arithmetic sections from the Wide Range Achievement Test, Revised (WRAT-R) (58).

Central nervous system function was assessed with a set of simple, nonverbal performance tests designed to be minimally influenced by differences in language or education. The tests were administered to a random half-sample of all adults 20–59 years of age, who were assigned to receive these tests if their identification number ended in an odd digit. The examination was composed of three tests—simple reaction time, serial digit learning, and symbol digit substitution—selected from the larger battery of Neurobehavioral Evaluation System (NES) tests (59). Factors that might have affected performance such as motivation, use of drugs, alcohol, or caffeine, and the temperature, humidity, and air flow in the testing booth were recorded in a brief pre- and post-test questionnaire.

The Household Youth Questionnaire, administered to children aged 2 months—16 years, included questions on attendance to special classes in school as a result of impairment and diagnosis of mental retardation. Data were also collected on visits to a psychiatrist, psychologist, or psychoanalyst for children 4–16 years of age and on school attendance and relationships with friends for those 5–16 years of age.

The Household Youth Questionnaire also included a series of questions on motor and social development for children aged 2 months—3 years. The questions were modeled after the Denver Developmental Screening Test (60) and a similar component used in the Child Health Supplement to the 1981 National Health Interview Survey. Related information includes occupational history and the cognitive, physical, and social function data collected in the functional health status of the elderly component.

Oral health

The main element of the oral health component was an oral examination conducted in the MEC. Methods used in this component were designed to be consistent with previous health examination surveys conducted by NCHS and with previous national surveys of oral health conducted by the National Institute for Dental Research (NIDR). Related information was also collected on selected risk factors such as diet, the use of smokeless tobacco, and the use of fluoride supplements.

During the MEC examination, the dentist performed oral examinations on all examinees 12 months of age and over. Oral soft tissue lesions were assessed for examinees aged 2 years and over. The assessment involved visual observation of the oral mucosa and laboratory assessment of an oral mucosal

smear for the presence of hyphae of candida albicans. A dental caries examination included an evaluation of coronal caries for those aged 2 years and over, root surface caries for examinees 18 years and over, and baby-bottle tooth decay among children aged 12–23 months. Examinees were questioned about history of injury to front teeth and then were examined for evidence of traumatic injury to the four upper and four lower permanent incisors.

Occlusal characteristics were assessed in examinees aged 8-50 years and included measurement of the alignment of teeth and assessment of posterior crossbite, overjet, overbite, and maxillary diastema. A periodontal examination was performed on two randomly selected quadrants of the mouth for examinees 13 years of age and over. Restorations and tooth conditions for those 18-74 years were also evaluated.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on utilization of dental health services and information needed to interpret the oral examination findings, such as history of cold sores and receipt of orthodontic treatment. The Household Youth Questionnaire included similar questions for children aged 2–16 years, as well as infant feeding practices contributing to baby bottle caries.

Risk factors and health behaviors

Risk factors and health behaviors associated with many chronic diseases and conditions were evaluated in NHANES III both in the household interview and during the MEC examination. The five primary behaviors assessed in the survey were alcohol use, tobacco use, drug use, physical activity, and sexual experience. The component on drug use is described in the special studies topic of this section.

Alcohol use

The MEC Youth and MEC Adult Questionnaires included questions on alcohol use for all examinees 12 years of age and over. The questions were designed to identify nondrinkers, very light drinkers, and former heavy drinkers; to ascertain quantity and frequency of use for quantifying alcohol intake; and to determine the frequency of heavy drinking occasions. Data on any alcohol intake during the previous day were also recorded for all examinees as part of the 24-hour dietary recall. The section on "Nutritional health assessment" of this report also has some information on alcohol. Standard liver function tests were performed. The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on the frequency of consumption of beer, wine, and liquor as part of the food frequency section.

Tobacco use and exposure

To encourage honest reporting of tobacco use by youths aged 8–16 years, information on use of cigarettes and smokeless tobacco (snuff or chewing tobacco) was collected in the privacy of the MEC as part of the MEC Youth Questionnaire. Data were collected on age of initiation, frequency, duration, and amount of tobacco consumed. Recent use of tobacco or

nicotine gum within the past 5 days, for evaluation of laboratory results, was also assessed in the MEC Youth and MEC Adult Questionnaires and the home examination for those aged 8 years and over.

The Household Adult Questionnaire, administered to adults 17 years of age and over, included questions on the use of cigarettes, cigars, pipes, and smokeless tobacco (snuff or chewing tobacco). Data were collected on age of initiation, frequency, duration, and amount of tobacco consumed and on exposure to tobacco smoke at work. Data on passive smoke exposure were collected in the Family Questionnaire. Family members who smoked cigarettes in the home were identified and the amount smoked per day was estimated. The Household Youth Questionnaire included questions on history of maternal smoking during pregnancy for children aged 2 months—11 years.

A biochemical determination of tobacco exposure was used to assess both passive smoking and tobacco use through measurement of blood cotinine levels from specimens obtained by venipuncture in the MEC from examinees aged 4 years and over. Cotinine is a metabolite of nicotine and is thus an indicator of primary or secondary exposure to tobacco. Cotinine was detected using an isotope dilution, liquid chromatography, tandem mass spectrometry method developed by the National Center for Environmental Health, CDC, which conducted the analyses. This was a newly developed method designed to detect levels as low as 0.030 nanograms per milliliter. Related information includes data collected in the respiratory disease component and identification of oral soft tissue lesions in the oral health component.

Physical activity

For children 8–16 years of age, data on frequency of exercise and physical activity were collected during the MEC interview. The Household Adult Questionnaire, administered to adults aged 17 years and over, contained questions on leisure-time physical activity adapted from the 1985 National Health Interview Survey and included information on types of activity, frequency, and assessment of level of activity compared with others. Participants were also asked to compare current levels of physical activity with those of the past year and 10 years ago. Related information includes data collected in the functional health status of the elderly component.

Sexual experience

Questions on sexual experience were included in the MEC Youth and MEC Adult Questionnaires for examinees aged 15–59 years. Information on age at first sexual intercourse, total number of partners, and number of partners in the past year was collected for those 17–59 years of age. Males 17–59 years of age were asked about the numbers of male and female partners. Age at first sexual intercourse was obtained from youths aged 15–16 years. Related information includes data collected in the immunization and infectious disease and reproductive health components.

Special studies

Four special studies requiring an additional collection of blood or urine during the MEC examination were carried out in conjunction with NHANES III. Planned and sponsored with other agencies, their unique status was warranted either by the confidential or experimental design of the research. The two highly sensitive studies, HIV testing and drug testing, were conducted using a rigorous protocol that maximized anonymity and confidentiality. The HIV testing is described in the immunization and infectious diseases section. The results from these analyses can only be linked to a limited set of demographic and medical information collected in the survey. The priority toxicant range study and the establishment of a deoxyribonucleic acid (DNA) storage bank for genetic research were both designed, in part, to explore new and experimental laboratory techniques. Also, a portion of the sera was placed in a bank for unanticipated future research projects.

Drug use

All examinees aged 12 years and over were questioned in the MEC Adult and Youth Questionnaires about lifetime and past-month use of marijuana and cocaine. In Phase 2 of NHANES III (1991-94), anonymous urine testing was included in the MEC examination in order to detect the presence of marijuana, cocaine, phencyclidine (PCP), opiates (morphine and codeine), and stimulants (amphetamine and methamphetamine) among examinees 18-59 years of age. Urine specimens were randomly numbered so they could not be linked with the examinee identification numbers. Limited demographic data including age (in 20-year categories), sex, race or ethnicity, sampling location, and educational level were included with the random numbers on protected data files. The identical random numbers and the associated demographic variables were assigned to the HIV serum, so that the association between drug use and HIV status could be examined.

Specimens were screened using an enzyme multiplied immunoassay technique with cutoff concentrations lower than those generally used in drug screening. Positive specimens were confirmed and then quantified using gas chromatography mass spectrometry. Urine analyses for drug screening were performed in a National Institute of Drug Abuse (NIDA) certified laboratory according to NIDA guidelines.

Priority toxicant reference range study

The purpose of the priority toxicant reference range study was to assess the levels of common pesticides and volatile organic compounds (VOC's) in a large sample of the U.S. population and to evaluate laboratory analytic methods in the process. Two groups of organic compounds were measured in the priority toxicant study: selected pesticides and their metabolites at the low parts-per-billion levels in urine and VOC's at the low parts-per-trillion levels in whole blood (see appendix table VII). The Division of Environmental Health Laboratory Sciences, National Center for Environmental Health, CDC, conducted the Priority Toxicant Reference Range Study on approximately 3,600 persons aged 20-59 years examined in

NHANES III. Participants volunteered to complete a brief chemical exposure questionnaire and to provide an additional 20 ml of blood and 40 ml of urine. No formal sampling procedures were instituted; 45 volunteers participated at each survey location. A \$10 remuneration was awarded for participation. Demographic and medical information obtained from NHANES III can be linked to the resulting laboratory measurements.

Serum bank and DNA specimen bank

NHANES III provided an opportunity to establish two nationally representative specimen banks, a serum specimen bank and a DNA bank of preserved, viable cells. Serum specimens are stored at -70°C or less and will be used for unanticipated future research projects.

For the DNA analyses, new molecular genetic techniques make it possible to examine substantial portions of the DNA sequence and its variation in the population using small samples of nucleated cells obtained by venipuncture. The development of transformation and immortalization proce-

dures to maintain active cultures of cells means that small samples collected from a large population can be maintained and amplified to provide specimens for future studies. It is anticipated that this endeavor will help establish a new era of health research that integrates genetics and environmental factors in the understanding of human disease.

During the MEC examination, a 6-cm³ specimen of venous blood was collected in a vacutainer tube containing a Ficoll heavy-density layer overlaid with a thixotropic gel followed by ACD anticoagulant from examinees 12 years of age and over. The specimen was then prepared by the National Center for Environmental Health following one of two methods. Either the nucleated cells were separated from the blood sample and then separated in several aliquots or the cells were separated from the blood sample and virally transformed to yield an immortalized culture. In both instances, multiple aliquots from each subject were frozen, following a controlled freezing procedure. The frozen aliquots are maintained in liquid nitrogen.

Nutritional status assessment

Nutrition data from the National Health and Nutrition Examination Survey (NHANES) are vital to nutrition monitoring and public health. As the cornerstone of the "nutrition and related health measurement" component of the Federal Government's National Nutrition Monitoring and Related Research Program (NNMRRP) (61), NHANES nutrition data are used in a variety of settings to enhance the health and nutritional status of the Nation. NHANES III data will be used to track progress toward the Nation's health and nutrition objectives (62,63,16) for diet, serum cholesterol, hypertension, iron deficiency anemia, overweight, and infant feeding practices. Additionally, NHANES provides reference data for nutritional biochemistries (64-72), anthropometric measures (73-76,8), and nutrient intakes (77-78); and provides information for policymakers to set nutrition policy (16,62,79-82) and research agendas (79,83,84). NHANES III was also designed to demonstrate relationships between diet and health. The nutritional assessments were designed to complement and link to NHANES III health components such as cardiovascular disease, diabetes, hypertension, osteoporosis, and dental caries to maximize data utility. A longitudinal design was added to the traditional NHANES cross-sectional design and studies of the relationship between present diet and future disease will be possible.

Food and nutrient consumption

Dietary factors are associated with 5 of the 10 leading causes of death and are associated with other conditions such as obesity (16). Deficiencies of nutrients and minerals, such as iron and some vitamins, remain a problem in selected population subgroups. Inadequate food intake and undernutrition are problems in high-risk subgroups such as low-income populations. Overconsumption of food components such as fat, cholesterol, and salt and underconsumption of fruits, vegetables, and complex carbohydrates are significant problems in the general population. Measurement of nutrient intake is important in evaluating food fortification, nutrition education, and intervention programs aimed at improving the population's dietary intake. Measurement of foods as they contribute to nutrient intake and as they comprise dietary patterns are important for evaluating and developing dietary guidance (81). Recognizing the importance of measuring both nutrient intake and food intake to meet current nutrition monitoring data needs, the NHANES III dietary component was developed to estimate total nutrient intake, nutrient intake from foods, intake of specific foods, and problems and factors related to insufficient food and nutrient intake.

Vitamin and mineral supplement data will be used by NCHS and the Food and Drug Administration (FDA) to determine the prevalence of very low and very high total nutrient intake levels in the population and for assessing the contribution of supplements to total nutrient intake and nutritional status (83). Total nutrient intake is also important for evaluating diet-health relationships such as the association between total calcium intake, blood pressure, and hypertension risk (84), and total calcium intake and bone density (85–86).

Alcohol intake

Alcohol problems and associated health risks are prevalent problems in adolescents and adults (16). Excessive alcohol intake is associated with cirrhosis of the liver as well as accidents and suicides (16). Moderate amounts of alcohol have been related to both increased risk of certain cancers and decreased risk of coronary heart disease (87). Information on alcohol was collected in NHANES III to quantify the contribution of alcohol to total caloric intake for population reference data, to assess the proportion of the population who typically consume larger amounts of alcohol than recommended in the *Dietary Guidelines for Americans* (81), and to investigate the relationship between alcohol intake and health outcomes (87,15).

Food program participation and food security

In the 1980's there were several reports that indicated that hunger was a serious problem in the United States on a national level and for certain subgroups of the population (88–93). However, accurately estimating the prevalence and severity of hunger is complex and historically has been controversial. In 1987, the University of California at Berkeley sponsored a workshop to bring together hunger researchers working at the local, State, and national levels. The workshop concluded that "of all the relevant Federal surveys, NHANES is probably the best equipped to look at the interrelationships between diet, food shortages, and health indicators" (94).

In addition to questions for families and individuals about having enough food or money to buy food, data were collected in NHANES III about the use of food stamps, participation in the Special Supplemental Food Program for Women, Infants, and Children (WIC), school breakfast and school lunch programs, and elderly feeding programs. Assessment of the dietary status of participants of such programs is important in aiding the study of Federal food programs and their effect on the dietary intake of low-income and high-risk subgroups.

NHANES III will enable researchers to link food security and program participation with other nutrition and health indicators, including cognitive function. This is especially important for children. It has been documented that hungry children can be irritable, apathetic, or lethargic, which can interfere with learning (95). The National Education Goals were established in 1990, the first of which states that by the year 2000, "all children in America will start school ready to learn" (96). Having adequate food is a large part of this.

Vitamin and mineral status

Biochemical and hematological indicators of nutritional status are an essential part of the NHANES III nutrition component. Blood assessments have been included in past NHANES to determine the prevalence of compromised vitamin and mineral status at both the high and low ends of the population distribution (64–72); and the prevalence of nutrition-related risk factors, such as elevated serum cholesterol (10,11,97,98) or serum albumin (68).

Assessing fat-soluble vitamin status is of interest because of the widespread use of vitamin and mineral supplements in this country, coupled with the toxic potential of vitamin A (87) and the recent development of fat substitutes in food, which may influence fat-soluble vitamin absorption (87). In addition, serum levels of antioxidants, including alpha-tocopherol, carotenoids, selenium, and vitamin C, are of interest because of their possible role in reducing the risk of some cancers and heart disease (87). Finally, serum assays for the heavy metals lead and cadmium were included to assess toxicities of these contaminants and to correlate them with other health measures.

History of the use of certain drugs was ascertained because such use may be related to specific diseases. For example, long-term use of antacids containing calcium may be related to bone densitometry or blood pressure. In addition, chronic use of aspirin could affect risk of heart disease, stroke, or gallstones. This information will be used to assess the potential interaction of nutritional status and medications.

Iron-deficiency anemia

Iron deficiency has been described as the most common single nutritional deficiency in the developed and developing countries (64,68,72,99,100). Iron deficiency continues to be a special concern for children and women in poverty and women of childbearing age. NHANES II showed that 9 percent of children 1–2 years of age, 4 percent of children 3–4 years of age, and 5 percent of women aged 20–44 years had iron-deficiency anemia (16,68,72). The prevalence in low-income women and children was even higher. Because iron depletion develops gradually (72,100), a battery of iron-status indicators was included in NHANES III to assess all stages of

iron deficiency. Most of these indicators have also been included in previous NHANES, so it will be possible to examine secular trends.

Folate deficiency

There is some evidence that low serum folate levels in pregnant women are associated with neural tube defects in their infants (101,102). The Centers for Disease Control and Prevention (CDC), Food and Drug Administration, and other Public Health Service agencies are considering food fortification changes to increase folate intake in the target population, i.e., women of childbearing age (103). Assessment of anemia resulting from folate deficiency will be possible because of the availability of serum and red cell folate, dietary folate, and supplement-usage data in NHANES III. Because high intakes of folate can mask vitamin B₁₂ deficiency, it is also important to have a measure of vitamin B₁₂ status. An assessment of this status was added to Phase 2 in NHANES III to estimate the prevalence of vitamin B₁₂ deficiency in the population and to establish a baseline for evaluating future changes in folate food fortification policy.

Infant and child nutrition

Infants and children are particularly vulnerable to poor nutrition. Childhood and adolescence are important periods for establishing nutrition and health habits for later life. Whether or not an infant is breastfed, the type of milk or infant formula an infant is fed, and the types of solid foods first introduced are all critical infant feeding practices. Adequate dietary intake during infancy and childhood is necessary for proper growth and development and the prevention of future health problems. Of particular concern at this early age are iron deficiency, poor dietary habits, breastfeeding, and inadequate intake in highrisk populations (95). Also, overconsumption of certain foods is related to the development of obesity and dental caries in children.

Growth

Anthropometric measurements have been included in the National Health Examination Surveys since the first National Health Examination Survey (NHES I) was conducted in 1960-62 (1,104). These measurements were the basis for the NCHS growth charts, which were constructed with data from the earlier health examination surveys. The charts are used nationally in hospitals, health departments, and physicians' offices and have been adopted for international use by the World Health Organization (105,106). The production of these original growth charts, however, was affected by some inherent limitations. Because data were not available in previous NCHS surveys for the very youngest age group (age under 1 year), the data were supplemented with data from the Fels Research Institute (8). This resulted in growth curves for recumbent length (for children from birth through 3 years of age) based on Fels data and for stature (for children aged 2-18 years) based on NCHS data. Because the median statures for the Fels data were greater than the median statures in the NCHS data, there was a disjuncture in the curves for children between 24 and 36 months of age (107). NHANES III was specifically designed to resolve both of these limitations; children 2 months of age and over were included in the survey (108), and more sophisticated curve-smoothing techniques that have evolved since the first NCHS growth charts will be used.

Overweight and obesity

Overweight and obesity are current public health issues and prevalent risk factors for chronic disease. NHANES III anthropometric data will be used to estimate the prevalence of overweight and severe overweight in the United States for various age, race or ethnicity, and gender subgroups (16,74). NHANES II data showed that 26 percent of adults were overweight (16). Assessment of body fat distribution has been shown to be related to chronic disease development (87). Body measurement data indicative of overweight or obesity will be used as control or explanatory variables in epidemiological analyses of many other examination items, including blood pressure, glucose intolerance, gallbladder ultrasound, and a battery of other indicators for cardiovascular disease.

Anthropometric measures can be utilized in many ways; for example, to estimate body composition, to develop various reference standards, to establish baseline data for future longitudinal studies, to monitor trends over time in the population, and to evaluate risks for adverse health outcomes (109).

Diet-health relationships

With the growing understanding of the role of nutrition in health promotion and disease prevention, nutritional status assessment has assumed greater prominence and has been integrally linked with other aspects of NHANES III. As the Surgeon General remarked upon the release of *The Surgeon General's Report on Nutrition and Health* (15), for the majority of adults who don't smoke and don't drink excessively, what they eat is the most significant controllable risk factor affecting their long-term health. The NHANES III has been designed to capture as many nutrition risk factors as feasible related to the major chronic diseases affecting Americans, while continuing to provide a comprehensive assessment of the population's nutritional status for nutrition monitoring purposes.

The dietary information will be useful for studying the relationship between dietary habits and health. For example, sodium-intake data from the dietary interview, more specific than in past NHANES, can be linked with blood pressure data, saturated fat can be linked to blood cholesterol, and intake of antioxidants such as vitamins A, C, E, and carotenoids can be joined with followup information on cancer and heart disease (15). Past NHANES data have been used to relate the number of meals and snacks eaten to dental caries (110); and information on the number of meals eaten away from home can be used to plan and evaluate nutrition education programs targeting overweight and obese clients.

Osteoporosis and calcium intake

Osteoporosis is a debilitating disease of reduced bone mass that causes fractures of the vertebrae, hip, forearm, and other bones. Intake of calcium, phosphorus, vitamin D, protein, and alcohol, as well as a sedentary lifestyle, may all be related to the development of osteoporosis (111). NHANES III measures intake of these nutrients, including total calcium and frequency of consumption of calcium-rich foods. In addition, a question on historical intake of milk was included in the household interview to investigate the relationship between past calcium intake and current bone densitometry results. Interest in past consumption of dairy foods has been raised by findings suggesting that the level of calcium intake by young adults may be related to peak bone mass (85,86).

Nutritional status methods

The nutritional assessment component of NHANES III was designed to include several data sources (dietary intake interviews, nutrition-related interviews, anthropometric data, hematological and nutritional biochemistries, and nutrition-related clinical assessments) in order to provide a comprehensive assessment of nutritional status (112).

Methodologies for the nutritional assessment were developed with input from experts and data users from government agencies, academic research institutions, and industry. In 1986, an NHANES III Nutrition Methodology Working Group was established. In addition to NCHS planning staff, it included Federal staff with specific expertise in the topics under discussion and/or who were primary data users with a nutrition policy need for the data. The Nutrition Methodology Working Group reviewed the literature and discussed survey methods, operational issues, and specific details that needed to be determined for the NHANES III nutrition component. Planning sessions included discussion of the following topics:

- General issues. Household versus mobile examination center (MEC) administration of the dietary interview; automated data collection; nutrition monitoring and comparability to other national surveys, primarily the food consumption surveys conducted by the U.S. Department of Agriculture (USDA)
- 24-hour dietary recall method. Automated versus manual data collection; number of days of observation; location of interview; number of interviews per individual; adults versus children in the household
- Food frequency questionnaire (FFQ). Review of FFQ's used in other surveys, including past NHANES and the 1987 National Health Interview Survey; appropriate uses of FFO data
- Longitudinal study issues relative to nutrition
- Children's issues. Proxy rules; use of food models; data retrieval for day care and school lunch
- Dietary questions. Interview information needed on food security (hunger); water intake; dietary practices
- Vitamin and mineral supplement usage. Level of detail required; method of data collection

 Anthropometry. Measurements; bioelectrical impedance; supplemental interview questions (e.g., self-assessment of overweight)

Based on the study objectives, consideration of outside input, and the Nutrition Methodology Working Group discussions, a comprehensive nutrition proposal was developed by NCHS staff. The proposal was reviewed by NHANES III Research Consortium members and served as the basis for planning the nutrition component.

Dietary methodology

Prior NHANES conducted between 1971 and 1984 included 24-hour dietary recall and food frequency components as parts of the dietary interview (77,113). On March 16–18, 1986, NCHS sponsored the Dietary Methodology Workshop to review dietary methodologies and obtain recommendations for selection of methods for NHANES III (114). Experts in the fields of dietary survey methodology, epidemiology, nutrition, public health, and biostatistics presented papers that addressed statistical issues unique to the interpretation and use of dietary survey data, selection of dietary methods appropriate for nutrition monitoring activities, and approaches useful for assessing the relationship of diet to energy balance and three diet-related chronic diseases (cancer, cardiovascular disease, and osteoporosis) (114).

The overall workshop recommendation, based on the major aims of the NHANES III nutrition component, was that NCHS should continue to use the 24-hour recall as the principal methodology to provide detailed quantitative food and nutrient intake data for the U.S. population. Use of a food frequency was recommended to supplement data from the 24-hour recall and to provide typical or qualitative data for ranking persons by intake of specific foods and food groups.

Twenty-four-hour dietary recall

The 24-hour recall was collected through an automated interview using the Dietary Data Collection (DDC) system (appendix I). All NHANES III examinees, approximately 30,000 total, were asked to complete a 24-hour dietary recall during their MEC visit. In addition, about 5 percent of all adult examinees received a second replicate MEC examination that included a 24-hour dietary recall; replicate data will be used to estimate within- and between-person variances for estimating nutrient intake distributions. NHANES III examinations were conducted on all days of the week with the objective of conducting approximately 15 percent of the 24-hour recalls on each day of the week.

NHANES III, Phase 1 examinees 50 years of age and over (approximately 3,500 persons) who completed a 24-hour recall interview in the MEC were eligible to participate in a special dietary study of older persons—the Supplemental Nutrition Survey of Older Americans (SNSOA) (115,116). The SNSOA was funded through an interagency agreement with the National Institute on Aging at the NIH. The objective of the study was to obtain two independent replicate 24-hour recalls, administered by trained telephone interviewers, using

the DDC system. Replicate 24-hour recall data will be used to estimate usual intakes of older persons, to adjust nutrient intake estimates, and to explore methodologic issues (116).

The SNSOA telephone methodology was pretested in two pilot studies. SNSOA subjects were recontacted by telephone interviewers approximately 8 and 16 months after their MEC examination. Most of the telephone interviews were unscheduled and subjects were not compensated for their participation in the SNSOA. Appendix table IX indicates the administration of the 24-hour dietary recall and the FFQ in NHANES III by age of the sample person, respondent (self and/or proxy), place of interview (sample person's home or MEC), and interview type (nondietary, dietary, and telephone).

Food frequency

In a major innovation for the NHANES, a FFQ was incorporated into the household interview to provide general qualitative dietary information for individuals aged 17 years and over. The FFQ used a 1-month reference period and was not quantitative, i.e., did not collect portion sizes. It was not designed to produce population nutrient intake estimates, and use of food frequency data for this purpose is not appropriate (109,117–119).

The FFQ food list was developed to be comparable to food lists used in past NHANES for trend assessment but was expanded to capture more detailed intake of foods containing specific nutrients of interest. Foods containing nutrients related to risk for cancer, cardiovascular disease, and osteoporosis (87), such as vitamins A and C, caffeine, and calcium, respectively, were added to a general food list. In addition, the instrument was modified to be appropriate for use with the population subgroups sampled in NHANES III by including foods high in these nutrients that were reported by white and black persons in NHANES II and by Mexican-Americans in Hispanic HANES.

Because the FFQ was collected during the household interview, information on food intake is available for all interviewed persons and can also be linked with reported health conditions. Collection of the FFQ in the household for all interviewed persons will also allow assessment of potential nonresponse to the 24-hour recall, which was collected in the MEC for interviewed and examined persons. Another important use of the food frequency data is to provide baseline dietary data for followup analysis. Because all NHANES III sample persons are followed for mortality, a larger sample of interviewed persons with dietary intake information is available for followup analysis.

To complement the osteoporosis component, adults were asked to report their milk consumption during five age periods: 5–12 years, 13–17 years, 18–35 years, 36–65 years, and 65 years of age and over. Responses were recorded as "more than once per day," "once per day," "less than once per day, but more than once per week," "once per week," "less than once per week," "less than once per week," although several researchers have found that the recall of past diet was strongly influenced by present dietary habits (120–124) and that it is difficult to quantify the amount of calcium consumed during periods of

peak bone growth using retrospective dietary data, most people can probably retrospectively report whether or not they consumed milk products during these time periods in a qualitative sense.

Nutrition-related interview

A complete picture of dietary intake is not possible with a single 24-hour recall and food frequency. Therefore, additional interview questions were asked about water intake, usage of vitamin and mineral supplements, meal and snack patterns, infant feeding practices, alcohol intake, and food sufficiency. Appendix table X shows the nutrition-related interview information collected in NHANES III by age of individual.

Questions related to periodic or chronic food shortages were asked for both families and individuals to study the impact of food insecurity on dietary intake, nutritional status, and health (88). At the family level, questions were asked about the number of days per month on which there was no food or money to buy food and the reasons for the problem. The questions for individuals, modeled after those developed and used in the Community Childhood Hunger Identification Project (125), asked about the frequency of and reasons for skipping meals and going without food (88).

In addition to the 24-hour recall and food frequency, alcohol intake information was collected through additional questions about current and past alcohol consumption asked of respondents aged 12 years and over during a private interview in the MEC. When using and interpreting alcohol data from the various data collection methods used in NHANES III, it is important to note that alcohol intake estimates can vary between dietary methods because of method and reporting differences (126). To assess total nutrient intake, sources of nutrients such as discretionary salt, water, vitamin and mineral supplements, and nutrient-containing medicines were evaluated. The DDC system (i.e., 24-hour recall) was specifically designed to probe for fat and salt used in the preparation of foods, and additional questions about type and frequency of salt used at the table were asked. Usual daily water consumption and the amount of water consumed for the 24-hour recall period were collected. The source of the home water supply and the presence in the home of a water softening or conditioning system were assessed during the household interview. Serious consideration was given to the collection of a household drinking water sample, but it was decided that one casual water sample would not be representative of the usual content of household water for all seasons.

Information about current vitamin and mineral supplements and prescription and nonprescription medication usage for the month prior to the interview was collected during the household interview and for the 24-hour period prior to examination. If possible, the interviewer recorded brand and dosage directly from the supplement or prescription-medication container label and asked about the frequency of usage.

Anthropometry

A core set of body measures has been included in all past NHANES; however, the necessity of certain measures and the availability of new equipment warranted the discontinuation of some measures and the addition of others. The current set of measures was selected from a public health perspective. Because of heightened awareness and the emergence of evidence of associations between fat distribution and health outcomes, the number of circumference measurements was expanded. Additionally, to be on the cutting edge of new technology amenable to the survey environment, bioelectrical impedance analysis (BIA) was included for those age groups for which stable prediction equations were expected to become available from empirical research (127).

The selection of both procedures and equipment was influenced by constraints inherent to the unique setting of this survey and by the need to ensure reasonable comparability with the past while collecting data to meet current needs. In order to include an optimal number of measures in a limited time frame, a considerable amount of planning and experimentation was devoted to modifying and refining applications of the equipment, the procedures, and the facility, including the automated data recording system. The final array of body measures was distilled to several sets that are variably administered, dependent upon the age of the sample persons. These measures are shown in appendix IV and may be categorized as weight, height, length, circumference, breadth, skinfold, and bioelectrical impedance.

As with all other components of this survey, the primary objective was to maximize validity and reliability. Because one major end product of the anthropometric component is to produce reference values, accuracy was emphasized through standardized training and a multifaceted quality control system. Related to this, reproducibility is also a paramount concern, not only within and between individual data collectors and trainers for NHANES III, but also to facilitate comparisons between the NHANES III and other surveys and studies. Specific consideration was given to selecting methods that incorporated, to the extent possible, objective procedures. For example, bony landmarks were selected to identify anatomical sites for placement of the instruments and proper positioning of the sample persons; marks were made on the measurement sites to locate midpoints and anchor the measuring devices; and where feasible, measures were taken directly on the skin. In general, the guidelines of the Anthropometric Standardization Reference Manual (128) were followed, although modifications were made for selected procedures. Documentation of complete details of the NHANES III anthropometric procedures will be disseminated in a separate publication.

Laboratory determinations

When selecting nutritional biochemistry and hematological indicators to include in NHANES III, first priority was given to scientific merit. An NCHS survey planning group was charged with developing a list of blood determinations for NHANES III, including priorities by age group. The planning group used recommendations from an ad hoc panel convened by the Life Sciences Research Office, Federation of American Societies for Experimental Biology, at the request of the FDA

(100), as well as other important sources, such as the first report of the Joint Nutrition Monitoring Evaluation Committee (129) and *The Surgeon General's Report on Nutrition and Health* (15). Individual agencies and institutes within the NIH also developed specific proposals for biochemical and hematological measures to be included in NHANES III. For example, the National Heart, Lung, and Blood Institute developed and funded the lipid analysis for NHANES III (see the part "Health status assessment"). The scientific merit of each measure was evaluated in the context of the goals of the survey, i.e., which NHANES III health conditions and examination measures were available for linkage with the laboratory data.

If deemed to have sufficient scientific merit, the next criterion considered was feasibility of measuring the indicator in a national survey. This included whether the state-of-the-art analytic methodology currently accepted by the scientific community was practical for a large field survey lasting 6 years. Specimen size requirements and staff and monetary costs also had a bearing on feasibility (130). Laboratory protocols and analytical methods for several nutritional determinations were developed at the National Center for Environmental Health (CDC). A list of the nutritional biochemistry and hematological variables assayed in NHANES III is shown by age in appendix table IV. In previous NHANES, blood was collected from children by fingerstick. However, because of problems in performing a fingerstick without creating contamination or causing hemodilution by "milking," it was decided to collect blood from children aged 1 year and over in NHANES III by venipuncture only (130,131). Because a lesser amount of blood can be collected from children than from adults, it was not possible to assay the full battery of nutritional biochemistries in children. For young children, only the most critical nutritional biochemistries were assayed (appendix table IV).

One new indicator, red cell distribution width, was added because it may become abnormal earlier in the development of iron deficiency than other blood cell count indicators, such as hemoglobin or mean cell volume, but after the fall of iron stores (132). Many iron-status indicators are affected by inflammation as well as by iron deficiency (72). The ability to assess iron status in NHANES III has been enhanced by the addition of a biochemical measure of inflammation, C-reactive protein. The C-reactive protein measure, which will also be useful in the arthritis component, will aid determination of the prevalence of true iron deficiency without confounding by inflammatory conditions. This will be particularly useful when assessing iron status of older persons, in whom the prevalence of abnormal iron status indicators as a result of inflammation is high (133).

Serum and red blood cell folate were assessed on all examined persons 4 years of age and over. For Phase 2 of the survey (1991–94), assessment of homocysteine, methylmalonic acid, and vitamin B_{12} were added to provide population reference data on vitamin B_{12} status. This information will be critical to assessing the population's folate status and folate-vitamin B_{12} relationships.

NHANES III provides the most comprehensive assessment of fat-soluble vitamin status available from an NHANES. In addition to vitamins A and E, which have been measured in at least one previous NHANES, vitamin D, retinyl esters (which may increase in vitamin A toxicity), and a profile of five different carotenoids are being assessed.

Clinical assessments related to nutrition

Unlike previous NHANES, the physician's examination component of NHANES III did not screen for overt clinical signs of nutritional deficiencies such as keratomalacia, pellagrous dermatitis, or follicular hyperkeratosis, which are uncommon in the United States. Instead, a number of nutrition-related health conditions were assessed in NHANES III (see the section "Health status assessment"), including cardiovascular disease and related risk factors, diabetes, osteoporosis, dental conditions, and gallbladder disease. Dietary and nutrition-related interview information (appendix table X) supplement the physical examination findings and allow for further study of the interrelationships between nutrition and health in the population and subgroups at increased risk.

Sample design and analysis guidelines

Sample design

The general structure of the NHANES III sample design is the same as that of the previous NHANES. Each of these surveys used a stratified multistage probability design. The major design parameters of the two previous NHANES and the special Hispanic HANES, as well as NHANES III, have been previously summarized (17). The NHANES III sample was designed to be self-weighting within a primary sampling unit (PSU) for subdomains and fairly close to self-weighting nationally for each of these subdomain groups (but not for the total population).

The NHANES III sample represents the total civilian noninstitutionalized population, 2 months of age or over, in the 50 States of the United States. The first stage of the design consisted of selecting a sample of 81 PSU's, which, in the first stage, are mostly individual counties. In a few cases, adjacent counties were combined to keep PSU's above a minimum size. The PSU's were stratified and selected with probability proportional to size (PPS). Thirteen large counties (strata) were chosen with certainty (probability of one). For operational reasons, these 13 certainty PSU's were divided into 21 survey locations. After the 13 certainty strata were designated, the remaining PSU's in the United States were grouped into 34 strata, and 2 PSU's were selected per stratum (68 survey locations). The selection was done with PPS and without replacement. The NHANES III sample therefore consists of 81 PSU's or 89 locations.

The 89 stands were randomly divided into 2 sets, 1 consisting of 44 sites and the other 45 sites. One set of PSU's was allocated to the first 3-year survey period (1988–91) and the other set to the second 3-year period (1991–94). Therefore, unbiased estimates (from the point of view of sample selection) of health and nutrition characteristics can be independently produced for both Phase 1 and Phase 2 as well as for both phases combined.

For most of the sample, the second stage of the design consisted of area segments composed of city or suburban blocks, combinations of blocks, or other area segments in places where block statistics were not produced in the 1980 census. In the first phase of NHANES III, the area segments were used only for a sample of persons who lived in housing units built before 1980. For units built in 1980 and later, the second stage consisted of sets of addresses selected from building permits issued in 1980 or later. These are referred to as "new construction segments." In the second phase, 1990

census data and maps were used to define the area segments. Because the second phase followed within a few years of the 1990 census, new construction did not account for a significant part of the sample and the entire sample came from the area segments.

The third stage of sample selection consisted of households and certain types of group quarters, such as dormitories. All households and eligible group quarters in the sample segments were listed, and a subsample was designated for screening in order to identify potential sample persons. The subsampling rates enabled production of a national, approximately equal, probability sample of households in most of the United States, with higher rates for the geographic strata with high Mexican-American populations. Within each geographic stratum, there is an approximate equal-probability sample of households across all 89 stands. The screening rate in each stratum was designed to produce the desired number of sample persons for the rarest age-sex domain in the race and ethnic group defining the geographic stratum.

Persons within the sample of households or group quarters were the fourth stage of sample selection. All eligible members within a household were listed, and a subsample of individuals was selected based on sex, age, and race or ethnicity. The definitions of the sex, age, race or ethnic classes, subsampling rates, and designation of potential sample persons within screened households were developed to provide approximately self-weighting samples for each subdomain within geographic strata and at the same time to maximize the average number of sample persons per sample household. Experience in previous NHANES indicated that this increased the overall participation rate.

Although the exact sample sizes will not be known until data collection has been completed, estimates have been made. A summary of the expected sample sizes at each stage of the design is as follows:

| Number of PSU's | 81 |
|---|----|
| Number of stands (survey locations) | 89 |
| Number of segments | 38 |
| Number of households to be screened | 00 |
| Number of households with sample persons 20,0 | 00 |
| Number of sample persons | 00 |
| Number of interviewed sample persons 35,0 | 00 |
| Number of examined sample persons | 00 |

A more detailed description of the sample design for NHANES III, including a description of the research that resulted in the final design, has been previously published (17).

Analysis guidelines

Because of the complex survey design used in NHANES III, traditional methods of statistical analysis based on the assumption of a simple random sample are not applicable. Detailed descriptions of this issue and possible analytic methods for analyzing NHANES data have been described previously (7,79,134,135). These previously recommended guidelines are revised on a periodic basis as new statistical procedures and analytic computer software are developed. However, there are some important analysis considerations that have not changed over time.

First, there are the two aspects of the NHANES design that must be taken into account in data analysis. One is the sample weights and the other is the complex survey design. Sample weights are needed to estimate means, medians, and other descriptive statistics. They must be used to produce correct population estimates because each sample person does not have an equal probability of selection. The sample weights incorporate these differential probabilities of selection and include adjustments for noncoverage and nonresponse. With the large oversampling of young children, older persons, black persons, and Mexican-Americans in NHANES III, it is essential that the sample weights be used in all analyses. Otherwise, misinterpretation of results is highly likely.

The second aspect of the design that must be taken into account in data analysis is the strata and PSU's from the sample design used to estimate variances and test for statistical significance. In general, sampling variances will be underestimated if calculated without incorporating the complex sample design.

The effect of the complex sample design on variance estimates is referred to as the design effect, which is the ratio of the variance of a statistic from a complex sample to the variance of the same statistic from a simple random sample of

the same size (3). A design effect of one indicates the equality of the simple random sample variance and the complex sample variance.

Design effects in NHANES have traditionally been higher than one, and the magnitude of the design effects have been variable. In NHANES I and NHANES II, the average design effect was calculated to be about 1.5. Preliminary analyses from NHANES III indicate that the average design effect might be lower (approximately 1.2 or 1.3).

Although preliminary analyses may be performed on unweighted data with standard statistical packages that assume simple random sampling, final analyses should be done on weighted data using special computer programs that use an appropriate method for estimating variances from a complex sample (e.g., SUDAAN (136) or PCCARP (137)). The calculation and use of "average" design effects (when unstable variances occur) along with the sample weights have been suggested as an alternative NHANES analytic approach (135).

Recently, NCHS staff have participated in an effort to establish guidelines for variance estimation and statistical reporting standards. In addition to delineating some of the previously mentioned issues, the staff produced a nomogram of recommended sample sizes for analyses of complex survey data (table 1). For means of fairly symmetric populations and proportions based on commonly occurring events (where 0.25), a good rule of thumb is that the sample sizeshould be no smaller than some broadly calculated "average design effect" times 30. The first column of the table represents a simple random sample design and the other columns reflect the increased sample size requirements for a more complex survey design. Thus, the minimum sample size for a normal approximation increases for more rare events as well as for survey designs that result in increased average design effects. Other criteria and approaches for estimating minimum

Table 1. Recommended sample sizes for a complex survey design, by design effect and specified proportion

| | Design effect | | | | | | | | | | | | | |
|------------|---------------|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Proportion | 1.0 | 1.1 | 1.2 | 1.3 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.5 | 3.0 | 3.5 |
| 0.99 | 800 | 880 | 960 | 1,040 | 1,120 | 1,200 | 1,280 | 1,360 | 1,440 | 1,520 | 1,600 | 2,000 | 2,400 | 2,800 |
| 0.95 | 160 | 176 | 192 | 208 | 224 | 240 | 256 | 272 | 288 | 304 | 320 | 400 | 480 | 560 |
| 0.90 | 80 | 88 | 96 | 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 | 200 | 240 | 280 |
| 0.85 | 53 | 59 | 64 | 69 | 75 | 80 | 85 | 91 | 96 | 101 | 107 | 133 | 160 | 187 |
| 0.80 | 40 | 44 | 48 | 52 | 56 | 60 | 64 | 68 | 72 | 76 | 80 | 100 | 120 | 140 |
| 0.75 | 32 | 35 | 38 | 42 | 45 | 48 | 51 | 54 | 58 | 61 | 64 | 80 | 96 | 112 |
| 0.56-0.74 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 75 | 90 | 105 |
| 0.55 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 75 | 90 | 105 |
| 0.50 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 75 | 90 | 105 |
| 0.45 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 75 | 90 | 105 |
| 0.26-0.44 | 30 | 33 | 36 | 39 | 42 | 45 | 48 | 51 | 54 | 57 | 60 | 75 | 90 | 105 |
| 0.25 | 32 | 35 | 38 | 42 | 45 | 48 | 51 | 54 | 58 | 61 | 64 | 80 | 96 | 112 |
| 0.20 | 40 | 44 | 48 | 52 | 56 | 60 | 64 | 68 | 72 | 76 | 80 | 100 | 120 | 140 |
| 0.15 | 53 | 59 | 64 | 69 | 75 | 80 | 85 | 91 | 96 | 101 | 107 | 133 | 160 | 187 |
| 0.10 | 80 | 88 | 96 | 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 | 200 | 240 | 280 |
| 0.05 | 160 | 176 | 192 | 208 | 224 | 240 | 256 | 272 | 288 | 304 | 320 | 400 | 480 | 560 |
| 0.01 | 800 | 880 | 960 | 1,040 | 1,120 | 1,200 | 1,280 | 1,360 | 1,440 | 1,520 | 1,600 | 2,000 | 2,400 | 2,800 |

NOTE: Minimum sample size requirements are adjusted for the relative inefficiency in the sample design by a factor equal to the design effect where design effect = complex sample variance/simple random sample variance

For midrange proportions (0.25 <p <0.75), the simple random sample (SRS) minimum sample size is 30.

For extreme proportions ($p \le 0.25$ or $p \ge 0.75$), the SRS sample size (n) satisfies the following rule: $n(p) \ge 8$ and $n(1-p) \ge 8$.

sample sizes exist; however, this is the approach currently proposed for NHANES III analyses.

These guidelines reflect a design-based approach to estimation and analysis. In some instances, a model-based approach may be used. The use of an "average design effect" to estimate the complex sample variances is one such instance. The use of model-based approaches is most appropriate when maximizing use of all available data is preferable (138,139).

It is important to remember that guidelines are just that, and they are not absolutes. They represent strategies that yield

the most sound statistical conclusions. Violating the guidelines introduces a greater degree of uncertainty about the soundness of the analytic conclusions but does not necessarily mean that a particular analysis is invalid. Consideration of the survey design, survey nonresponse, data collection and processing procedures, potential measurement errors, and the subject matter being studied are all equally important and should be evaluated to judge the merit of each analysis and interpretation of data from any survey, including NHANES III.

Data collection and reports of findings

This section describes the operation of NHANES III, particularly the many different logistical activities that had to come together smoothly for the survey to achieve high response rates and data of high and uniform quality. It is important to maintain consistently high quality throughout a long, complex effort involving many interviewers and examiners gathering data in many places under varying conditions. Because NHANES III provided a standard environment and operation that traveled from one survey location to the next, it was possible to collect data under identical conditions whether in Anchorage, Alaska, or in Brownsville, Texas.

Listed below are some operational "firsts" that distinguished NHANES III from earlier NHANES in both scope and complexity.

- This survey was the longest ever fielded, covering a period of 6 years
- The survey was also the longest in terms of individual respondent burden for both the household interview and examination
- The age range was expanded to include the youngest and oldest people ever covered
- Each of the mobile examination centers (MEC's) consisted of four trailers instead of three
- Oversampling of black persons, Mexican-Americans, the very young, and the very old dictated that many households be screened to sample adequate numbers from these groups
- Interviewers took blood pressure measurements in the households of sample persons
- Staff used computer-assisted personal interviewing (CAPI) procedures for the household interview and the home examination starting in fall 1992
- Trained examiners did a subset of examination components in the home on very young, very old, or handicapped persons who were unable or unwilling to come to the MEC
- All data collection procedures in the MEC were automated
- A contractor conducted all data collection activities
- The design included specifications to accommodate future followup surveys
- A formal emphasis on replicate examinations led to a much larger pool of complete replicate examination data than in any previous NHANES

NCHS contracted with Westat, Inc., a survey research firm, to carry out data collection for NHANES III. For the survey, Westat employed a full-time field staff of 27 household interviewers, 32 examination staff, and 15 administrative staff

who traveled 11 months of each year collecting data. Many of these staff, especially the interviewers and examiners, spoke both English and Spanish. Other activities carried out by Westat included translation of the survey instruments into Spanish, selecting the sample, creating instruction manuals, training staff, and conducting, under NCHS guidance, four pretests of the survey.

Staff carried out the first pretest of interviewing procedures in Spanish and English in Los Angeles, California, from October 3 through November 14, 1987. The pretest involved about 300 interviews with sample persons and tested questionnaire translations and listing, sampling, and household interviewing procedures.

The first examination pretest, held in Rockville, Maryland, from August 10 through December 11, 1987, involved about 600 volunteers from Federal agencies. Certain interviewing procedures were tested as well as all examination procedures including questionnaires.

The second examination pretest was held in Tampa, Florida, from January 4 through March 16, 1988. This pretest involved a probability sample of about 475 persons and tested questionnaire translations and all sampling, listing, interviewing, examination, automation, and quality control procedures. Experience with examinations of the elderly both in the examination center and the home was also a major concern in this pretest.

After several months of evaluating the results of these three pretests, condensing the examination by dropping some components and shortening others, and changing procedures, staff held the "dress rehearsal" in College Park, Maryland, from October 5 through November 25, 1988. The dress rehearsal, which involved about 650 sample persons, was meant only to refine all sampling, listing, interviewing, and examination procedures before the survey started. No changes of substance were made.

NHANES III itself was conducted from October 18, 1988, through October 15, 1994, in two phases, each of which comprised a national probability sample. The first phase was conducted from October 18, 1988, through October 24, 1991, at 44 locations. The second phase was conducted from September 20, 1991, through October 15, 1994, at 45 sites.

Schedule and logistics

The first task undertaken after the selection of the primary sampling units (PSU's) was to develop a schedule to conduct

the survey in each of the 89 locations. Several factors entered into the determination of the sequence of sites within each phase. These included geography, seasonal weather patterns, expected number of sample persons in the PSU's, expected number of households to be screened in each PSU, racial and ethnic profile of the PSU's, and relative distance between consecutive locations.

Because the MEC's are prone to physical breakdowns brought on by cold weather, and sample persons are less likely to participate in extreme winter conditions, the first consideration in scheduling was to avoid the North in winter. Although such a policy may have introduced seasonal variation in some of the data, the NHANES focus on chronic conditions tends to lessen the potential for bias. As it was also important to achieve economy of operation, sequencing survey locations according to their geographical proximity to each other was desirable. Carrying this goal to its most economical conclusion would have required going to all places located in one section of the country before moving on to the next. Because such a configuration would have introduced a time bias that could confound an attempt to analyze trends over time, compromises were necessary. One such compromise was to spread the operation over the survey years so that about one-sixth of each of the black, Mexican-American, and other populations would be sampled in each year. Then for each year, the most economical sequence of survey locations was chosen within the geographic and seasonal constraints. Thus, the conflicting goals of economy of operation and reduction of scheduling bias could both be satisfactorily met. As a result, NHANES III circled the United States each year for 6 years.

The optimal number of sample persons that can be interviewed and examined at any location for any of the Health and Nutrition Examination Surveys (HANES) ranges between 300 and 600. On one hand, for an examination schedule of less than about 3 weeks (the number of weeks normally allowed for 300 persons) it is not cost-effective to set up the MEC with its sewer, water, and electrical connections. On the other hand, 600 persons is the upper limit to allow for the selection of as many PSU's as possible. Therefore, NHANES III survey designers established a target number of sample persons that stayed within that range and averaged around 450 per site. This consistency in size made it easier to piece together a schedule that not only satisfied the restrictions mentioned earlier but the following requirements as well.

The schedule at each survey site contained an initial period of about 3-4 weeks of household interviewing before examinations began. During this time some 15 interviewers did most of the screening, household interviewing, and making of examination appointments. Then an examination team arrived to prepare the MEC and carry out examinations during a 4-7-week period. See figure 1 for a portion of a representative schedule.

The movement of staff between survey locations followed one of three patterns depending on the type of staff—household interviewer, examiner, or field office. Most household interviewers traveled to every site to do the bulk of screening and interviewing before examinations started. Then at the beginning of examinations, they went on to the next

place to do screening and interviewing. Each of the two teams of examination staff traveled to every second location to stay for the examination period. Each of the three field office teams traveled to every third location where they stayed from before the beginning of household interviewing through the end of examinations, a period of 8–11 weeks. A few household interviewers who specialized in convincing reluctant sample persons to participate in the examination phase of the survey, rather than in the initial screening and household interviewing, were more apt to follow different patterns. However, by and large, the model described represents staff movement throughout NHANES III.

Advance arrangements and public affairs

Carrying out NHANES III in each community involved a sequence of activities that covered a span of about 7 months (figure 2). Early activities focused on notification of local officials, selection and preparation of field office and MEC sites, and solicitation of support from the media and other local contacts. Then, as field office and interviewing staff arrived on site, the emphasis shifted to household interviewing of sample persons and making appointments for them to have the physical examination. Finally, after the examination staff arrived, examinations took place in the MEC's.

About 4 months before household interviewing started in a county, NCHS staff sent an introductory letter and an NHANES III Fact Sheet to each of a number of local officials, including the local health director and nutritionist; mayor or county executive; Chamber of Commerce president; police chief; sheriff; school superintendent; coordinator on aging; and heads of the medical, dental, and osteopathic societies.

Later, the NCHS and Westat advance team met with the local health director and key staff to explain the survey and ask their help in finding a site for the MEC. As in all HANES, the most desirable site was central, near major highways, level, and easily and cheaply accessible to sources of water, electricity, and sewage disposal. It also had to be in a neighborhood to which any person in the county would feel comfortable going. Good examples are parking lots of large hotel chains, hospital parking lots, and county fairgrounds.

At the initial meeting with the health department, the advance team learned of other key local officials to be informed. They discovered public information officers who could help promote the survey locally. They also asked for sources of medical care who would accept referrals when NHANES physicians or laboratories found conditions requiring treatment for sample persons who had no usual source of medical care.

When all advance arrangements were complete, NCHS staff sent each local official a followup letter giving the addresses and phone numbers of the field office and MEC.

NCHS personnel purposely maintained a direct role in the areas of advance arrangements and public affairs. As representatives of a Federal agency, NCHS staff could establish a rapport with local government officials that might not have been achieved as easily by a private contractor alone. Therefore the advance-arrangements team was comprised of both

| | Team I (801 miles) | | Team 2 (323 miles) | |
|---|---|--|---|-------------------------|
| | MEC III (842 miles) | | MEC II (842 miles) | |
| | Mytown | | Ourtown | |
| | Site 442 | • | Site 443 | |
| | 1,579 households screen | nea | 1,300 households scree | nea |
| Office cetus | 450 sample persons | | 391 sample persons | |
| Office setup | 8/13 (Thu) | | 9/2 (Wed) | |
| Interviewing | 8/20 (Thu) | | 9/10 (Thu) | |
| Trailer arrival | 8/23 (Sun) | | 9/3 (Thu) | |
| Trailer setup | 8/24 (Mon) | | 9/4 (Fri) | |
| Travel days | 2 days (9/3-9/4) | | 1 day (9/28) | |
| Training days | - | | 9/29 (Tue)-10/2 (Fri) | |
| Exam staff setup | 9/5 (Sat) | " | 10/3 (Sat) | |
| Dry runs | 9/9 (Wed) | Days Days off | 10/6 (Tue) | Days Days off |
| Examinations | 9/10 (Thu)-9/12 (Sat) | 3 | 10/7 (Wed)-10/12 (Mon) | |
| | 9/15 (Tue)-9/21 (Mon) | 6 Sun | 10/15 (Thu)-10/19 (Mon | |
| Training | 9/24 (Thu)-9/28 (Mon) | 5 | 10/22 (Thu)-10/26 (Mon | |
| Training | | - | 10/29 (Thu)-11/2 (Mon) | 5 3 |
| | 10/3 (Sat)-10/5 (Mon) | 3 5 | 11/5 (Thu)-11/7 (Sat) | 3 |
| | 10/8 (Thu)-10/12 (Mon) | | | |
| | 10/15 (Thu)-10/19 (Mon | 5 1 | | |
| | 10/22 (Thu) | 28 days | Total | 23 days |
| | rotai | 20 days |) Otal | 20 day3 |
| Trailer teardown | 10/23 (Fri) | | 11/8 (Sun) | |
| Trailer departure | 10/23 (Fri) | | 11/9 (Mon) | |
| Office setup Office training Interviewer training Interviewing Trailer arrival Trailer setup Travel days Exam staff setup Dry runs Examinations | MEC I (1,043 miles) Theirtown Site 444 1,319 households screer 485 sample persons 10/1 (Thu) 10/8 (Thu) 10/9 (Fri) 10/10 (Sat) 9/30 (Wed)-10/5 (Mon) 10/6 (Tue) 2 days (10/24-10/25) 10/28 (Wed) 10/29 (Thu) 10/30 (Fri)-10/31 (Sat) 11/3 (Tue)-11/7 (Sat) | Days Days off 2 5 | MEC III (1,399 miles) Yourtown Site 445 1,786 households scree 446 sample persons 10/20 (Tue) 10/26 (Mon)-10/27 (Tue) 10/28 (Wed) 10/29 (Thu) 10/25 (Sun) 10/26 (Mon) 2 days (11/9-11/12) 11/13 (Fri) 11/14 (Sat) 11/17 (Tue)-11/21 (Sat) 11/24 (Tue)-11/30 (Mon) 12/3 (Thu)-12/7 (Mon) |) Days Days off 5 |
| | 11/10 (Tue)-11/16 (Mon 11/19 (Thu)-11/23 (Mon 11/26 (Thu)-11/30 (Mon 12/3 (Thu)-12/7 (Mon) 12/10 (Thu)-12/11 (Fri) Total | 6 Sun 5 4 Thu (holida 5 2 29 days | 12/10 (Thu)-12/14 (Mon | 5 |
| Trailer teardown | 12/12 (Sat) | | 1/9 (Sat) | |
| Trailer departure | 12/12 (Sat) | | 1/16 (Sat) | |
| nalici ucpatiule | 12/12 (Say | | Break 12/19–1/4 | |
| | | | 5100K 12/10 1/T | |

Figure 1. Example of a portion of a representative survey schedule used in the National Health and Nutrition Examination Survey: 1988–94

| Month | -4 | -3 | -2 | -1 | 0 | +1 | +2 |
|---------------------------------|----|----|----|-------|----|----|----|
| Notification of local officials | X | | Χ | | | | |
| Advance arrangements | X | ~ | | ~~~~~ | Χ | | |
| Opening of field office | | | | | Χ | | |
| Trailer setup | | | | | XX | | |
| Mailing of advance letters | | | | Х | | | |
| Household interviewing | | | | | X | | X |
| MEC examinations | | | ' | | | X | Х |
| Home examinations | | | | | | | XX |
| Trailer teardown | | | | | | | Х |
| Closing of field office | | | | | , | | Х |
| Month | -4 | -3 | -2 | -1 | 0 | +1 | +2 |

NOTE: MEC is mobile examination center.

Figure 2. Sequence of activities at each survey location of the National Health and Nutrition Examination Survey: 1988-94

Westat and NCHS staff who together started early preparations in each county. Once the initial rapport was secure, Westat personnel continued the process.

NCHS workers produced several outreach materials for use in different ways to appeal to various audiences. The four-page NHANES III Fact Sheet explained the survey in detail to local officials, the media, and other inquiring professionals. One-page flyers emphasized the special benefits of the survey for older people. The Secretary of Health and Human Services recorded a short promotional videotape for television public service announcements. A longer videotape with footage from the examination was produced and made available for field staff to offer the local television stations. Special endorsement letters from the American Association of Retired Persons, the National Institute on Aging, the Social Security Administration, and the National Association of Area Agencies on Aging were available to promote the survey when appropriate. A distinctive flash card booklet helped the interviewers explain to sample persons how they were selected for NHANES III.

The most important of the outreach materials, the NHANES III Sample Person Brochure, was an eight-page two-color booklet with pictures that described the examination experience for the sample person. Written in simple language, in either English or Spanish, it used a question-and-answer format designed to make sure sample persons were fully informed of the benefits and risks of the examination before they consented to participate. The last page of the booklet was the actual consent form to be signed by the sample person or parent.

Another aspect of outreach was publicity—how to get it and how not to get too much of it. Before household interviewing commenced, NCHS staff sent a locally tailored press release to each newspaper, television station, and radio station in the community. Their hope was to get at least one NHANES III article published in a local newspaper just before household interviewers began knocking on doors. NCHS staff also sent special press releases to newspapers serving the senior citizen, Hispanic, and African-American populations

where such papers existed. When the approach was successful, the interviewers, carrying the article, a local affirmation of NHANES III, were better able to confirm the legitimacy of the survey to respondents.

At the start of the examination period, after household interviewing had been going on for about 3 weeks, the staff held a "dry run" examination session at which they conducted examinations on volunteers from the local community. Although the main reason was to make certain all examination equipment was running properly, it was also a chance to invite local officials and the media to an open house. Often the television stations shot examination footage (using volunteers so as not to violate the confidentiality guaranteed to sample persons) that appeared on the evening news programs. This television exposure, which often included all or part of the NCHS-produced videotape, gave an extra boost to the never-ending efforts to encourage participation among those selected for the survey.

Occasionally, when several operations were running simultaneously in neighboring communities, such as in the Los Angeles area, NCHS staff arranged press conferences. However, a more productive, and thus more commonly used, mechanism was an informative talk given by the Westat field manager at a local service club or senior citizen center.

Staffing and training

Westat advertised nationally to recruit field office, interviewing, and examination staff who were not only qualified in their specialties but came from a variety of geographic, racial, and ethnic backgrounds. For many positions it was imperative that staff speak both English and Spanish.

Although the interviewing staff were not required to have academic credentials, most were experienced interviewers who represented a cross-section of society; many were of Hispanic origin. Similarly, although the requirements for the field office administrative staff did not include academic credentials, many of these staff had previous field experience, even previous HANES experience.

Each of the two examination staffs was a group of 16 who worked and traveled together as a team. They included a physician, dentist, ultrasonographer, two dietary interviewers, four x-ray technicians, a phlebotomist, three medical technologists, a health interviewer, a home examiner (who was a medical technologist by training), and a coordinator. Many staff, especially the dietary interviewers, health interviewer, and coordinator, were fluent in both Spanish and English. Two locally hired staff supplemented them at each place.

Examining physicians were required to have either an M.D. or D.O. degree, be licensed, and be board certified or board eligible in family, internal, or preventive medicine. Dentists were required to have a D.D.S. degree and be licensed. Ultrasonographers carried Registered Diagnostic Medical Sonography credentials. Health technicians were certified by the American Registry of Radiologic Technologists. Dietary interviewers had a bachelor's degree in home economics or a related subject and at least 10 credit hours in foods and nutrition. Medical technologists had experience separating white cells from blood samples.

All staff went through month-long introductory programs that oriented them to NHANES III in general and trained them to do their jobs in particular. Conducted by Westat staff, these training programs relied on NCHS subject matter experts as well as outside consultants to bring the new employees to satisfactory skill levels before they went into the field to collect data. Yearly, throughout the survey, Westat and NCHS staff conducted formal retraining programs to make sure these skill levels were maintained.

Household interviewing and examination appointments

About 10 days before interviewing began in a county, the NCHS Director sent to each sample household in the 23–26 sampled neighborhoods a large-print letter saying that an interviewer would soon be visiting. The dwelling units selected to be screened were a probability sample of those identified by staff called "listers" who previously had walked throughout the sampled neighborhoods looking for all dwelling units.

At the beginning of the interviewing period, the field manager distributed segment (neighborhood) assignments to about 15 interviewers. They visited each household to administer a screening questionnaire that identified the household members, their ages and birth dates, and their racial and ethnic identities. Then according to the sampling instructions based on age, sex, and racial and ethnic identity contained on the screener, the interviewer selected sample persons from the household members.

Because of the effort to oversample the very young, the very old, black persons, and Mexican-Americans, interviewers had to screen many households. Although only about one household in five contained sample persons, in households with sample persons, an average of just over two people were chosen. Therefore, much of the early interviewing focused on screening. Nevertheless, the competing interest of filling the examination schedule early made it crucial at first not only to

screen households but also to complete interviews and make appointments for selected sample persons to have the health examination.

Because many Mexican-Americans preferred to have the household interview in Spanish, all survey data collection instruments were available in Spanish as well as English. As mentioned earlier, many interviewers were fluent in both languages. When it was necessary to conduct an interview in a language other than English or Spanish, a translator was engaged to assist the interviewer in administering the questionnaires.

At the beginning of each interview with a sample person over 16 years of age, the interviewer asked the respondent to refrain from smoking or drinking coffee or alcohol during the interview. The reason for this request was to prepare for the blood pressure measurements to be taken later. Then the interviewer administered, depending on the sample person's age, either the Household Adult Questionnaire (for persons aged 17 years and over) or the Household Youth Questionnaire (for persons 2 months-16 years of age). See appendix III for the content of these questionnaires and appendix table I for a list of interview topics by questionnaire. At the end of the adult interview, the interviewer, following a rigorous procedure, took three sets of systolic and diastolic blood pressure measurements and recorded the average of the last two. Then the interviewer gave the respondent a report that included the measurements; an assessment of whether they were normal, borderline high, or high; and recommendations for followup by a health care provider.

The final questionnaire was the Family Questionnaire (appendix III), which the interviewer administered to a responsible adult household member. The purpose was to find out about educational levels, ethnicity, occupational information, health insurance coverage, family income, and characteristics of the house itself.

Before asking sample persons to make an appointment for the health examination (which could last as long as 3½ hours), interviewers explained its various components. Participants also learned that they would receive free transportation to the MEC and a cash payment. The basic payment was \$30 for the examination. However, there was the possibility of receiving an additional \$20 under conditions relating to the time of the appointment and fasting status, conditions that are explained later in this section. Another incentive for sample persons to participate was that they would receive the findings from the examination.

After the sample person had read the Sample Person Brochure and signed the consent form, the interviewer called the field office to make the appointment, finding the earliest examination slot available, subject to a few constraints, on a day and time acceptable to the sample person. Then the interviewer gave the sample person an appointment slip showing the date and time of the scheduled examination appointment and explained the exact fasting instructions. The interviewer indicated that a taxi would take the person to the examination center at the appointed time and would return the examinee home. However, persons who preferred to drive would be paid for their mileage. The interviewer also told the

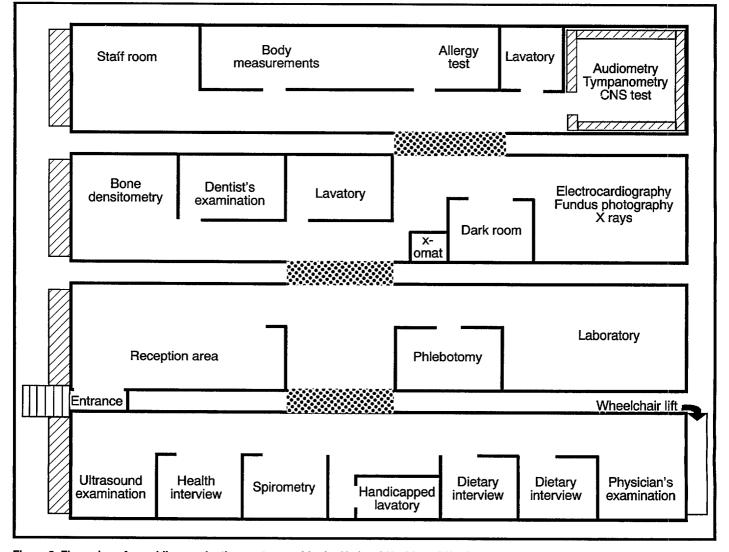


Figure 3. Floor plan of a mobile examination center used in the National Health and Nutrition Examination Survey: 1988-94

sample person that a reminder notice would arrive in the mail a few days before the scheduled examination. A day before the appointment, a field office staff member telephoned the sample person with a reminder of the appointment, the fasting instructions, and the taxi pickup arrangements if applicable.

The main limitation on scheduling a person for the examination, one considered so important that people were remunerated for following it, was related to the need to obtain blood specimens under controlled fasting conditions. In past HANES in which there was a glucose tolerance test (GTT), interviewers asked the people chosen for it to fast overnight and appear for a morning examination. Many people, however, were unwilling or unable to schedule a morning appointment. To avert a similar occurrence in NHANES III. NCHS staff tried something new. Households were divided randomly into two groups, "morning" and "other." Anyone over the age of 20 in the morning group fasted overnight and had a morning examination. The others over the age of 20 years fasted 6 hours and had either an afternoon or an evening examination. Whether or not the sample person was given the GTT (only those between 40 and 74 years of age were eligible

for this test), this arrangement enabled NCHS staff to analyze better the results of blood tests normally given under strict overnight fast conditions. For example, it allowed analysis of diurnal variations in the levels of laboratory test values such as lipids. What made the system work was that a \$20 bonus was paid to sample persons who participated during the designated examination session.

Another example of a scheduling constraint was the limit on the number of persons over the age of 60 who could participate during a given examination session. The examination could be very long and arduous for older persons; therefore, there would not have been time for all of them to complete the examination if too many older persons had been scheduled during the same session.

More than 73 percent of sample persons made an appointment, appeared at the MEC as scheduled, and completed the examination at that time. These people required no further followup visits. The rest, people who either broke their appointments or refused to make any at all, required additional persuasion efforts from the interviewers. Household interviewers were very diligent about recontacting these people and

succeeded in convincing many of them eventually to participate in the examination. These interviewers used a variety of techniques beyond the offer of remuneration, free transportation, and the results of the examination. Techniques included appealing to the sample person's sense of responsibility and community spirit. Eventually, about 14 percent of these people agreed to take part and contributed to raising the examination rate by 4 percentage points to more than 77 percent.

Examination center and equipment

As in previous surveys, NHANES III examinations were carried out in specially designed and equipped MEC's that were moved from one location to the next according to the survey schedule. Each of the three identical examination centers consisted of four trailers, approximately 48 feet long by 8 feet wide, with about 1,570 square feet of space. To form an examination center, the four trailers were parked on level hard ground, side by side, and connected with enclosed telescoping passageways. With four trailers instead of three, an NHANES III MEC was more than one-third larger than in previous NHANES. Through size alone, this permitted a far more extensive and complex examination than before. Other new features of the NHANES III examination center, added because of the emphasis on examining older people, were a wheelchair lift and a lavatory designed to accommodate handicapped people.

Shown in figure 3 is a diagram of the floor plan of each MEC. The shaded areas between the trailers represent the passageways, and those at one end of each trailer depict air conditioning units. The minicomputer serving the automation network was in the body measurement room that was adjacent to the staff room, which contained a network printer, copier, refrigerator, and range.

For any NHANES, the instruments used to collect examination data were chosen because they met certain criteria for acceptability. The preference was to use equipment normally used in a clinical or research setting if it could operate reliably in the survey setting with minimal alteration. The statistical data produced by the instrument had to be acceptable to the scientific community. The instruments had to be rugged enough to stand up to the rigors of constant travel. Ease of calibration and maintenance was also important, and the staff had to be able to use the equipment accurately and reliably. Lastly, the equipment had to fit into the small space available. Appendix I lists the equipment used during NHANES III.

The acceptability of the equipment was a factor in deciding which components could be done in the NHANES setting. For example, the bone density component would not have been in NHANES III had it not been for the timely availability of a bone densitometer that used x rays to produce an image of the hip in about 15 minutes. A bone densitometer considered early in the planning required about 30 minutes, an unaffordable luxury of time when planners were trying to fit a myriad of possible components into a 4-hour examination session.

Before examinations began at any location, the MEC manager directed the parking and alignment of the trailers, the

leveling of the individual trailers, the connection of the passageways, and the electrical, water, and sewer attachments. Because there were three MEC's and two examination teams, a set of trailers could always be moved from one survey location to another, parked, set up, and ready for examinations by the time an examination team arrived.

The MEC's were moved in synchrony with the three field office teams and served to transport each field office automation system from one place to another. Many other office and medical supplies also traveled with them. A running inventory of all office and medical supplies was kept with each examination center so that when supplies became low, the staff at the central warehouse could send out replenishments, usually after the trailers arrived at a survey location but before examinations began.

Several days before examinations began, the NCHS biomedical engineer arrived on site to inspect all the computer and medical equipment to make sure it was working satisfactorily. During this period the engineer arranged for company service representatives to do preventive maintenance work on the machines. On setup day the examination staff unpacked the rest of the instruments and supplies and put the machines through their paces while the engineer was still on site in case malfunctioning equipment needed to be repaired. The engineer usually stayed through the "dry run" examination session, at which staff tested the equipment using local luminaries and other volunteers to act as examinees. The engineer also stayed for at least a day of real examinations to be absolutely sure everything was functioning normally.

A typical schedule for the first half of the examination period embraced two 4-hour sessions a day, 5 days a week, Tuesdays through Saturdays. Wednesdays, Fridays, and Saturdays had morning and afternoon sessions; Tuesdays and Thursdays had morning and evening sessions. The target number of examinees scheduled for each session was 10. About halfway through the examining period the schedule shifted to a Thursday-through-Monday work week. Morning and afternoon sessions were on Fridays, Saturdays, and Sundays; morning and evening sessions were on Thursdays and Mondays. One reason for this intricate schedule was to provide the flexibility to accommodate all sample persons whenever they might be available. Another reason was to gather 24-hour dietary recall information for every day of the week, not just weekdays.

Examination center methods

Four types of data collection methods were employed in the MEC. Appendix table II shows the examination components and the age groups covered by each, as well as the topics covered by the supplemental questionnaires administered in the examination center. Appendixes III and IV give the specific content of the forms and questionnaires used. Other sections discuss the rationale and purposes of the components.

One method of data collection was the direct physical examination by a professional expert examiner, as in the physician's and dental examinations. Although the content of these examinations was quantified to the fullest extent pos-

sible, there still remained in each one aspects requiring the professional judgment of the expert examiner. Because these professionals were clinically educated to use their independent judgment, it was necessary that they be trained to conform exactly to the very different demands of a standardized survey examination procedure.

The tests and measurements done by the health technicians and ultrasonographers represented a second method. These measurements were quantifiable and objective, and the procedures for them could be clearly defined, leaving little room for judgment on the part of the examiner. Audiometry, tympanometry, fundus photography, radiography, electrocardiography (ECG), gallbladder ultrasonography, bone densitometry, body measurements, allergy testing, physical performance testing, and spirometry fall into this category of examination. Many of these examinations yielded products that required later expert review to quantify the findings contained therein.

The third method of data gathering in the MEC was interviewing, used to collect nutrition-related information, data on sensitive subjects such as tobacco use among youngsters, sexual experience, and depression; and tests of cognitive ability and learning achievement. For example, in a dietary interview room, with the help of food models to prompt respondents to identify portion sizes of foods consumed, dietary interviewers obtained and entered into the automated system 24-hour recall and food frequency information. A health interviewer in a private setting administered the WISC-R and WRAT-R to young respondents and the MEC Adult Questionnaire, MEC Youth Questionnaire, or MEC Proxy Questionnaire as appropriate for the examinee's age.

A fourth data collection method, specimen collection, was used by the phlebotomist who drew blood on examinees 1 year of age and over. Urine specimens were collected, too, from those 6 years of age and over. In the laboratory, medical technologists divided blood and urine specimens for analysis. Blood samples were tested for certain hematological assessments, then the remainder of the blood and urine specimens were processed and divided into many prelabeled vials. The vials were stored under appropriate cold (4–8°C) or frozen (≤20°C) conditions in preparation for shipment to various analytical laboratories where numerous other tests were performed later. In appendix tables III–V the analytes measured in NHANES III, the assay methods used, and the laboratories where the assays were performed are listed.

Examination experience

When a sample person appeared at the appointed time at the examination center, the coordinator greeted the person in the reception area. The examinee first changed into the foam slippers and paper shirt and pants provided for all examinees. The coordinator then assigned the person to an examiner according to a flow system designed to make the best use of the 4-hour examination session. After each examination component or set of components, the examinee returned to the coordinator for assignment to another examiner. This continued until all components were complete.

The purposes of the flow system were to keep to a minimum the time examinees were in the examination center and to use examination staff efficiently. Because the examination components varied in length and because examinees did not receive the same components, the flow system had to be flexible. Therefore the first rule was to serve the examinee who had been waiting the longest. The second rule was to use priorities to determine which examiner served the examinee if more than one examiner was available. Sometimes the influence of one component upon another determined which one the examinee received first.

Before starting an individual examination component, the examiner asked the examinee a few questions to see if there was any reason why it would not be safe for the person to have that examination. The questions were different for each component. Safety exclusions are discussed further later.

Upon completion of an examination component, the examiner entered a completion code into the computer and also recorded the fact of completion on a paper control record. The examinee carried the control record along from one component to the next through the whole examination. After completing all examination components, the examinee changed back into street clothes and returned to the reception area. At the end of the examination session, the coordinator thanked and remunerated the examinee according to the established procedure.

Home examination

A goal in NHANES III was to examine the highest possible number of sample persons in the MEC. However, some frail older people and others who were bed-bound or in wheelchairs could not participate in the usual way. Because NHANES III had no upper age limit, many more individuals than in previous surveys fell into this group. Therefore, the home examination was designed to gather certain physical and physiological information on sample persons in their own houses through a subset of components normally done in the MEC. These are listed in appendix table II.

Sample persons 60 years of age and over whom interviewers found to be bed-bound or in wheelchairs were immediate candidates for the home examination. The household interviewer did not try to schedule such an individual for the MEC but instead arranged for a home examination to be done by a medical technologist. For other sample persons, interviewers did not suggest the possibility of a home examination until a decision was made that further efforts to persuade the person to come to the MEC would be futile.

A field office staff member made the appointment for the home examination. Sample persons who were at least 20 years of age were asked to fast exactly as if they had been going to the MEC. Although the appointment was at the sample person's convenience, preferred appointment times were during periods when the examination center was open and its lab available for blood processing. After the examination, which lasted 30–60 minutes, the home examiner gave the sample

person a cash payment of \$15. Then the examiner returned to the examination center to process the blood specimens. (Urine specimens were not collected.)

Data processing

During each examination component, examiners recorded all data directly into an automated data collection system that ended the need for most paper forms. Except for a few components (bone density, dietary, dental, spirometry, and neurological) that used independent automated systems, the system was integrated. However, administrative functions for all components were part of the central automated system. The need for hard-copy records did not vanish completely, though; technicians still took x rays; they took photographs of the fundus of the eye and of height measurements; they generated tympanogram, electrocardiogram, and spirometry tracings; and they made videotapes of the gallbladder ultrasound examination.

All data gathered about a sample person carried a unique identifying number. However, there were two exceptions that applied to the HIV seroprevalence test and the urine drug tests done for persons 18 years of age and over. Because of the special sensitivity of the tests, they were conducted as double-blind studies using randomly numbered specimen vials. There was no link between the random numbers and the corresponding sample person identification numbers. The only demographic information about a sample person that accompanied the vials was sex, age group (20-year group), race and ethnic group, survey location, and educational level.

At the end of operations at each location, field staff sent all records to various locations for processing, interpretation, and/or storage. Computer tapes of CAPI data and field office administrative records went to the NCHS data processing center at Research Triangle Park (RTP), North Carolina, for uploading to the mainframe computer. Tapes of examination data directly entered into the automation system went to NCHS headquarters for immediate uploading. Paper questionnaires done before NHANES III started CAPI procedures went to the RTP facility for keying and processing. X rays, spirometry and ECG tracings, tympanograms, and height and weight photographs went to NCHS headquarters. Fundus photographs, videotapes of the gallbladder ultrasound examination, and computer tapes of the spirometry and bone density examinations went to consultants for reading and interpretation before being returned to NCHS.

Quality control

Two sources of error may enter into survey data collection activities: sampling error and nonsampling error. The control of sampling error is discussed in the section "Sample design and analysis guidelines." Described in this section is the control of nonsampling error.

One type of error occurring in perhaps all surveys, especially those in which participation is voluntary, is that resulting from nonresponse. Nonresponse bias may occur if there is a large proportion of nonrespondents whose character-

istics differ from those of respondents for the measurements being made. The potential nonresponse bias is greater when response rates are low. Therefore, a major effort was made in NHANES III, as in all previous NCHS health examination surveys, to reduce the magnitude of nonresponse.

Two adaptations to earlier NHANES sample designs were still in effect for NHANES III, primarily to improve response rates. The number of sample persons selected per family was larger than in past NHANES (although smaller than in the Hispanic HANES), and the geographic size of the PSU's remained small (as it was in NHANES II and the Hispanic HANES), so the travel distance between the neighborhoods and the examination center was as short as possible.

Most efforts at increasing response were directed at making the examination experience more appealing. Although some of these methods have been mentioned previously, they included adapting the schedule of examination sessions to suit the needs of each particular locality; scheduling examination appointments at the convenience of the sample persons; scheduling whole families together for the examination; using bilingual Hispanic interviewers and examination staff members; printing the questionnaires in both Spanish and English; locating the examination centers in convenient and socially acceptable places; providing free transportation to and from the examination center; providing for babysitting; obtaining permission from the schools for student examinees to miss classes; sending the examination results to the examinee; and giving each examined person a cash payment as a token of appreciation. Also, an extensive followup system was used to help sway sample persons who refused the examination or broke their appointments.

Assuring the quality of the household interview data was a long, thorough process. First, the questionnaires developed by NCHS staff were translated into Spanish. During the pretests they were checked in both Spanish and English to see that they worked in both languages and that the two versions were equivalent. Precise definitions of questionnaire terms were written and incorporated into detailed instruction manuals. Before the interviewers went into the field, they received intensive training specific to the survey and its questionnaires. Later retraining sessions were conducted as necessary. In years 2 and 3 of the second phase of the survey, interviewers used CAPI procedures with built-in field edits that prevented many inconsistencies and out-of-range answers from ever being recorded.

Validation of completed questionnaires with respondents is a procedure often used in interview surveys to be sure questionnaires have not been falsified. In NHANES III supervisors conducted a 10-percent validation of all cases, some by telephone, others in person. If problems were discovered, the work was verified or redone to the extent necessary to ensure the validity of the data.

Field edits were a very important part of quality control. Throughout the survey an editor went over all questionnaires completely (whether on paper or in the CAPI system) and informed the interviewer's supervisor of any error patterns found, so interviewers could be corrected. Also, field personnel sent each questionnaire with errors to the MEC on the day

of the sample person's examination so the correct information could be retrieved directly from the examinee.

One of the most direct methods of monitoring, used in all NCHS health examination surveys, was observation of the interviews by NCHS and contractor staff. In addition, while these headquarters staff were in the field, they often took time to edit questionnaires.

Quality control of the health examination had the two goals of reducing systematic and random measurement error for each examination component and quantifying what error remained. Quality control measures that applied to the examination as a whole were the standard environment provided by the three identical sets of MEC's; standard state-of-the-art equipment and examination procedures; automation of all data collection procedures in the examination center through a local area network run by a minicomputer; detailed written instructions for all procedures; specialized training of examiners before they collected data; periodic retraining of examiners to reduce the drift in technique inherent in long surveys; formal transmittal procedures to account for and send data from the field to the processing centers; documentation of unusual occurrences that may have affected the data; a thorough check of all medical and automation instrumentation at each location; and the "dry run" examination session conducted to be sure all the equipment and staff were functioning properly.

Other elements of the field quality control program applied individually to the various components of the examination. For example, the technicians calibrated the equipment and instruments used for ultrasonography, bone densitometry, spirometry, audiometry, tympanometry, radiography, body measurements, and the laboratory procedures. These calibrations were done at various intervals depending on the instrument. The biomedical engineer saw that preventive maintenance for both medical and automation equipment was performed as scheduled with results recorded in instrument log books. Also, throughout the survey, the engineer and systems staff were on call to see that the equipment consistently functioned at the high performance levels required.

As with the household interview component, observation of examinations was an important quality control measure. Various NCHS, Westat, and consultant staff each visited the field about four times a year to observe the procedures under their respective domains. During these visits, the examiners were retrained as appropriate if technique had deteriorated since the last set of observations. For all these field visits, written reports documented the quality of the data gathered and retraining conducted.

Certain examination components, such as ECG, tympanometry, radiography, bone densitometry, spirometry, fundus photography, and ultrasonography yielded hard documents. The ECG's and spirograms were recorded not only on paper as tracings but also on computer tapes. The films and tracings produced by these components had to meet a number of standards of quality to be acceptable. To assess the quality of the hand and knee x rays, an expert radiologist read a sample of the films and transmitted those findings to the technicians so their techniques could be affirmed or corrected as necessary.

As a safeguard against recording error in the measurements of standing and sitting height, there was extra quality control. The technician took an instant photograph of the height scale setting for each standing and sitting height measurement and read the measurement to be recorded from the photograph, not directly from the scale. This way the effect of parallax was removed. Then later all the height photographs were compared with data entered into the computer. When recording errors were found, the data were corrected.

Another frequently used quality control measure was to compare patterns of measurements over time and across examiners and survey locations. If any abnormal variability appeared, appropriate measures were taken to uncover the reasons and retrain examiners in the correct measurement techniques.

Even though many methods were used to keep measurement error to a minimum, some degree of measurement error may have been left in the data. Therefore, another objective of the quality control program was to determine the extent of this error. To do this, the survey collected replicate data, either by rereading hard documents produced by the procedures, such as x rays, ECG's, and photographs of height measurements, or by repeating procedures exactly as they were done originally. Most laboratory tests were repeated as a matter of course. But otherwise, the scope and frequency of collection of replicate data varied greatly.

During the first few weeks at a survey location, many examinees over 6 years of age were asked if they were willing to participate 2–3 weeks later in a second examination in the MEC or in the home. For operational convenience, these examinees were volunteers. The possible bias resulting from the use of a nonstatistical sample was not of prime importance because the main interest was not the values of the measurements themselves but rather the errors in the measurements.

Generally, 20 volunteers at each survey location were scheduled for re-examination in the examination center. An additional 10 people examined first in the MEC volunteered for a replicate examination in the home. The home examination replicates made it possible for the tests and measurements made in the home to be compared with similar ones made in the MEC. Such components included spirometry, body measurements, and laboratory tests.

Although the full-scale replicate examinations were the single most ambitious undertaking of replicate data gathering in NHANES III, other replicate measurements were periodically performed for the purposes of monitoring and evaluating inter- and intra-examiner variability. For example, replicate data were gathered by persons designated as "standards" who visited the field periodically and replicated such examination components as the dental examination, blood pressure, and body measurements. These replicates were used mainly to monitor the measurement process and retrain examiners if necessary. Sometimes, instead of replicating a procedure, an expert reread the hard document produced by the procedure. This applied to ultrasonography and fundus photography.

A significant amount of instrument quality control took place in the MEC laboratory. For example, control specimens were used to check the Coulter cell counter daily. And to assure quality in hematology, each technician participated in the CDC Proficiency Testing Program at least four times a year.

At each "dry-run" examination session, the technicians split the blood specimens and sent pairs of tubes to the various laboratories performing NHANES III laboratory analyses. In addition to these blind-split duplicates, the contract laboratories routinely performed their own replicate and quality control determinations. Whenever differences larger than predetermined tolerances occurred, the analyses were repeated. Generally two types of quality control systems were used by the chemical laboratories, "bench" quality control pools inserted by the analyst in each analytical run to monitor the day-to-day analysis and "blind" quality control samples placed in vials, labeled, and processed so as to be indistinguishable from regular NHANES III samples.

Medical safety policy

Ensuring the medical safety of all NHANES III participants was of paramount importance. From the first contact with a sample person through the interview and examination to the last report of medical findings, this policy was sustained. Even from the earliest stages in the planning process, individual risks were always weighed against the overall benefits to society at large.

During the household visit, the interviewer, using the Sample Person Brochure, spelled out clearly the examination and any minimal risks associated with procedures such as phlebotomy and x rays. The interviewer made great efforts to identify diabetic sample persons who were on insulin and instruct them to not fast before their examinations. Sample persons manifestly unable to participate at the MEC were encouraged to have the home examination.

As pointed out earlier, the examination center was designed to accommodate examinees who were in wheelchairs. And, to help ensure the safety of all examinees, there was a physician in the examination center at all times that it was in operation. Although there were several physicians on call for backup duty, on the rare occasion when a physician was not available, the examination center closed.

Because the MEC was not equipped nor staffed for treatment of medical problems, the examination staff had to be able to respond quickly to any medical emergency by getting the affected person to a treatment facility as quickly as possible. To this end the advance-arrangements team had ascertained and posted in the examination center the name of the nearest medical facility that had agreed to handle emergencies. Furthermore, at least once a year the NCHS medical officer conducted an emergency drill with each examination team

Although few people were excluded from a component for medical reasons, it was important not to risk the health of examinees, however slight the risk might be. Therefore, according to the answers given to the safety exclusion questions asked before each component, an examiner could exclude someone from that component. For example, recent chest or abdominal surgery or a recent heart attack excluded an exam-

inee from spirometry. Appendix table VIII lists the safety exclusions for each component.

Medical referrals and reports of findings

Data from the many medical components that make up NHANES III provide important information on the health status of the people of this Nation. However, this health examination was not intended to serve as a screening instrument or diagnostic measure or to substitute for an examination performed by a participant's own health care provider.

Nonetheless, the information from the health examination was thought to have important implications for the health of the individual sample person. Therefore, NCHS staff designed the report-of-findings system to provide examinees with results from the laboratory tests, physician's examination, and special studies such as ECG, gallbladder ultrasonography, and spirometry. Appendix table XI lists the reportable findings from the examination.

NHANES III is the first HANES to report results directly to examinees rather than to their health care providers. These results were reported in one or more of three ways. One was direct communication from the physician to the examinee in the MEC. This approach was the only means of reporting results to the individual face to face. The other ways, employed after the examinee had left the examination center, used letters or the telephone as the means of communication.

To expedite the reporting of examination results, especially those of an urgent nature, NCHS medical officers classified each reportable medical result into one of three levels of severity. Level I referred to a major medical finding that was an emergency requiring immediate medical attention. Most all Level I referrals occurred while the examinee was still in the examination center. Examples of such referrals are heart attack symptoms, dangerously high blood pressure, and anaphylactic reactions to the allergy skin test. Also included in this type of referral was suspected child abuse, handled in the following special way: The informed consent form each parent or guardian of a minor sample person signed before participation contained a statement explaining that the examining physician would report suspected child abuse to the local authorities.

Occasionally, the NCHS medical staff made a Level I referral after the examinee had left the examination center. For instance, if the expert consultant who read the fundus photographs of the eye saw a condition that was an immediate threat to the sample person's vision, the expert telephoned the medical officer in charge of reporting examination findings and explained the condition. The medical officer used the most expedient means to reach the sample person, either telephone or overnight express mail or both. Sometimes in this situation, the field staff were still in the community and could help locate and inform the examinee.

A Level II referral was also a major medical finding, but not one requiring immediate attention. These findings needed care within 2-3 weeks. The examining physician could make Level II referrals from the dental examination, blood pressure measurements, ECG, or hematology tests directly from the

examination center. Abnormal findings noted from the physician's examination itself could warrant Level II referrals as well.

However, most of the Level II referrals did not come from the examination center because the laboratory findings and special studies that generated them were not available while the examinee was in the examination center. These findings came from specimen assays done by outside laboratories and interpretations of the special studies done by consultants. The laboratories and consultants reported extremely abnormal clinical findings to NCHS by phone or facsimile as soon as the tests were run. NCHS medical officers had given the laboratories clear definitions of "extremely abnormal" for the reportable laboratory findings, both by test and cutoff value. Those values, as well as the abnormal and medically acceptable values, are listed in appendix table XII. (In general, "extremely abnormal" was plus or minus two standard deviations outside the medically acceptable range for a particular test.) The expert consultants defined what was "extremely abnormal" for the fundus, bone density, and gallbladder examinations, and for the x rays.

Finally, Level III referrals were all other findings reported to the examinee. These included both minor medical findings already known by the examinee as well as those findings within the medically acceptable ranges.

NCHS staff developed a rapid reporting system to deliver Level II (and occasionally Level I) findings quickly and accurately by certified letter. The letter alerted a sample person that a finding was very much outside the medically acceptable range. Each letter identified the test(s), the result(s), and for the laboratory tests, the extremely abnormal cutoff value(s). The main message of the letter, stated in very carefully worded strong language, was the recommendation that the sample person immediately see a health care provider for proper evaluation and treatment. The letter explained that the survey

examination was not a substitute for an examination by one's own physician. Further, the letter encouraged the sample person to call the NCHS medical officer on a toll-free number with any questions about the examination results. Accompanying the certified letter was a list of medical care providers in the community that would take referrals. This list was especially useful to a sample person who lacked a health care provider or who may have had limited resources available for health care. Appendix II contains examples of the rapid reports.

The routine report of findings went to all examined sample persons whether or not any abnormal findings were present. Although it did not report the results of every test and examination, it was a complete summary of all those of clinical interest. This report confirmed any extremely abnormal values reported earlier through the rapid reporting system. In this case a special message reminded the sample person that he or she had already received some extremely abnormal results and should already have taken them to a health care provider.

Contained in the routine report were height and weight and, depending on the age of the examinee, blood pressure and the results from the special studies and laboratory tests. Appendix II shows an example of the reports of findings. If the examinee had received an ECG, a copy of the tracing went with the report. NCHS sent the routine report by regular mail to the examinee or parent about 12 weeks after examinations were complete in a community. In addition to the actual values, this report contained a two-sided cover letter (one side in English and the other side in Spanish). This cover letter simply thanked the examinees for participating in the survey and invited them to call NCHS if they had questions about the reports. The report packet also contained the medical referral listing for the specific community and a list of health information resources.

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Appendix I Summary of survey content and methods

Data collection, coding, and quality control of 24-hour dietary recalls

The NHANES III Dietary Data Collection (DDC) system, a microcomputer-based interview system, was used to collect 24-hour dietary recalls (140–142). With support from the National Institutes of Health (NIH), the University of Minnesota's Nutrition Coordinating Center (NCC) developed a prototype of the NHANES III DDC system; the prototype system was then adapted for use in NHANES III with additional funding from the National Center for Health Statistics (NCHS) and the Food and Drug Administration (FDA). NCHS specified that the DDC system have the following features:

- Capability to conduct open-ended interviews using structured probes built into the interview system itself to ensure standardized data collection
- Capability to collect information on brand name products, cooking methods, and the use of fat and sodium in food preparation
- Ability to identify foods eaten together
- Capability to record information on the time of day food was eaten, the name of the meal or snack, and the place where the food was consumed
- Capability to record information about foods not found in the DDC system
- Capability to edit 24-hour dietary recalls during and after the interview
- Automated coding of foods to the U.S. Department of Agriculture (USDA) survey nutrient data base

NCHS pretested the DDC system during two NHANES III pilot studies. Information recorded in the 24-hour recalls included the time consumed, food names, type of meal or snack, and where the foods were consumed. During each 24-hour recall interview, sample persons quantified foods and beverages using food-specific units (such as a "large" egg or "medium-sized" apple), abstract food models, special charts (e.g., shapes), and measurement aids such as rulers and measuring cups and spoons. Interviewers probed for specific brand names for commercial products such as margarines, baked goods, and fast foods in order to provide more detailed information for food identification purposes.

During the 24-hour dietary recall, information about the specific types and amounts of alcoholic beverages was collected in a private interview. At the end of the 24-hour recall,

the dietary interviewers probed for a list of foods and beverages, including alcoholic beverages, that are often forgotten.

Prior to each followup telephone interview for the Supplemental Nutrition Survey of Older Americans (SNSOA), two advance letters and a Food Model Booklet were mailed to each subject to inform them of the study. The food model booklet for the SNSOA contained life-size, two-dimensional drawings of the NHANES III food models, measurement aids, and charts used in the MEC. Research has shown that two-dimensional drawings such as those used in the telephone followup have good reliability with three-dimensional ones (143).

Interview training and quality control

NCHS and Westat, Inc., wrote the NHANES III Dietary Interviewer's Training Manual, which provides detailed instructions for all aspects of 24-hour recall and food frequency data collection (149). A section describing telephone interview procedures for the SNSOA was added to the manual in 1990. All NHANES dietary interviewers completed a comprehensive training course that emphasized standardized data collection and proper interviewing technique. An experienced trainer organized and conducted dietary interviewer training. Dietary interviewers were required to have college-level training in foods and nutrition and a majority were bilingual in English and Spanish.

Dietary interviewer performance was monitored using several techniques including field monitoring of interviews in progress and reviews of taped dietary interviews by NCHS and Westat, Inc. (141,145,146). In addition, dietary interviewers performed a 10-percent cross-check of printed 24-hour recall reports. Interviewer retraining sessions were conducted periodically throughout the survey; field memorandums and newsletters were prepared by NCHS and Westat, Inc., to inform the interviewers of DDC updates and issues concerning the dietary interview protocol.

Food composition data base

The DDC system's foods data base was mapped to USDA's Survey Nutrient Data Base (SNDB). The DDC data files collected from respondents contain detailed information about all foods and beverages consumed and were sent on computer tapes to NCHS headquarters in Hyattsville, Maryland, for review, editing, and processing. Special computer programs for NCHS to merge the DDC interview files with the

SNDB containing food codes, gram weights, recipes, and nutrient values were prepared by the NCC.

At the start of the survey, the DDC system included more than 8,000 "base" foods and 3,000 brand-name products. However, the diversity of foods available in the marketplace is constantly increasing, particularly foods with modified fat, cholesterol, salt, and fiber content. New foods were routinely added to the USDA data bases throughout NHANES III and the DDC system was subsequently updated (141).

Specific descriptions of food are also necessary for trend analysis. Trend analysis is essential for nutrition monitoring as well as for long-term studies investigating diet and health relationships (147). The evaluation of trends in dietary intake is dependent on food composition data base changes, food coding decisions made during or between surveys, and the ability to reanalyze past dietary data, if necessary. The comparison of food and nutrient intakes over time is possible with NHANES III because both the multiversion DDC foods data base and the Survey Nutrient Data Base are time-specific.

Medical instruments and automation equipment

Medical instruments in the mobile examination center

Ultrasound room

Toshiba SSA-90A Ultrasound Scanner (Sonolayer V) RMI Ultrasound Phantom Echowarm GW2E Gel Warmer Panasonic AG-6300MD VHS VCR

Spirometry room

Thommen 2000 Barometer
Ohio Medical 822 or 827 Spirometer modified by
NIOSH
NIOSH-built HF4 Computer

Physician's examination room

Baumanometer Wall Model Standard Mercury
Sphygmomanometers
Littman Classic Stethoscope with dual head
Baumanometer Calibrated V-Lok Cuffs (thigh, large
arm, adult, child, infant)
Emergency medical kit
Valhalla 1990B Bioimpedance Analyzer
Lifepak 6s 801555-36 Portable ECG
24.9 cubic foot oxygen tank

Laboratory

Coulter S-PLUS JR Blood Analyzer
Coulter DTH2AS Data Terminal
Sorvall GLC-2B DuPont Instruments Centrifuges (two)
Hamilton-Bell V6500 Centrifuge
Damon MB Microhematocrit Centrifuge
F7CSS Nor-Lake freezers (three)
F7CSS Nor-Lake refrigerator
NuAire NU-425-400 Biological Safety Hood

Reception area

TL-15 Burglary Floor Safe IVAC IVI811A Thermometer

X-ray room

Marquette MAC-12 ECG
Canon CR4-45NM Non-Mydriatic Retinal Camera
Canon (Polaroid) CR4-PC Camera Back
Canon CR4-FN 35mm Camera Back
Picker 755-560-F Radiographic Generator
X-Rite 601 Silver Recovery Unit
X-Rite 334 X-Ray Film Sensitometer
X-Rite 301 X-Ray Film Densitometer
Westinghouse Film Illuminator
Kodak RP X-Omat M6AW Film Processor

Dental examination room

Harvey 5000 Chemiclave MDT Corporation Rolux light

Bone densitometry room

Hologic QDR-1000 X-Ray Bone Densitometer Hologic Phantom WHF-1 Phantom Hologic PRA-1 Pronator Foot Brace

Audiometry room

Grason-Stadler 1716 Audiometer
Telephonics TDH-50P (296D200-2) Earphones
Teledyne TA-7A Tympanometer
Bruel & Kjaer 2235 Sound Level Meter
Bruel & Kjaer 1624 Octave Band Filter
Bruel & Kjaer 4230 Acoustic Calibrator
Bruel & Kjaer 4144 Condenser Microphone
Bruel & Kjaer 4152 Artificial Ear Coupler
Compaq Deskpro 286 2551 computer used for central
nervous system examination

Body measurement room

Holtain T/W Skinfold Caliper (dial caliper)
Bicondylar Vernier Elbow Breadth Caliper
Mediform CLPR65 Sliding Caliper
Lufkin Y606PM Steel Measuring Tape
Ross Insertion Tape
Holtain Height Stadiometer w/Polaroid Camera
Sitting Height Box, 50cm
Holtain Infant Measuring Board
Toledo 2181 Scale w/300 lbs. weight (12@ 25 lbs.)
Toledo 8136 Scale Digital Display Readout
Lock and Key Mechanism (custom made by Alan
Shapiro)

Local area network equipment in the mobile examination center

DEC IVAX 630 Main Computers (two)
DEC DSRVB Terminal Server (four)
DEC VT220 Terminals (two)
DEC VT320 Terminals (nine)
DEC PC500 VAXmate Computers (three)
DEC 325C Computers (three)
DEC LNO3 Printer
Liebert 3.0 KVA Uninterruptible Power Source

Medical instruments in the household

Baumanometer Gravity Rx Sphygmomanometer
Baumanometer Calibrated V-Lok Cuff (thigh, large arm, adult, child, infant)
Littman Classic Stethoscope
NIOSH PJ5 Spirometer with Tamarac Flow Sensor used with Compaq 286 Laptop Computer
Holtain T/W Skinfold Caliper (dial caliper)

Lufkin Y606PM Steel Measuring Tape
Ross Insertion Tape
Seca 220 Standing Portable Stadiometer
Seca Integra 815 Scale
Baby measuring board (custom made by Irwin Schorr)
Lock and key mechanism (custom made by Alan
Shapiro)
Carpenter's folding rule

Summary tables

Table I. Interview topics covered, by type of questionnaire

| | Hous | sehold questionnaires | |
|--|--|--|--|
| Household screener | Family questionnaire | Household adult questionnaire (ages 17 years and over) | Household youth questionnaire (ages 2 months-16 years) |
| Household composition Selection of sample persons Ending interview | Individual characteristics Health insurance and income assistance Family background Occupation of family head Housing characteristics Family characteristics | Blood pressure measurement Orientation Health services Selected conditions Diabetes High blood pressure/cholesterol Cardiovascular disease Muscoloskeletal conditions (ages 20 years and over) Gallbladder disease Kidney conditions Respiratory and allergy Diet and body weight Food frequency Vision and hearing Dental care and status Tobacco Physical functioning (ages 60 years and over only during Phase 1) Vision and hearing Occupation/language usage Exercise Social support/residence Vitamin, mineral, and medicine usage Name/Social Security number | Birth (2 months – 11 years) Infant feeding practices/diet (2 months – 11 years) Motor and social development Health services and functional impairment Selected conditions Respiratory and allergy Vision and hearing School attendance and language usage Vitamin, mineral, and medicine usage Name/Social Security number Dental care and status |
| | Supple | emental questionnaires | |
| MEC adult questionnaire (ages 17 years and over) | MEC youth questionnaire (ages 8–16 years) | MEC proxy questionnaire (ages 2 months-11 years) | Home examination questionnaire (ages 2–11 months and 20 years and over) |
| Tobacco Selected conditions Medicine, vitamin, and mineral usage Cognitive function (ages 60 years and over) Alcohol/drug use Reproductive health Diagnostic interview schedule (ages 17–39 years) | Activity Tobacco Reproductive health (boys ages 12–16 years and girls ages 10–16 years) Selected conditions Medicine, vitamin, and mineral usage (ages 12–16 years) Food frequency (ages 12–16 years) Alcohol/drug use (ages 12–16 years) Diagnostic interview schedule (ages 15–16 years) | Medicine, vitamin, and mineral usage (ages 1–11 years) Selected conditions Infant food frequency (ages 2–11 months) | Infant food frequency (ages 2–11 months) Cognitive function (ages 60 years and over Selected conditions Medicine, vitamin, and mineral usage (ages 20 years and over) Tobacco Reproductive health (ages 20 years and over) |

NOTE: MEC is mobile examination center.

Table II. Examination components, by age group

| 2 months-5 years | 6–19 years | 20-39 years | 40–59 years | 60–74 years | 75 years and ove |
|--------------------------------|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Physician's exam | Physician's exam | Physician's exam | Physician's exam | Physician's exam | Physician's exam |
| Dental exam ¹ | Dental exam | Dental exam | Dental exam | Dental exam | Dental exam |
| Rody measurements ² | Body measurements | Body measurements ² | Body measurements ² | Body measurements ² | Body measurements ² |
| /enipuncture ¹ | Venipuncture | Venipuncture ² | Venipuncture ² | Venipuncture ² | Venipuncture ² |
| Dietary interview | Dietary interview | Dietary interview | Dietary interview | Dietary interview | Dietary interview |
| lealth interview | Health interview | Health interview | Health interview | Health interview | Health interview |
| | Urine collection | Urine collection | Urine collection | Urine collection | Urine collection |
| | Spirometry ³ | Spirometry ² | Spirometry ² | Spirometry ² | Spirometry ² |
| | Bioelectrical impedance ⁴ | Bioelectrical impedance | Bioelectrical impedance | Bioelectrical impedance | Bioelectrical impedance |
| | Allergy test | Allergy test ⁵ | Allergy test ⁵ | ••• | |
| | Audiometry | | | | |
| | Tympanometry | ••• | • • • | ••• | |
| | Cognitive test ⁶ | | ••• | Cognitive test ² | Cognitive test ² |
| | | Bone density exam | Bone density exam | Bone density exam | Bone density exam |
| | | Ultrasound exam | Ultrasound exam | Ultrasound exam | |
| | | CNS test ⁵ | CNS test ⁵ | | |
| | | 3.13 .331 | Fundus photography | Fundus photography | Fundus photography |
| | | | Electrocardiography | Electrocardiography | Electrocardiography |
| | | | Liconocaralography | Performance test ² | Performance test ² |
| | | | | Hand/knee x-rays | Hand/knee x-rays |

¹1 year of age and over.

NOTE: CNS is central nervous system.

²Also included in the home examination.

³8 years of age and over.

⁴12 years of age and over.

⁶Half-sample only.

⁶6-16 years of age.

Table III. Laboratories and diagnostic centers

| Component | Laboratory or diagnostic center |
|---|--|
| Lipids | Lipoprotein Analytical Laboratory Johns Hopkins University Baltimore, MD |
| Urinary iodine Follicle-stimulating hormone (FSH), luteinizing hormone (LH) | University of Massachusetts Medical Center Worcester, MA |
| Urine albumin (micro)/creatinine | Department of Pediatrics University of Minnesota Minneapolis, MN |
| Glucose Insulin/C-peptide Glycated hemoglobin (Hb _{A1c}) | Department of Child Health University of Missouri-Columbia Columbia, MO |
| Tetanus antitoxin | Department of Microbiology and Immunology Medical University of South Carolina Charleston, SC |
| Thyroid hormones | Endocrine Services Laboratory University of Southern California Los Angeles, CA |
| C-reactive protein/Rheumatoid factor | Immunology Division University of Washington Seattle, WA |
| Biochemistry profile Fibrinogen | White Sands Research Center (WSRC) Alamogordo, NM |
| Nutrition biochemistries Urinary phenois | National Center for Environmental Health Centers for Disease Control and Prevention Atlanta, GA |
| White blood cell differential Human immunodeficiency virus (HIV)-1 Hepatitis A, B, C, delta, E Toxoplasmosis Hantavirus | National Center for Infectious Diseases Centers for Disease Control and Prevention Atlanta, GA |
| Hematology (complete blood count) | NHANES III Mobile Examination Center |
| Urine drug test | CompuChem Laboratories Research Triangle Park, NC |
| Herpes simplex I and II | Department of Pediatrics and Infectious Disease Emory University Atlanta, GA |
| Ribonucleic acid (RNA)/deoxyribonucleic acid (DNA) extraction | Environmental Protection Agency Research Triangle Park, NC |
| Rubella Varicella | California State Department of Health Services Viral & Rickettsial Disease Laboratory Berkeley, CA |
| Candidiasis | Maryland Medical Laboratory Baltimore, MD |
| Bone density | Nuclear Medicine, Diagnostic Radiology Mayo Clinic Rochester, MN |
| Dietary interview | Nutrition Coordinating Center University of Minnesota Minneapolis, MN |
| Gallbladder ultrasound Hand and knee radiography | Department of Radiology George Washington University Medical Center Washington, DC |
| Fundus photography | Department of Ophthalmology University of Wisconsin Madison, WI |
| Electrocardiography | Division of Cardiology University of Alberta Edmonton, Alberta, Canada |
| Spirometry | National Institute for Occupational Safety and Health Morgantown, WV |
| Central nervous system test | National Institute for Occupational Safety and Health Cincinnati, OH |

NOTE: NHANES is the National Health and Nutrition Examination Survey.

Table IV. Blood and urine assessments, by age group

| 1–3 years 4–5 years 6–11 years 12–19 years 20 years and over | | | | | | |
|--|--|---|---|--|--|--|
| 1-0 years | 4-0 years | Whole b | | 20 years and over | | |
| | | | | | | |
| CBC ¹ /RDW Platelets | CBC ¹ /RDW | CBC ¹ /RDW | CBC ¹ /RDW | CBC ¹ /RDW | | |
| -cell differential | Platelets 3-cell differential | Platelets 3-cell differential | Platelets 3-cell differential | Platelets 3-cell differential | | |
| ifferential smear | Differential smear | Differential smear | Differential smear | Differential smear | | |
| ead ⁵ | Lead ⁵ | Lead ⁵ | Lead ⁵ | Lead ⁵ | | |
| rotoporphyrin ⁵ | Protoporphyrin ⁵ | Protoporphyrin ⁵ | Protoporphyrin ⁵ | Protoporphyrin ⁵ | | |
| | Red blood cell folate | Red blood cell folate | Red blood cell folate | Red blood cell folate | | |
| | Glycated hemoglobin ⁵ | Glycated hemoglobin ⁵ | Glycated hemoglobin ⁵ | Glycated hemoglobin ⁵ | | |
| | (Hb _{Aic}) | (Hb _{Alc}) | (Hb _{Alc}) | (Hb _{Aic}) | | |
| | | Seru | ım | | | |
| on ⁵ | Iron ⁵ | Iron ⁵ | Iron ⁵ | Iron ⁵ | | |
| otal iron binding capacity5 | Total iron binding capacity ⁵ | Total iron binding capacity ⁵ | Total iron binding capacity ⁵ | Total iron binding capacity ^s | | |
| erritin ⁵ | Ferritin ⁵ | Ferritin ⁵ | Ferritin ⁵ | Ferritin ⁵ | | |
| | Folate ⁵ | Folate ⁵ | Folate ⁵ | Folate ⁵ | | |
| | Apolipoprotein A ₁ , B ^{4,5} | Apolipoprotein A ₁ , B ^{4,5} | Apolipoprotein A ₁ , B ^{4,5} | Apolipoprotein A ₁ , B ^{4,5} | | |
| | Total cholesterol ⁵ | Total cholesterol5 | Total cholesterol ⁵ | Total cholesterol ⁵ | | |
| | HDL cholesterol5 | HDL cholesterol ⁵ | HDL cholesterol ⁵ | HDL cholesterol ⁵ | | |
| | Triglycerides ⁵ | Triglycerides ⁵ | Triglycerides ⁵ | Triglycerides ⁵ | | |
| | Lp(a) ^{2,5} | Lp(a) ^{2,5} | Lp(a) ^{2,5} | Lp(a) ^{2,5} | | |
| | Cotinine | Cotinine | Cotinine | Cotinine | | |
| | C-reactive protein ⁵ | C-reactive protein ⁵ | C-reactive protein ⁵ | C-reactive protein ⁵ | | |
| | Rheumatoid factor | Rhumatoid factor | Rhumatoid factor | Rhumatoid factor | | |
| | Vitamin A (retinol) ⁵ Carotenoids ⁵ | Vitamin A (retinol) ⁵ Carotenoids ⁵ | Vitamin A (retinol) ⁵ Carotenoids ⁵ | Vitamin A (retinol) ⁵ Carotenoids ⁵ | | |
| | Retinyl esters ⁵ | Retinyl esters ⁵ | Retinyl esters ⁵ | Retinyl esters ⁵ | | |
| | Vitamin E ⁵ | Vitamin E ⁵ | Vitamin E ⁵ | Vitamin E ⁵ | | |
| | Vitamin B ₁₂ ² | Vitamin B ₁₂ ² | Vitamin B ₁₂ ² | Vitamin B ₁₂ ² | | |
| | Methyl malonic acid ² | Methyl malonic acid ² | Methyl malonic acid ² | Methyl malonic acid ² | | |
| | Homocysteine ² | Homocysteine ² | Homocysteine ² | Homocysteine ² | | |
| | Helicobacter pylori4 | Helicobacter pylori⁴ | Helicobacter pylori⁴ | · | | |
| | Tetanus | Tetanus | Tetanus | Tetanus | | |
| | | Hantavirus (ages 10+)⁴ | Hantavirus ⁴ | Hantavirus⁴ | | |
| | | Vitamin C | Vitamin C | Vitamin C | | |
| | | Hepatitis A | Hepatitis A | Hepatitis A | | |
| | | Hepatitis B/delta | Hepatitis B/delta | Hepatitis B/delta | | |
| | | Hepatitis C | Hepatitis C | Hepatitis C | | |
| | | Hepatitis E | Hepatitis E | Hepatitis E | | |
| | | Rubella ⁵ | Rubella ⁵ | Rubella ⁵ | | |
| | | Varicella | Varicella | Varicella | | |
| | | Diphtheria | Diphtheria | Diphtheria | | |
| | | | Herpes simplex I and II | Herpes simplex I and II HIV 1 ^{3,5} | | |
| | | | HIV 1 (ages 18+) ^{3,5} Toxoplasmosis ⁵ | Toxoplasmosis ⁵ | | |
| | | | Vitamin D (25-hydroxyvitamin D _a) | Vitamin D (25-hydroxyvitamin D ₃) | | |
| | | | Total/ionized calcium | Total/ionized calcium | | |
| | | | Selenium ⁵ | Selenium ⁵ | | |
| | | | Thyroxine (T₄) | Thyroxine (T ₄) | | |
| | | | Thyroid-stimulating hormone (TSH) | Thyroid-stimulating hormone (TSH | | |
| | | | Antithyroglobulin antibodies | Antithyroglobulin antibodies | | |
| | | | Antimicrosomal antibodies | Antimicrosomal antibodies | | |
| | | | | FSH/LH (females ages 35–60 yea Insulin | | |
| | | | | C-peptide | | |
| | | | Biochemistry profile ⁵ | Biochemistry profile ⁵ | | |
| | | | Total carbon dioxide | Total carbon dioxide | | |
| | | | Blood urea nitrogen | Blood urea nitrogen | | |
| | | | Total bilirubin | Total bilirubin | | |
| | | | Alkaline phosphatase | Alkaline phosphatase | | |
| | | | Total cholesterol | Total cholesterol | | |
| | | | AST (SGOT) | AST (SGOT) | | |
| | | | ALT (SGPT) | ALT (SGPT) | | |
| | | | LDH | LDH | | |

Table IV. Blood and urine assessments, by age group—Con.

| Age group | | | | | |
|-----------------|-----------|-----------------|---|---|--|
| 1–3 years | 4–5 years | 6–11 years | 12–19 years | 20 years and over | |
| | | Sen | ım—Con. | | |
| ··············· | | | GGT | GGT | |
| Total protein | | | | Total protein | |
| | | | Albumin | Albumin | |
| | | | Creatinine | Creatinine | |
| | | | Glucose | Glucose | |
| | | | Calcium | Calcium | |
| | | | Chloride | Chloride | |
| | | | Uric acid | Uric acid | |
| | | | Phosphorus | Phosphorus | |
| | | | Sodium | Sodium | |
| | | | Potassium | Potassium | |
| | | F | Plasma | | |
| | | | | Glucose (ages 20–39 years, 75 years and over) OGTT (ages 40–74 years) Fibrinogen (ages 40 years an over) ⁵ | |
| | | | Urine | | |
| | | Cadmium | Cadmium | Cadmium | |
| | | Creatinine | Creatinine | Creatinine | |
| | | Albumin (micro) | Albumin (micro) | Albumin (micro) | |
| | | lodine | lodine | lodine | |
| | | 1000 | Cocaine ^{2,3} (ages 18 years and over) | Cocaine ^{2,3} | |
| | | | Opiates ^{2,3} (ages 18 years and over) | Opiates ^{2,3} | |
| | | | Phencyclidine ^{2,3} (ages 18 years and over) | Phencyclidine ^{2,3} | |
| | | | Amphetamines ^{2,3} (ages 18 years and over) | Amphetamines ^{2,3} | |
| | | | Marijuana ^{2,3} (ages 18 years and over) | Marijuana ^{2,3} | |
| | | | , | Pregnancy test (females ages 20–59 years) | |
| | | W | hite cells | | |
| | | | Storage/banking ⁵ | Storage/banking ⁵ | |

¹Includes hematocrit, hemoglobin, red and white cell counts, mean corpuscular volume, mean corposcular hemoglobin, and mean corpuscular hemoglobin concentration.

²Phase 2 only.

³Anonymous.

⁴Phase 1 only.

⁵Home examination also.

Table V. Assay methods and instrumentation for laboratory assessments, by type of analysis Assav/Instrumentation Analysis Whole blood assessments Complete blood count S Plus Jr/Coulter Electronics S Plus Jr/Coulter Electronics **Platelets** S Plus Jr/Coulter Electronics 3-cell differential S Plus Jr/Coulter Electronics Red cell distribution width Manual differential on abnormals and 10% of normals Differential smears Fluorescence/Extraction Protoporphyrin GFAA/Perkin-Elmer Model 5000 and 5100 Lead "Quantaphase Folate" RIA Kit/Bio-Rad Laboratories Red blood cell folate DIAMAT HPLC/Bio-Rad Laboratories Glycated hemoglobin (HbA1c) Serum biochemical assessments "Quantaphase Folate" RIA Kit/Bio-Rad Laboratories Alpkem RFA Automated Ferrozine Colorimetric Iron and total iron-binding capacity Quantimune Ferritin IRMA Kit/Bio-Rad Laboratories Ferritin HPLC/Waters Chromatography Vitamin C INCSTAR 25-OH-D RIA Kit Vitamin D (25-hydroxyvitamin D₃) HPLC/Waters Chromatography Vitamin A/E/carotenoids/retinyl esters 125I-folic/57Co-B-12 Vitamin B₁₂1 Rasmussen Method Methyl malonic acid1 **HPLC** Homocysteine¹ GFAA/Perkin-Elmer Model 3030 and 5100 Selenium Hitachi 704 Analyzer/Boehringer-Mannheim Diagnostics Total cholesterol Hitachi 704 Analyzer/Boehringer-Mannheim Diagnostics High-density lipoprotein Hitachi 704 Analyzer/Boehringer-Mannheim Diagnostics Triglycerides RID/Strategic Diagnostics Venture, Inc. Apolipoprotein A₁ and B2 Lp(a)1 ELISA/Strategic Diagnostics Venture, Inc. NOVA 7+7 Electrolyte Analyzer/NOVA Biomedical Total and ionized calcium Cotinine EIA Screen/STC, Inc., LCMS Confirmation/Perkin-Elmer SCIEX RIA & EIA/Abbott Diagnostics Hepatitis A Hepatitis B/delta RIA (B), EIA(Delta)/Abbott Diagnostics EIA/Abbott Diagnostics Hepatitis C **ELISA** Hepatitis E **ELISA/Wyeth Laboratories** Tetanus In vitro neutralization assay Diphtheria Immunodot Assay/Emory University Herpes simplex I and II HIV type 1 LAV EIA Kit/Genetic Systems, HIV-1 Western Blot Human immunodeficiency virus 1 Kit/Cambridge Biotech Corporation EIA/Bio-Tek Instruments Rubella antibody EIA/Bio-Tek Instruments Varicella antibody Toxoplasmosis antibody Toxo-G ELISA/Diagnostics Pasteur Helicobacter pylori2 **ELISA** ELISA Hantavirus² Behring Nephalometric Analyzer/Behring C-reactive protein Behring Nephalometric Latex Fixation Analyzer/Behring Rheumatoid factor Serono FSH MAIAclone Kit/Ciba-Corning Diagnostics, Inc. Follicle-stimulating hormone (FSH) Serono LH MAIAclone Kit/Ciba-Corning Diagnostics, Inc. Luteinizing hormone (LH) RIA modification of Challand Method (Clin Chim Acta 60:25.1975) Thyroxine (T₄) Thyroid-stimulating hormone (TSH) TSH-Third Generation Chemiluminescence Assay Kit/Nichols Institute Diagnostics Thyroglobulin Antibody RIA Kit/Kronus Antithyroglobulin antibodies TPO Antibody RIA Kit/Kronus Antimicrosomal antibodies Insulin RIA Kit/Pharmacia Diagnostics Insulin C-peptide RIA/Novo BioLabs

Biochemistry profile
Total carbon dioxide
Blood urea nitrogen
Total bilirubin
Alkaline phosphatase
Total cholesterol

Aspartate aminotransferase (serum glutamic-oxaloacetic transaminase) Alanine aminotransferase (serum glutamate pyruvate transaminase)

Lactate dehydrogenase

Total protein
Albumin
Creatinine
Glucose
Calcium
Chloride

Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics

Table V. Assay methods and instrumentation for laboratory assessments, by type of analysis—Con.

| • | , , , , , |
|---------------------------------------|---|
| Analysis | Assay/Instrumentation |
| Uric acid | Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics |
| Phosphorus | Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics |
| Sodium | Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics |
| Potassium | Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics |
| Gamma glutamyl transpeptidase | Hitachi 737 Analyzer/Boehringer-Mannheim Diagnostics |
| Plasma assessments | |
| Glucose (oral glucose tolerance test) | Hexokinase System/Roche COBAS MIRA Chem System |
| Fibrinogen | Coag-A-Mate XC Plus/Organon-Teknika/General Diagnostics |
| Urinary assessments | |
| Cadmium | GFAA/Perkin-Elmer Model 3030 |
| Creatinine | Synchon AS/ASTRA Clinical Analyzer/Beckman Instruments |
| Albumin (micro) | Fluorescent Immunoassay/Bio-Rad Laboratories |
| lodine | Chloric Acid digestion/Technicon Autoanalyzer |
| Pregnancy test | ICON II hCG Immune Concentration Assay/Hybritech, Inc. |
| Marijuana | Latex Agglutination/Roche Diagnostics, GCMS/Hewlett Packard |
| Cocaine | Latex Agglutination/Roche Diagnostics, GCMS/Hewlett Packard |
| Phencyclidine | Latex Agglutination/Roche Diagnostics, GCMS/Hewlett Packard |
| Amphetamines | Latex Agglutination/Roche Diagnostics, GCMS/Hewlett Packard |
| Opiates | Latex Agglutination/Roche Diagnostics, GCMS/Hewlett Packard |
| | |

¹Phase 2 only.

²Phase 1 only.

Table VI. Laboratory analyses in comparable surveys, by survey and type of analysis

| | | Sur | vey ¹ | | | | Sun | уөу ¹ | |
|---|---|-----|------------------|-----|---|----|-----|------------------|-----|
| Analysis | 1 | 11 | Н | 111 | Analysis | 1 | 11 | Н | 111 |
| Whole blood assessments | | - | | | Follicle-stimulating hormone (FSH)/ | | | | |
| Sedimentation rate | Х | | | | Luteinizing hormone (LH) | | | | Х |
| Complete blood count | X | Х | × | X | Thyroxine (T ₄) | | | | X |
| Platelets | | | • | x | Thyroid-stimulating hormone (TSH) | | | | X |
| 3-cell differential | | | | x | Antithyroglobulin antibodies | | | | X |
| Differential smear | Х | X | × | x | Antimicrosomal antibodies | | | | X |
| Red-cell distribution width | ^ | ^ | ^ | x | Insulin | | | | X |
| Lead | | х | Х | X | C-peptide | | | | X |
| Protoporphyrin | | X | x | × | o popular | | | | ^ |
| Red blood cell folate | | x | x | x | Biochemistry profile | | | | |
| Glycated hemoglobin (Hb _{A1c}) | | ^ | ^ | X | Total carbon dioxide | | | X | Х |
| | | Х | v | ^ | Blood urea nitrogen | Х | | Х | Х |
| Carboxyhemoglobin | | ^ | X | | Total bilirubin | Х | 2X | Х | Х |
| Serum biochemistry assessments | | | | | Alkaline phosphatase | Х | 2X | Х | Х |
| Folate | ~ | Х | ~ | ~ | Total cholesterol | Х | | Х | Х |
| Iron and total iron-binding capacity | X | X | X | X | Aspartate aminotransferase (serum | | | | |
| - , - | ^ | | X | X | glutamic-oxaloacetic transaminase) | 2X | 2X | Х | Х |
| Ferritin | | X | Х | X | Alanine aminotransferase (serum | | | | |
| Vitamin C | | Х | | X | glutamate pyruvate transaminase) | | | Х | X |
| Vitamin D (25-hydroxyvitamin D ₃) | | | | X | Lactate dehydrogenase | | | Х | Х |
| Vitamin E | | | Х | Х | Gamma glutamyl transpeptidase | | | | Х |
| Zinc and copper | | X | | | Total protein | Х | | Х | Х |
| Vitamin A (retinol) | Х | 3X | X | Х | Albumin | X | х | х | х |
| Carotenoids | | | | Х | Creatinine | X | X | X | × |
| Retinyl esters | | | | Х | Glucose | | | X | X |
| Vitamin B ₁₂ | | Х | | ⁵X | Calcium | X | | X | × |
| Methyl malonic acid | | | | δX | Chloride | | | X | × |
| Homocysteine | | | | δX | Uric acid | Х | | x | X |
| Selenium | | | | Х | Phosphorus | X | | x | X |
| Total cholesterol | Х | X | Х | Х | Sodium | X | | X | x |
| High-density lipoprotein cholesterol | | Х | Х | Х | Potassium | x | | X | X |
| Triglycerides | | Х | Х | Х | 1 otaosiani | ^ | | ^ | ^ |
| Apolipoproteins A ₁ and B | | | | ⁴X | Plasma assessments | | | | |
| Lp(a) | | | | 5Χ | Plasma fibrinogen | | | | Х |
| Total and ionized calcium | | | | X | Glucose (oral glucose tolerance test) | | X | х | Х |
| Cotinine | | | | X | , , , | | | - | - |
| Bile salts | | X | | | Urinary assessments | | | | |
| Pesticides | | X | X | Х | Urinalysis | Х | X | Х | |
| Syphilis | Х | X | X | | Pesticides | | Х | X | |
| Hepatitis A, B, and delta | | X | X | Х | Riboflavin | Х | | | |
| Hepatitis C | | ., | X | x | Thiamine | Х | | | |
| Hepatitis E | | | X | x | Cadmium | | | | Х |
| Tetanus | Х | | x | x | Creatinine | Х | | | Х |
| Diphtheria | X | | ^ | x | Albumin (micro) | | | | Х |
| Polio | x | | | ^ | Iodine | X | | | Х |
| Herpes simplex I and II | ^ | × | | × | Cocaine | | | | 5X |
| Human immunodeficiency virus I | | ^ | | | Opiates | | | | 5X |
| Rubella antibody | v | | | X | Phencyclidine | | | | 5X |
| | Х | | | X | Amphetamines | | | | 5X |
| Varicella antibody | | | | X | Marijuana | | | | 5X |
| Toxoplasmosis antibody | | | | X | Sodium | | | | x |
| Helicobacter pylori | | | | ⁴X | Pregnancy test | Х | | | x |
| Hantavirus | | | | ⁴X | | ^ | | | ^ |
| C-reactive protein | | | | Х | Excess and reserve vials | | | | |
| Rheumatoid factor | | | | Х | Serum | Х | Х | Х | Х |
| | | | | | White blood cells for deoxyribonucleic acid | | | | |
| | | | | | (DNA) banking | | | | > |

¹ I is National Health and Examination Survey (NHANES) I. II is NHANES II. H is the Hispanic Health and Nutrition Survey. III is NHANES III.

²Bile salts subset.

³Children only.

⁴Phase 1 only.

⁵Phase 2 only.

Table VII. Special studies

Volatile organic compounds (VOC's)1 Benzene 1,1-Dichloroethane Methylene Chloride Toluene 1,2-Dichloroethane Chloroform Styrene 1,1,-Dichloroethene Carbon Tetrachloride 1,2-Dichloropropane Ethylbenzene cis-1,2-Dichloroethene o-Xylene trans-1,2-Dichloroethene Bromoform m-Xylene 1.1.1-Trichloroethane Dibromomethane p-Xylene 1,1,2-Trichloroethane Bromodichloromethane Chlorobenzene Trichloroethene Dibromochloromethane 1,2-Dichlorobenzene 1,1,2,2-Tetrachloroethane Acetone 1,3-Dichlorobenzene Tetrachloroethene 2-Butanone 1,4-Dichlorobenzene Hexachloroethane Pesticides or metabolites¹ 2,4-Dichlorophenol Pentachlorophenol 2-isopropoxyphenol 2,5-Dichlorophenol 4-Nitrophenol Carbofuranphenol 2,4,5-Trichlorophenol 1-Naphthol 3,5,6-Trichloro-2-pyridinol 2,4,6-Trichlorophenol 2-Naphthol 2,4-Dichlorophenoxyacetic-acid Osteocalcin and bone alkaline phosphatase2 High-density lipoprotein phospholipid3

Dehydroepiandrosterone4

NOTE: Data from these studies are not from probability samples and may not be available for public use.

¹This study was conducted by the Division of Environmental Health Laboratory Sciences, National Center for Environmental Health, Centers for Disease Control and Prevention, on volunteers ages 20-59 years.

²This study was conducted on those with a Vitamin D assay, an acceptable bone density scan, and a serum creatinine level of ≤2.0 mg/dL. Most were examined during a morning session.

³This study was conducted on all persons with coronary heart disease (CHD) and on 600 persons without CHD from 12 age-sex groups.

⁴This study was conducted on 1,400 persons 20-90 years of age from 14 age-sex groups.

Table VIII. Automatic exclusion protocol for physically or cognitively impaired examinees, by type of impairment and examination component

| Component | Automatic exclusion(s) | Cognitively impaired | Confined to wheelchair | | |
|------------------------|---|----------------------------------|--|--|--|
| Physician exam | None | Attempt | Attempt | | |
| Bioelectric impedance | Pregnancy Cardiac pacemaker | Attempt | Refer to transfer note ¹ | | |
| /enipuncture | Hemophilia Cancer chemotherapy in the past 4 weeks | Refer to proxy note ² | Attempt | | |
| Glucose tolerance test | test Diabetic taking insulin Hemophilia Cancer chemotherapy in the past 4 weeks Refer to proxy note ² | | Attempt Refer to glucose tolerance test note ³ | | |
| Allergy | Does not usually have problems breathing in chest or lungs, now having problems (do not exclude if breathing problem is due entirely to nasal congestion from a cold) | Refer to proxy note ² | Attempt | | |
| | Usually has problems breathing in chest or lungs that are now worse | | | | |
| | Past severe reaction to allergen skin testing | | | | |
| | Severe eczema or infection on both arms | | | | |
| Audiometry | Drainage from ear(s), (only test nondraining ear) | Refer to proxy note ² | Attempt | | |
| ympanometry | Either ear has a tube | Refer to proxy note ² | Attempt | | |
| | Drainage from ear(s), (only test nondraining ear) | • • | | | |
| Spirometry | Chest or abdominal surgery in the past 3 weeks | Refer to proxy note ² | Attempt | | |
| | Hospitalization for heart problems in the last 6 weeks: Myocardial infarction or heart attack Angina or chest pain Congestive heart failure | | | | |
| Dental | Must take penicillin before getting a dental checkup or care | | | | |
| | Ever told by a doctor he/she has a heart problem because of the following: Congenital heart murmur Heart valve problem Congenital heart disease Bacterial endocarditis | | | | |
| | Ever been told by a doctor he/she has: Rheumatic fever Hemophilia Kidney disease requiring renal dialysis | Refer to proxy note ² | Attempt Can be examined in wheelchair | | |
| | Pacemaker or other artificial material in heart, arteries, or veins | | | | |
| | Hip, bone, or other joint replacement | | | | |
| Sone densitometry | Female under 60 years of age and results of pregnancy tests positive or uncertain | Refer to proxy note ² | Refer to transfer note ¹ | | |
| | Female under 60 years of age and any possibility that she is pregnant or she does not know if she is pregnant | | | | |
| | Fractured or broken both hips Pins or artificial hip | | | | |

Table VIII. Automatic exclusion protocol for physically or cognitively impaired examinees, by type of impairment and examination component—Con.

| Component | Automatic exclusion(s) | Cognitively impaired | Confined to wheelchair |
|-----------------------------------|------------------------|--------------------------------|--|
| Electrocardiogram | None | Attempt | Refer to transfer note ¹ |
| Joint x ray | None | Attempt | Wrists: can do in wheelchair Knees: see transfer note ¹ |
| Ultrasound | None | Attempt | Refer to transfer note ¹ |
| Body measures | None | Attempt | Attempt Use sitting protocol for: Weight Upper arm length Arm circumference Triceps skinfold Knee height Head circumference Wrist and elbow breadths |
| Central nervous system | None | Attempt | Attempt |
| Fundus photo | None | Attempt | Attempt Can do seated if examinee at proper height |
| Performance test | None | Attempt | Attempt Refer to performance test note4 |
| 24-hour recall and food frequency | None | Attempt; a proxy may be needed | Attempt |
| Urine specimen | None | Attempt | Attempt only if examinee can get up from wheelchair without assistance |
| WISC and WRAT | None | Attempt | Attempt |
| Interview (MEC and exit) | None | Ask at least memory | Attempt |

¹ Transfer note: Administer the test if the examinee can self-transfer to the table or if the sample person can be assisted in transferring by someone who has accompanied the sample person and who usually lifts him/her.

NOTES: WISC is Wechsler Intelligence Scale for Children, Revised. WRAT is Wide Range Achievement Test, Revised. MEC is mobile examination center.

²Proxy note: If the sample person cannot answer the safety questions, then a proxy is needed. If no proxy is available, then the procedure or test cannot be done.

³Glucose tolerance test note: If a sample person feels ill after the first venipuncture, do not automatically exclude from the glucose tolerance test. Allow the sample person to recover, then encourage the ingestion of the Dextol.

⁴Performance test note: If a wheelchair-bound examinee can get up from the wheelchair without assistance, attempt to do the entire performance test. If a sample person cannot get up from the wheelchair without assistance, then he/she should:

a. Receive the tests of shoulder external rotation, shoulder internal rotation, and lock and key test and

b. Not receive the tests of single chair stand, repeated chair stand, hip flexion and knee flexion, tandem stand, and measured walk.

Table IX. Administration of dietary intake instruments, by age of sample person, type of respondent, place of interview, and type of interviewer

| Age of sample person | Time of | 24-1 | nour recall | Food frequency | | |
|--------------------------------|-----------------------|-------|-------------|------------------|------------|--|
| | Type of respondent | Place | Interviewer | Place | Interviewe | |
| 2–11 months | Proxy | MEC | Dietary | MEC ¹ | Nondietary | |
| -5 years | Proxy | MEC | Dietary | _ | | |
| 3-11 years | Self/proxy | MEC | Dietary | _ | | |
| 2–16 years | Self ² | MEC | Dietary | MEC | Dietary | |
| 7–49 years | Self ² | MEC | Dietary | Home | Nondietary | |
| 0 years and over | Self ² | MEC | Dietary | Home | Nondietary | |
| 50 years and over ³ | Self ² | Home | Telephone | _ | _ | |

¹Also administered during home examination.

NOTE: MEC is mobile examination center.

Table X. Nutrition-related interview information collected in interviews, by age of sample person and type of information

| Information | Age | |
|--|-------------------|--|
| 24-hour dietary recall | 2 months and over | |
| Food security ¹ | 2 months and over | |
| Food program participation ¹ | 2 months and over | |
| Drinking water source ¹ and quantity | 2 months and over | |
| Vitamin and mineral supplement usage | 2 months and over | |
| Salt use frequency and type | 2 months and over | |
| Infant food frequency | 2-11 months | |
| Breakfast practices | 1 year and over | |
| Dietary changes for health reasons | 1 year and over | |
| Infant feeding practices, including breast feeding | 2 months-5 years | |
| Food frequency | 12 years and over | |
| Alcohol use | 12 years and over | |
| Antacids use | 17 years and over | |
| Lifetime milk frequency | 20 years and over | |
| Self- (or proxy-) reported height and weight | 2 months and over | |
| Self- (or proxy-) assessed weight status | 2 months and over | |
| Birth weight | 2 months-11 years | |
| Weight loss practices and reasons | 1 year and over | |
| Desired weight | 12 years and over | |
| Weight history | 25 years and over | |

¹Also collected at the household (family) level.

²Proxy used if necessary.

³Supplemental Nutrition Survey of Older Americans.

Table XI. Reportable findings from the examination, by age group and component or test

| | Age group | | | | | |
|---|-----------------------------------|---|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Component or test | 2 months- 5 years ¹ | 6–19 years | 20–39 years | 40–59 years | 60–74 years | 75 years and over |
| Blood pressure | A C (age 5) | AC | A CD | A CD | A CD | A CD |
| Physician's exam | | Α | Α | Α | Α | Α |
| Dentist's exam | | A | Α | Α | Α | Α |
| leight and weight | | C | С | С | С | С |
| Spirometry | | C (8 years of age and over) | Ċ | C | Ċ | С |
| Allergy test | ••• | C | C (1/2 sample) | C (1/2 sample) | ••• | ••• |
| Audiometry | | С | | | | |
| Bone density exam | | ••• | В | В | В | В |
| Jitrasound exam | ••• | ••• | BC | BC | BC | |
| Fundus photography | ••• | ••• | ••• | В | В | В |
| Electrocardiogram | ••• | | ••• | A², C | A ² , C | A ² , C |
| land/knee x rays | | ••• | • • • | • • • | A², B | A², B |
| Ferritin | BC | BC | BC | BC | BC | BC |
| Serum folate | BC (4 years of age and over) | BC | BC | BC | BC | BC |
| Red blood cell folate | BC (4 years of age and over) | BC | BC | BC | BC | BC |
| Protoporphyrin | | BC | BC | BC | BC | BC |
| /itamin A | | В | В | В | В | В |
| _ead | | В | В | В | В | В |
| Hepatitis B | - | В | В | В | В | В |
| Total cholesterol | | BC | BC | BC | BC | BC |
| High-density lipoprotein cholesterol | | C | C | C | C | C |
| • • • • | | BC | BC | BC | BC | BC |
| Triglycerides | | _ | B ³ , C | B³, C | B ³ , C | B ³ , C |
| Serum thyroxine (T ₄) | | B ³ , C (12 years of age and over) | | | | BC BC |
| Serum thyroid-stimulating hormone (TSH) | | BC (12 years of age and over) | BC | BC | BC | |
| Glycated hemoglobin (Hb _{A1c}) | | С | C | C | C | C |
| Plasma glucose | | ••• | BC | BC | BC | BC |
| Serum glucose | ••• | B (12 years of age and over) | ••• | • • • | | ••• |
| Sodium | • • • | BC (12 years of age and over) | BC | BC | BC | BC |
| Potassium | ••• | BC (12 years of age and over) | BC | BC | BC | BC |
| Chloride | ••• | С | С | С | С | С |
| Bicarbonate | ••• | C (12 years of age and over) | C | С | С | С |
| Blood urea nitrogen | • • • | BC (12 years of age and over) | BC | BC | BC | BC |
| Creatinine | | BC (12 years of age and over) | BC | BC | BC | BC |
| Unicacid | ••• | C (12 years of age and over) | С | С | С | С |
| Calcium | | BC (12 years of age and over) | BC | BC | BC | BC |
| Phosphorus | | C (12 years of age and over) | С | С | С | С |
| Total bilirubin | | C (12 years of age and over) | С | С | С | С |
| Aspartate aminotransferase (serum glutamic-oxaloacetic | ••• | C (your or age and one, | | | | |
| transaminase) | | BC (12 years of age and over) | BC | BC | BC | BC |
| Alanine aminotransferase (serum glutamate pyruvate | | ,, | | | | |
| transaminase) | | BC (12 years of age and over) | BC | BC | BC | BC |
| Lactate dehydrogenase | | C (12 years of age and over) | C | С | С | С |
| Alkaline phosphatase | | C (12 years of age and over) | Ċ | Ċ | C | С |
| Total protein | | C (12 years of age and over) | Č | Č | Č | Č |
| • | | C (12 years of age and over) | Č | Č | Č | Č |
| Albumin | | | A ² ,B ⁴ ,C |
| Hemoglobin | | A ² ,B ⁴ ,C | | | | _* - |
| Hematocrit | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Red blood cell count | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Mean corpuscular volume | · · | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Mean corpuscular hemoglobin | - | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Mean corpuscular hemoglobin concentration | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| White blood cell count | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Platelets | A ² | A ² | A ² | A ² | A ² | A ² |
| Granulocytes (total) | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Lymphocytes (total) | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Monocytes (total) | | A ² , C | A ² , C | A ² , C | A ² , C | A^2 , C |
| Granulocytes (3-part differential) | | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| * | _ | A ² , C | A ² , C | A ² , C | A ² , C | A ² , C |
| Lymphocytes (3-part differential) | | | | A ² , C | A ² , C | A ² , C |
| ARCHOPATRIC II-LINOTOTICATION PROPERTY PORTAGONA | A7. U | A ² , C | A ² , C | Α,υ | Α, υ | Α,υ |

Key: A = reported in mobile examination center.

B = rapid report (includes blood tests from home exam).

C = routine report (includes blood tests from home exam).

D = reported during household interview.

^{... =} Not applicable.

¹Only results from physician's exam and height and weight measurements are available to examinees 2-11 months.

²Only reported in mobile examination center if extremely abnormal.

³Only reported in rapid report as reference value for serum TSH.
⁴Only reported in rapid report as reference value for ferritin, protoporphyrin, and lead.

Table XII. Laboratory test results reporting criteria

| Laboratory test and characteristic | Medically acceptable values | Early reporting cutoff values | Other abnormal values | Comments |
|---|---------------------------------|----------------------------------|--|---|
| Ferritin | 20-2,000 ng/mL | <10 | 1019, >2,000 | |
| Serum folate | ≥4.0 ng/mL | <3.0 | 3.0-3.9 | |
| Protoporphyrin Age | (in μ g/dL red blood cells) | | | |
| 1–2 years | 0-80 | ≥90 | 81-89 | |
| 3–4 years | 075 | ≥90 | 76–89 | |
| 5 years and over | 0-70 | ≥90 | 71–89 | |
| Red blood cell folate | ≥140 ng/mL red blood cells | <100 | 100–139 | |
| Vitamin A Age | (in μg/dL) | <10 | | Report only values <10 µg/dL |
| 1–17 years | ≥25 | <10 | | |
| 18 years and over | ≥30 | | | |
| Lead | (in μg/dL) | | | Not reported routinely, |
| Age | | | | only rapid report |
| 1–5 years | 0-9.9 | ≥10 | | |
| 6–17 years | 0-14.9 | ≥15 | | |
| 18 years and over | 0-14.9 | ≥20 | | |
| Total cholesterol (Hopkins Laboratory) Age | (in mg/dL) | | | |
| 1–19 years | <177 | >400 | 177–400 | |
| 20 years and over | <200 | >400 | 200–400 | |
| Total cholesterol (WSRC Lab) | <200 mg/dL | >400 | 200400 | Omit if Hopkins Laboratory total cholesterol is available |
| HDL cholesterol | ≥35 mg/dL | | <35 | is available |
| Triglycerides Sex and age Male | (in mg/dL) | | | |
| 1–9 years | ≤100 | >500 | 101-500 | |
| 10–14 years | ≤125 | >500 | 126-500 | |
| 15–19 years | ≤150 | >500 | 151–500 | |
| 20 years and over | ≤250 | >500 | 251–500 | |
| Female | | | | |
| 1–9 years | ≤110 | >500 | 111–500 | |
| 10-14 years | ≤130 | >500 | 131-500 | |
| 15–19 years | ≤170 | >500 | 171–500 | |
| 20 years and over | ≤250 | >500 | 251500 | |
| Serum thyroxine (T ₄) | 4.5–13.2 μg/dL | | <4.5, >13.2 | |
| Serum thyroid-stimulating hormone (TSH) | 0.36–6.70 μU/mL | <0.10, >15.0 | 0.10–0.35 6.71–15.00 | |
| Glycated hemoglobin (Hb _{A1c}) | 0.0-6.1 percent | 1400 | >6.1 | |
| Plasma glucose, fasting ¹ | 60.0–139.9 mg/dL | ≥140.0 | <60.0 | |
| Morning session | 60.0-139.9 mg/dL | ≥200.0 | <60.0, 140.0–199.9 | |
| Afternoon or evening sessions | 60.0–139.9 mg/dL | ≥250.0 | <60.0, 140.0–249.9 | |
| Serum glucose (WSRC Lab) ³ | 60.0–139.9 mg/dL | ≥140.0 | <60.0 | Omit if fasting plasma |
| | | -1.00 | | glucose is available. WSRC Lab should make early reports only for sample persons 12–19 years of age |
| Sodium | 138.1–145.6 mmol/L | <122.0, >154 | 122.0-138.0 145.7-154.0 | |
| Potassium | 3.57-4.49 mmol/L | <2.90, >5.40 | 2.90–3.56 4.50–5.40 | |
| Chloride | 100.3–110.0 mmol/L | | <100.3, >110.0 | |
| Bicarbonate | 21–36 mmol/L | . 50 | <21, >36 | |
| Blood urea nitrogen | 0-20 mg/dL | >50 >3.0 | 21–50 | |
| Creatinine | 0.0–1.3 mg/dL | >3.0 | 1.4–3.0 | |
| Creatinine | | | >75 | |
| Uric acid | 0.0-7.5 mg/dL | <7.0 >1 2.0 | >7.5 7.0–8.6, 10.2–12.0 | |
| | | <7.0, >12.0 | >7.5 7.0–8.6, 10.2–12.0 <2.7, >4.6 | |

Table XII. Laboratory test results reporting criteria—Con.

| Laboratory test and characteristic | Medically acceptable values | Early reporting cutoff values | Other abnormal values | Comments |
|--|-----------------------------|----------------------------------|--|----------|
| spartate aminotransferase (serum | | | | |
| glutamic-oxaloacetic transaminase) | 0–40 U/L | ≥120 | 41–119 | |
| Nanine aminotransferase (serum glutamate | | | | |
| pyruvate transaminase) | 0–43 U/L | ≥129 | 44–128 | |
| actate dehydrogenase | 0–210 U/L | | >210 | |
| alkaline phosphatase | | | | |
| ∖ ge | | | | |
| 12-19 years | 0–521 U/L | | >521 | |
| 20 years and over | 0–123 U/L | | >123 | |
| Total protein | 6.6–8.1 g/dL | | <6.6, >8.1 | |
| Albumin | ≥3.6 g/dL | | <3.6 | |
| lemoglobin | | | | |
| Sex and age | | | | |
| Male | | | | |
| 1–2 years | 10.3-13.6 g/dL | <6.5 | 6.5-10.2, >13.6 | |
| 3–4 years | 10.9–13.5 g/dL | <6.5 | 6.5–10.8, >13.5 | |
| 5–10 years | 11.2-14.2 g/dL | <6.5 | 6.5-11.1, >14.2 | |
| 11–14 years | 12.0-15.2 g/dL | <6.5 | 6.5–11.9, >15.2 | |
| 15–19 years | 12.9-16.6 g/dL | <6.5 | 6.5–12.8, >16.6 | |
| 20–64 years | 13.3–16.9 g/dL | <6.5 | 6.5–13.2, >16.9 | |
| 65 years and over | 12.4–16.9 g/dL | <6.5 | 6.5–12.3, >16.9 | |
| - emale | | | | |
| 1–2 years | 10.5–13.3 g/dL | <6.5 | 6.5–10.4, >13.3 | |
| 3–4 years | 10.9–13.8 g/dL | <6.5 | 6.5–10.8, >13.8 | |
| 5–10 years | 11.3–14.1 g/dL | <6.5 | 6.5–11.2, >14.1 | |
| 11–14 years | 11.5–14.6 g/dL | <6.5 | 6.5–11.4, >14.6 | |
| 15–19 years | 11.315.0 g/dL | <6.5 | 6.5–11.2, >15.0 | |
| 20–64 years | 11.6–15.3 g/dL | <6.5 | 6.5–11.5, >15.3 | |
| 65 years and over | 11.9–15.4 g/dL | <6.5 | 6.5–11.8, >15.4 | |
| Hematocrit | | | | |
| Sex and age | | | | |
| Male · | 04 5 40 0 ~/dl | | -01 E - 40 0 | |
| 1–2 years | 31.5–40.0 g/dL | | <31.5, >40.0 | |
| 3-4 years | 32.2–39.2 g/dL | | <32.2, >39.2 | |
| 5–10 years | 33.2–41.0 g/dL | | <33.2, >41.0 | |
| 11–14 years | 35.2-44.5 g/dL | | <35.2, >44.5 | |
| 15–19 years | 38.2–48.0 g/dL | | <38.2, >48.0 | |
| 20–64 years | 39.5–49.0 g/dL | | <39.5, >49.0 | |
| 65 years and over | 37.7–49.1 g/dL | | <37.1, >49.1 | |
| Fernale 1–2 years | 31.5–39.0 g/dL | | <31.5, >39.0 | |
| 3–4 years | 32.0-40.0 g/dL | | <32.0, >40.0 | |
| 5–10 years | 33.1-41.0 g/dL | | <33.1, >41.0 | |
| 11–14 years | 34.5–42.5 g/dL | | <34.5, >42.5 | |
| 15–19 years | 33.7–43.7 g/dL | | <33.7, >43.7 | |
| 20–64 years | 35.0–45.0 g/dL | | <35.0, >45.0 | |
| 65 years and over | 35.5-45.2 g/dL | | <35.5, >45.2 | |
| Red blood cell count | (× 10 ¹² /L) | | | |
| Red blood cell count Sex and age | (^ 10 /L) | | | |
| Male | | | | |
| | 3.9-5.3 | | <3.9, >5.3 | |
| 1–2 years | | | | |
| PICOV BILL | 3.9–5.0 | | <3.9, >5.0 | |
| • | | | <4.0, >5.1 | |
| 5–10 years | 4.0–5.1 | | 40.54 | |
| 5–10 years | 4.2-5.4 | | <4.2, >5.4 | |
| 5–10 years | | | <4.2, >5.4 <4.3, >5.6 <4.3, >5.6 | |

Table XII. Laboratory test results reporting criteria—Con.

| Laboratory test and characteristic | Medically acceptable values | Early reporting cutoff values | Other abnormal values | Comments |
|--|--|-------------------------------|----------------------------------|----------|
| emale | | | | |
| 1–2 years | 3.9-5.1 | | <3.9, >5.1 | |
| 3-4 years | 3.8-5.0 | | <3.8, >5.0 | |
| 5–10 years | 4.0-5.1 | | <4.0, >5.1 | |
| 11–14 years | 4.0-5.1 | | <4.0, >5.1 | |
| 15–19 years | 3.8–5.0 | | <3.8, >5.0 | |
| 20–64 years | 3.8–5.1 | | | |
| 65 years and over | 3.9–5.1 | | <3.8, >5.1 <3.9, >5.1 | |
| ean corpuscular volume | (fL) | | | |
| ex and age | | | | |
| ale | | | | |
| 1–2 years | 66.4–87.7 | • | <66.4, >87.7 | |
| 3-4 years | 73.6-88.6 | • | <73.6, >88.6 | |
| 5-10 years | 74.8-90.7 | | <74.8, >90.7 | |
| 11–14 years | 77.5–91.3 | | <77.5, >91.3 | |
| 15–19 years | 79.6–94.7 | | <79.6, >94.7 | |
| • | | | • | |
| 20–64 years | 81.6–98.5 | | <81.6, >98.5 | |
| 65 years and over | 82.0–100.5 | • | <82.0, >100.5 | |
| emale 1_2 years | 60 1 99 2 | | -en 1 - 00 n | |
| 1–2 years | 69.1–88.2 | | <69.1, >88.2 | |
| 3–4 years | 74.5–89.8 | • | <74.5, >89.8 | |
| 5-10 years | 75.7-89.9 | • | <75.7, >89.9 | |
| 11–14 years | 77.8-94.0 | • | <77.8, >94.0 | |
| 15–19 years | 80.2-96.5 | | <80.2, >96.5 | |
| 20–64 years | 81.2–98.8 | | <81.2, >98.8 | |
| 65 years and over | 81.2-99.8 | | <81.2, >99.8 | |
| | J.12 0010 | • | 701.E, 700.U | |
| ean corpuscular hemoglobin ex and age | (pg) | | | |
| ale | | | | |
| 1–2 years | 20.9-29.3 | | -20.0 ×20.2 | |
| | | | <20.9, >29.3 | |
| 3–4 years | 24.6–30.4 | | <24.6, >30.4 | |
| 5–10 years | 25.4–31.0 | • | <25.4, >31.0 | |
| 11–14 years | 26.2–31.2 | • | <26.2, >31.2 | |
| 15-19 years | 27.2-32.4 | • | <27.2, >32.4 | |
| 20-64 years | 27.8-33.7 | | <27.8, >33.7 | |
| 65 years and over | 27.4~34.0 | | <27.4, >34.0 | |
| emale | | | | |
| 1–2 years | 23.2-29.8 | | -00.0 | |
| * | | | <23.2, >29.8 | |
| 3–4 years | 25.2–30.4 | | <25.2, >30.4 | |
| 5-10 years | 25.8–30.8 | • | <25.8, >30.8 | |
| 11–14 years | 26.3–31.8 | • | <26.3, >31.8 | |
| 15-19 years | 26.8-32.7 | • | <26.8, >32.7 | |
| 20-64 years | 27.1-33.3 | | <27.1, >33.3 | |
| 65 years and over | 27.3–33.7 | | <27.3, >33.7 | |
| , | | | | |
| lean corpuscular hemoglobin | (normant) | | | |
| concentration ex and age | (percent) | | | |
| ale | | | | |
| 1–2 years | 31.06-34.55 | • | <31.06, >34.55 | |
| 3-4 years | 31.64-34.50 | | <31.64, >34.50 | |
| 5-10 years | 31.55–34.53 | | <31.55, >34.53 | |
| 11–14 years | | | • | |
| • | 31.72-34.26 | | <31.72, >34.26 | |
| 15–19 years | 31.70–34.50 | | <31.70, >34.50 | |
| 20–64 years | 32.0034.92 | • | <32.00, >34.92 | |
| 65 years and over | 31.83-34.83 | • | <31.83, >34.83 | |
| | | | | |
| emale | | | <31.43, >35.07 | |
| emale 1–2 years | 31.43-35.07 | • | | |
| 1–2 years | | | <31.46. >34.45 | |
| 3–4 years | 31.46–34.45 | • | <31.46, >34.45 | |
| 1–2 years | 31.46–34.45 31.61–34.70 | • | <31.61, >34.70 | |
| 1–2 years | 31.46–34.45 31.61–34.70 31.19–34.45 | • | <31.61, >34.70 <31.19, >34.45 | |
| 1–2 years 3–4 years 5–10 years 11–14 years 15–19 years | 31.46–34.45 31.61–34.70 31.19–34.45 31.28–34.42 | • | <31.61, >34.70 | |
| 1–2 years | 31.46–34.45 31.61–34.70 31.19–34.45 | • | <31.61, >34.70 <31.19, >34.45 | |

Table XII. Laboratory test results reporting criteria—Con.

| Write blood cell count Size and age Manual Size an | Laboratory test and characteristic | Medically acceptable values | Early reporting cutoff values | Other abnormal values | Comments |
|--|---------------------------------------|------------------------------|----------------------------------|--------------------------|-------------------------|
| Male — 1 | White blood cell count | (× 10 ⁹ /L) | | | |
| 1-2 years | Sex and age | , , | | | |
| 3-4 years | Male | | | | |
| 3-4 years | | 5.10-13.80 | ≤3.00. ≥16 | 3.01-5.09. 13.81-15.99 | |
| 5-10 years | | | | • | |
| 11-14 years | · · · · · · · · · · · · · · · · · · · | | • | | |
| 15-19 years | | | | | |
| 20-64 years | - | | | | |
| 65 years and over 4.40–10.10 x3.00, x16 3.01–4.39, 10.11–15.99 Formule 1-2 years 5.40–14.10 x3.00, x16 3.01–5.39, 14.11–15.99 3-4 years 4.90–12.20 x3.00, x16 3.01–4.89, 12.21–15.99 3-4 years 4.90–12.20 x3.00, x16 3.01–4.89, 11.11–15.99 3-4 years 4.90–11.00 x3.00, x16 3.01–4.59, 11.11–15.99 3-4 years 4.90–11.10 x3.00, x16 3.01–4.59, 11.10–15.39 3-10–15.19 years 4.90–11.10 x3.00, x16 3.01–4.29, 11.01–15.39 3-10–15.19 years 4.90–11.10 x3.00, x16 3.01–4.29, 11.11–15.99 3-10–15.19 years 4.90–11.00 x3.00, x16 3.01–4.29, 11.21–15.39 3-10–4.29, 11.21–15.29 3-10–4.29, 11.21–1 | • | | · | · | |
| Femule 1-2 years | • | | | | |
| 1-2 years | 65 years and over | 4.40-10.10 | 50.00, 210 | 3.01-4.39, 10.11-15.99 | |
| 3-4 years | Female | | | | |
| 5-10 years 4.60-11.10 | 1–2 years | 5.40-14.10 | ≤3.00, ≥16 | 3.01-5.39, 14.11-15.99 | |
| 11—14 years 4.50—11.00 | 3-4 years | 4.90-12.20 | ≤3.00, ≥16 | 3.01-4.89, 12.21-15.99 | |
| 11—14 years 4,50—11.00 | 5–10 years | 4.60-11.10 | ≤3.00, ≥16 | 3.01-4.59, 11.11-15.99 | |
| 15-19 years 4.80-11.10 | • | | · | | |
| 20-44 years | | | | | |
| 65 years and over | • | | | | |
| Platelets . 200–400 × 10 ⁹ /L | | | | | |
| Granulocytes (total number) | • | _ | 30.00, 210 | 3.01-4.23, 10.01-13.33 | |
| Sex and age Meller | Platelets | 200–400 × 10 ⁹ /L | <50, >600 | 50–199, 401–600 | platelet counts, report |
| Male 1-2 years | Granulocytes (total number) | (× 10°/L) | | | |
| Male 1-2 years | | • | | | |
| 1-2 years 1.40-6.55 | • | | | | |
| 3-4 years 1.96-6.63 | | 1 40-6 55 | | <1.40 >6.55 | |
| 5-10 years 1.55-7.10 | | | | · · | |
| 11-14 years 1.40-6.83 | - | | | · | |
| 15-19 years 1.90-7.56 2.20-7.60 2.20, 7.56 20-64 years 2.20-7.60 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.56 2.20, 7.20 3-4 years 1.80-6.96 3-4 years 1.80-6.96 3-1.80, 6.96 3-1.80, 6.96 3-1.80, 7.47 3-1.80, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.76 3.20, 7.20 3.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, 7.20 3.20, | | | | | |
| 20-64 years 2.20-7.60 | | | | | |
| Female 1-2 years 1.68-7.20 | • | | | | |
| Female 1-2 years | - | | | • | |
| 1-2 years 1.68-7.20 | 65 years and over | 2.34-8.10 | | <2.34, >8.10 | |
| 3-4 years 1.80-6.96 | Female | | | | |
| 3-4 years 1.80-6.96 | 1–2 years | 1.68-7.20 | | <1.68, >7.20 | |
| 5-10 years 1.88-7.47 11-14 years 1.90-7.76 11-9 years 2.43-8.04 20-64 years 2.08-7.95 65 years and over 2.30-7.10 Lymphocytes (total number) Sex and age Male 1-2 years 1.89-5.13 5-10 years 1.89-5.13 5-10 years 1.85-3.70 15-19 years 1.55-3.70 15-19 years 1.30-3.43 20-64 years 1.35-3.40 65 years and over 1.13-3.47 Female 1-2 years 2.33-7.24 3-4 years 1.90-4.50 11-14 years 1.55-18 5-10 years 1.90-4.50 11-14 years 1.50-3.50 20-64 years 1.90-4.50 11-14 years 1.50-3.50 20-64 years 1.64-3.71 21-84 years 1.64-3.71 21-84 years 1.64-3.71 21-84 years 1.50-3.50 20-64 years 1.40-3.70 21-84 years 1.40-3.70 21-85 years 1.40-3.70 | • | 1.80-6.96 | | | |
| 11-14 years 1.90-7.76 15-19 years 2.43-8.04 20-64 years 2.08-7.95 65 years and over 2.30-7.10 Lymphocytes (total number) Sex and age Mate 1-2 years 2.46-6.95 3-4 years 1.89-5.13 5-10 years 1.85-4.33 11-14 years 1.85-4.33 11-14 years 1.55-3.70 15-19 years 1.30-3.43 20-64 years 1.35-3.40 65 years and over 1.13-3.47 Female 1-2 years 2.33-7.24 3-4 years 1.95-3.8 1.77-5.18 5-10 years 1.90-4.50 11-14 years 1.90-9.10 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.17-5.18 1.164-3.71 1.164-3.71 1.164-3.70 1.150, 3.50 1.150, 3.50 1.150, 3.50 1.150, 3.50 1.150, 3.50 1.164, 3.71 1.164, 3.71 1.164, 3.70 1.160, 3.70 | • | 1.88-7.47 | | | |
| 15–19 years 2.43–8.04 | | | | | |
| 20-64 years 2.08-7.95 | | | | | |
| 65 years and over 2.30–7.10 | · · | | | | |
| Lymphocytes (total number) (x 10°/L) Sex and age Male 1-2 years 2.46-6.95 <.1.89, >5.13 5-10 years 1.89-5.13 <.1.89, >5.13 5-10 years 1.55-3.70 <.1.55, >3.70 15-19 years 1.30-3.43 <.1.35, >3.40 65 years and over 1.13-3.47 Female 1-2 years 2.33-7.24 3-4 years 1.77-5.18 5-10 years 1.90-4.50 11-14 years 1.90-4.50 11-14 years 1.64-3.71 15-19 years 1.64-3.71 15-19 years 1.50-3.50 20-64 years 1.40-3.70 | * | | | | |
| Sex and age Male 1-2 years 2.46-6.95 <2.46, >6.95 3-4 years 1.89-5.13 <1.89, >5.13 5-10 years 1.85-4.33 <1.85, >4.33 11-14 years 1.55-3.70 <1.55, >3.70 15-19 years 1.30-3.43 <1.30, >3.43 20-64 years 1.35-3.40 <1.35, >3.40 65 years and over 1.13-3.47 <1.13, >3.47 Female 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | co yours and over | 2.00-7.10 | | (2.00, >7.10 | |
| Male 1-2 years 2.46-6.95 <2.46, >6.95 3-4 years 1.89-5.13 <1.89, >5.13 5-10 years 1.85-4.33 <1.85, >4.33 11-14 years 1.55-3.70 <1.55, >3.70 15-19 years 1.30-3.43 <1.30, >3.43 20-64 years 1.35-3.40 <1.35, >3.40 65 years and over 1.13-3.47 <1.13, >3.47 Female 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | Lymphocytes (total number) | (× 10°/L) | | | |
| 1-2 years 2.46-6.95 3-4 years 1.89-5.13 5-10 years 1.85-4.33 11-14 years 1.55-3.70 15-19 years 1.30-3.43 20-64 years 1.35-3.40 65 years and over 1.13-3.47 Female 1-2 years 2.33-7.24 3-4 years 1.77-5.18 5-10 years 1.90-4.50 11-14 years 1.64-3.71 15-19 years 1.50-3.50 20-64 years 1.40-3.70 | Sex and age | | | | |
| 3-4 years 1.89-5.13 | Male | | | | |
| 5-10 years | 1–2 years | 2.46-6.95 | | <2.46, >6.95 | |
| 5-10 years | 3-4 years | | | • | |
| 11-14 years 1.55-3.70 <1.55, >3.70 15-19 years 1.30-3.43 <1.30, >3.43 20-64 years 1.35-3.40 <1.35, >3.40 65 years and over 1.13-3.47 <1.13, >3.47 Female 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | • | | | | |
| 15–19 years 1.30–3.43 <1.30, >3.43 20–64 years 1.35–3.40 <1.35, >3.40 65 years and over 1.13–3.47 <1.13, >3.47 Female 1–2 years 2.33–7.24 <2.33, >7.24 3–4 years 1.77–5.18 <1.77, >5.18 5–10 years 1.90–4.50 <1.90, >4.50 11–14 years 1.64–3.71 <1.64, >3.71 15–19 years 1.50–3.50 <1.50, >3.50 20–64 years 1.40–3.70 <1.40, >3.70 | | | | | |
| 20-64 years 1.35-3.40 <1.35, >3.40 65 years and over 1.13-3.47 <1.13, >3.47 Female 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | | | | • | |
| 65 years and over 1.13–3.47 <1.13, >3.47 Female 1–2 years 2.33–7.24 <2.33, >7.24 3–4 years 1.77–5.18 <1.77, >5.18 5–10 years 1.90–4.50 <1.90, >4.50 11–14 years 1.64–3.71 <1.64, >3.71 15–19 years 1.50–3.50 <1.50, >3.50 20–64 years 1.40–3.70 <1.40, >3.70 | | | | | |
| Female 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | | | | • | |
| 1-2 years 2.33-7.24 <2.33, >7.24 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | - | 1.10-0.47 | | <1.10, 20.41 | |
| 3-4 years 1.77-5.18 <1.77, >5.18 5-10 years 1.90-4.50 <1.90, >4.50 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | | 0.00 7.04 | | -0.00 - 7.04 | |
| 5-10 years | | | | | |
| 11-14 years 1.64-3.71 <1.64, >3.71 15-19 years 1.50-3.50 <1.50, >3.50 20-64 years 1.40-3.70 <1.40, >3.70 | • | | | | |
| 15–19 years | | | | | |
| 20-64 years | 11–14 years | 1.64–3.71 | | <1.64, >3.71 | |
| 20-64 years | 15–19 years | 1.50-3.50 | | <1.50, >3.50 | |
| | 20–64 years | 1.40-3.70 | | | |
| | 65 years and over | 1.20-3.75 | | | |

Table XII. Laboratory test results reporting criteria—Con.

| Laboratory test and characteristic | Medically acceptable values | Early reporting cutoff values | Other abnormal values | Comments |
|------------------------------------|------------------------------------|-------------------------------|--------------------------|----------|
| Monocytes (total number) | (× 10 ⁹ /L) | | | |
| Sex and age | | | | |
| Male | | | | |
| 1-2 years | 0.25-1.20 | | <0.25, >1.20 | |
| 3–4 years | 0.20-1.20 | | <0.20, >1.20 | |
| 5–10 years | 0.15-0.99 | | <0.15, >0.99 | |
| 11–14 years | 0.10-0.88 | | <0.10, >0.88 | |
| 15–19 years | 0.15-0.75 | | <0.15, >0.75 | |
| 20-64 years | 0.20-0.85 | | <0.20, >0.85 | |
| 65 years and over | 0.15-0.80 | | <0.15, >0.80 | |
| Female | | | | |
| 1–2 years | 0.20-1.20 | | <0.20, >1.20 | |
| 3-4 years | 0.20-1.04 | | <0.20, >1.04 | |
| 5–10 years | 0.15-1.00 | | <0.15, >1.00 | |
| 11-14 years | 0.15-0.70 | | <0.15, >0.70 | |
| 15-19 years | 0.15-0.83 | | <0.15, >0.83 | |
| 20-64 years | 0.15-0.80 | | <0.15, >0.80 | |
| 65 years and over | 0.15-0.80 | | <0.15, >0.80 | |
| Granulocytes (3-part differential) | For "percent," no range to be used | | | |
| ymphocytes (3-part differential) | For "percent," no range to be used | | | |
| Monocytes (3-part differential) | For "percent," no range to be used | | | |

¹Done for sample persons over 20 years of age. ²Done for sample persons 40–74 years of age. ³Done for sample persons over 12 years of age.

Appendix II Examination results and reports

DATE

This form was presented to _

*U.S. GPO: 1993-342-334/80843

| S | Sample No. | Centers for Disease Control and F National Center for Health Statistic 6525 Belcrest Road |
|------|--|--|
| i_ | | Hyattsville, Maryland 20782 |
| | | AND BLOOD PRESSURE FINDINGS REPORT |
| | NATIONAL HE | EALTH & NUTRITION EXAMINATION SURVEY III |
| NAN | ME | DATE |
| Res | sting pulse rate for 30 seconds: | Comments |
| Bloc | od pressure:/ | Average of second and third measurements |
| | | Single measurement |
| | | MIL not measurable |
| Res | ad the statement circled below: | No proper cuff fit – thigh cuff used |
| (1) | Your blood pressure today is within | n the acceptable range*. We suggest you see your doctor within |
| (1) | the next two years to have your blo | ood pressure rechecked. Present this form to your doctor. |
| (2) | Your blood pressure today is accept | ptable, but at the high end of the acceptable range*. We suggest |
| | you see your doctor within the ne form to your doctor. | ext year to have your blood pressure rechecked. Present this |
| (3) | Your blood pressure today is above | e the acceptable range*. We suggest you see your doctor within |
| | the next two months to have you | ur blood pressure rechecked. Present this form to your doctor. |
| (4) | Your blood pressure today is mode | erately high*. We suggest you see your doctor within the next |
| | month to have your blood pressure | e rechecked. Present this form to your doctor. |
| (5) | Your blood pressure today is high* | YOU SHOULD SEE YOUR DOCTOR WITHIN THE NEXT WEEK |
| | TO HAVE YOUR BLOOD PRESSUI | RE RECHECKED. Present this form to your doctor. |
| (6) | Your blood pressure today is quite | high*. YOU SHOULD SEE YOUR DOCTOR OR CLINIC TODAY, |
| | OR GO TO A HOSPITAL EMERGE Present this form to your doctor. | NCY ROOM TO HAVE YOUR BLOOD PRESSURE RECHECKED. |
| | • - | |
| | | of the Joint National Committee on Detection, Evaluation ssure, United States Department of Health and Human |
| | Services, Public Health Service, I | |
| Υοι | ur pulse and blood pressure were n | measured by a trained examiner. These measurements were |
| obt | tained as part of a survey and d | to not represent a medical diagnosis. Interpretation of these |
| me | easurements must be made by a phy | ysician. |
| | | organization wish further information they should be directed to |

SIGNATURE

OMB No. 0920-0237 CDC 64.04 REV. 01/93

for signature, but he/she refused to sign.

DEPARTMENT OF HEALTH & HUMAN SERVICES Sample No.

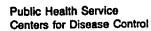
Public Health Service Centers for Disease Control

REV. 09/91

National Center for Health Statistics 6525 Belcrest Road Hyattsville, MD 20782

CHILD PULSE AND BLOOD PRESSURE FINDINGS REPORT NATIONAL HEALTH & NUTRITION EXAMINATION SURVEY III

| NAME DATE | | |
|--|--|--|
| Resting pulse rate for 30 seconds: | Comments | |
| Blood pressure:/ | Average of second and third measurements Single measurement MIL not measurable No proper cuff fit – thigh cuff used | |
| Read the statement circled below: | No proper can lit – thigh can used | |
| (1) Your child's blood pressure today is within | n the acceptable range*. | |
| blood pressures can vary from day to d Therefore, it is important to have your ch | ay and sometimes even from moment to moment. aild's blood pressure checked again when your child months or at least within one year. It is possible that Present this form to the doctor. | |
| age. Children's blood pressures tend to blood pressure checks. It is possible that | to be higher than the acceptable range* for his/her vary, and therefore it is important to have further tit may read lower next time. It is recommended sed within the next several weeks. Present this form | |
| | . YOUR CHILD SHOULD BE TAKEN TO A DOCTOR, AVE HIS/HER BLOOD PRESSURE RECHECKED. | |
| *According to the 1986 Second Task For Heart, Lung and Blood Institute, Public I | ce on Blood Pressure Control in Children, National Health Service, NIH. | |
| · · · · · · · · · · · · · · · · · · · | measured by a trained examiner. These measurements not represent a medical diagnosis. Interpretation of the | |
| | ization wish further information they should be directed (301) 436-8267 - collect, 8:00 AM to 4:00 PM. | |
| DATE | PARENT OR GUARDIAN SIGNATURE | |
| This form was presented to | for signature, but he/she refused to sign. | |
| (White copy to examiner; yellow copy to SP) | OMB No. 0920-0237 | |





National Center for Health Statistics 6525 Belcrest Road Hyattsville, MD 20782

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III RECOMMENDATIONS FOR DENTAL CARE

| Name | e | Sample No: |
|--------|-----------------|---|
| Date | of Exa | mination |
| | | |
| not in | ntende own d | examination of the National Health and Nutrition Examination Survey is not, and is d to be, a substitute for the examination usually given to persons seeking care from lentists. Neither a dental history nor x-rays are taken, and therefore the findings are sault of what can be seen at the time of the examination. |
| The | examin | ing dentist recommends that you: |
| | | Contact your dentist immediately. This office will also contact your dentist about this referral. |
| | | See your dentist within 2 weeks. This office will also contact your dentist about this referral. |
| | | See your dentist at your earliest convenience. |
| | | Continue your regular routine care. |
| | | |

OMB No.0820-0237

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Centers for Disease Control

National Center for Health Statistics 6525 Belcrest Road Hyattsville, MD 20782

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III NOTIFICATION OF DENTAL EXAMINATION FINDINGS

| DATE: | <u> </u> |
|---|--|
| NAME: | |
| ADDRESS: | |
| | |
| Dear Doctor: | |
| nobile facilities operated by the U.S. Health and Nutrition Examination Survion usually given to persons seeking o | port was among those who had voluntary examinations at special Public Health Service. The dental examination of the National rey is not, and is not intended to be, a substitute for the examinacare from their own dentists. Neither a dental history nor x-rays are solely the result of what can be seen at the time of the examireport be sent to you. |
| The examinee was referred to your off the checked below: | fice for immediate evaluation or treatment of the condition(s) |
| Clinical impression of soft tissue c | condition |
| You should already have been contact | ted about this person by our examining dentist. If you have not |
| yet been contacted for an appointmen as possible. | it, please notify the examinee of the need for follow-up as soon |
| Name of Examinee: | Sample No.: |
| Addroom | Age: |
| | Date of Examination: |
| Telephone: | |
| If you have any questions about the su 4:00 p.m. | urvey, please call me collect on (301) 436-8267, 8:00 a.m. to |
| | Sincerely yours, |
| | marsha & Doverport m |
| | Marcha G. Dayannart M.D. M.P.H. |

OMB No. 0920-0237 CDC 64.16 REV. 09/91

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Centers for Disease Control

National Center for Health Statistics 6525 Belcrest Road Hyattsville, MD 20782

SPECIAL EXAMINATION FINDINGS REPORT

| Date: | SP No | |
|--|--|---|
| Name: | | |
| Address: | | |
| _ | | |
| | | |
| - | | |
| conducted The objection health are the testing that was finding | has voluntarily pard National Health and Nutrition Examined at special facilities of the U.S. Public Heatives of the survey are to obtain informed nutrition status of the U.S. population. Ing done on, a finding outside the survey's medically acceptable is described below. Although you may alreading, we wanted to bring it to your attention | nation Survey ealth Service. mation on the As a result of g was revealed range. This dy be aware of |
| to be. physician | mination is not a complete examination; nor a Therefore, it is not a substitute for a n. No attempt has been made by our staff or treat the medical conditions of the part | visit to your physician to |
| Dr. Marsh | ou have any questions, you may contact me ion Center. The phone number is () After that date you ha Davenport at the National Center for Healt to 4:00 PM. The toll free number is 1 (800) | th Statistics, |
| FINDINGS | · | |
| | | |
| | | |
| | | |
| | | |

Sincerely yours,

OMB No. 0920-0237 CDC 64.42

REV. 10/92

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

Participant Name: Address:

Telephone: Sample Number:

Dear

Recently, you participated in a voluntary health examination at special mobile facilities operated by the Public Health Service. During the review of the tests, certain results were found to be abnormal and require <u>immediate attention</u>. The abnormal examination results are described on the enclosed sheet. We <u>STRONGLY RECOMMEND</u> that you make an appointment with your doctor to have these abnormal results fully evaluated.

We cannot be certain whether these abnormal examination results represent illness or not. Only a qualified physician who is familiar with your health or has thoroughly evaluated you can make this determination.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

If you have any questions, you may call our toll free number 1 800 452-6115, 8 AM to 4 PM Eastern Standard Time, Monday through Friday.

Sincerely yours,

Marsha G. Davenport, M.D., M.P.H. Medical Officer

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING CUTOFF VALUE |
|--|--------------------------|---------------------------------|
| Protoporphyrin Ferritin Hemoglobin | μg/dl ng/ml g/dl | ≥ 90 µg/dl RBC or < 10 ng/ml |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING CUTOFF VALUE |
|-----------------------|--------------------------|---------------------------------|
| Serum Folate | ng/ml | < 3 ng/ml |
| Red Blood Cell Folate | ng/ml | < 100 ng/ml RBC |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

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Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

EXAMINEE EARLY REPORTING

TEST VALUE CUTOFF VALUE

Glucose (Fasting) mg/dl ≥ 140 mg/dl

Glucose (value two hours after glucose

challenge) mg/dl ≥ 200 mg/dl

Oral Glucose Challenge Test: 75 Grams of Glucose given after a 10-16 hour fast.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING CUTOFF VALUE |
|---|--------------------------|------------------------------|
| Glucose (Fasting) | mg/dl | ≥ 140 mg/dl |
| Glucose (value two hours after glucose challenge) | mg/dl | ≥ 250 mg/dl |

Non-Standard Oral Glucose Challenge Test: 75 Grams of Glucose given after a 6-8 hour fast.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

TEST EXAMINEE EARLY REPORTING CUTOFF VALUE

Glucose (Non-Fasting) mg/dl ≥ 140 mg/dl

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING CUTOFF VALUE |
|--|--|--|
| BUN Creatinine Sodium Potassium Calcium AST | mg/dl mg/dl mmol/L mmol/L mg/dl U/L | <pre>> 50 mg/dl > 3.0 mg/dl > 154 or <122 mmol/L > 5.4 or < 2.9 mmol/L > 12 or < 7 mg/dl ≥ 120 U/L</pre> |
| ALT | U/L | ≥ 129 U/L |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | | ABNORMAL CUTOFF VALUE |
|---|--------------------------|----------------|--------------------------|
| TSH T4 | | μU/dl μg/dl | > 15 or < 0.1 μ U/dl |
| Antimicrosomal Antibody Antithyroglobulin | | U/L | > 0.5 U/L |
| Antibody | | U/L | > 1 U/L |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING <u>CUTOFF VALUE</u> |
|-------------------|--------------------------|--|
| Total Cholesterol | mg/dl | > 400 mg/dl |
| Triglycerides | mg/dl | > 500 mg/dl |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examinatin is not, and was not intended to be a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

| TEST | EXAMINEE <u>VALUE</u> | EARLY REPORTING CUTOFF VALUE |
|---|--------------------------|--|
| Lead (1-5 years) Lead (6-17 years) Lead (18+ years) | μg/dl μg/dl μg/dl | \geq 10 μ g/dl \geq 15 μ g/dl \geq 20 μ g/dl |
| Hemoglobin | q/dl | |

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. The listed laboratory values were sufficiently abnormal to require early reporting before our routine report of findings.

TEST EXAMINEE EARLY REPORTING

VALUE

CUTOFF VALUE

Vitamin A $\mu g/dl$ < 10 $\mu g/dl$

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

Participant Name: Address:

Telephone: Sample Number:

Dear

Recently, you participated in a voluntary health examination at special mobile facilities operated by the Public Health Service. As part of this examination your blood was tested for hepatitis B virus. At the time you were tested, you had the hepatitis B virus in your blood (your blood was positive for the hepatitis B surface antigen). The presence of the virus in your blood means that you were infected with it even though you may never have felt sick. Having received the vaccine for hepatitis B would NOT cause this test to be positive. You may or may not still have the virus in your blood at the present time. We STRONGLY RECOMMEND you bring this letter to your physician so he/she will know of the results and can further evaluate your health.

We cannot be certain whether these abnormal examination results represent illness or not. Only a qualified physician who is familiar with your health or has thoroughly evaluated you can make this determination.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

If you have any questions, you may call our toll free number 1 800 452-6115, 8 AM to 4 PM Eastern Standard Time, Monday through Friday.

Sincerely yours,

Marsha G. Davenport, M.D., M.P.H. Medical Officer

REPORT OF ABNORMAL FINDINGS NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. During this examination, you had a bone-mineral scan of your (right/left) hip. When we were reviewing this bone-mineral scan, we noted an area of bone that is of concern to us. (Place description here). From our limited examination, we cannot be certain whether this abnormal finding represents an illness. We STRONGLY RECOMMEND that you make an appointment with your doctor to have an X-ray of your (right/left) hip to resolve this issue.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

REPORT OF ABNORMAL FINDINGS NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

| Date: |
|--|
| Participant Name: |
| Address: |
| |
| Telephone: |
| Age and Sex: |
| Date of Examination: |
| Sample Number: |
| |
| Recently the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. As part of the examination, the fundus of one eye (left,right) was photographed. During the evaluation of this photograph, the following abnormal findings were noted that require evaluation by an ophthalmologist. |

Description:

The objective of the Survey is to obtain information on the health and nutrition status of the United States population. The survey was performed on a random sample of the individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not, intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

If you have any questions, please telephone us at (301) 436-8267, 8:00 a.m. to 4:00 p.m., Monday through Friday.

REPORT OF ABNORMAL FINDINGS NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

Participant Name: Address:

Telephone:
Age and Sex:
Date of Examination:
Sample Number:

Recently, the person named in this report was among those who had voluntary examinations at special mobile facilities operated by the Public Health Service. As part of the examination, X-rays of the hands and knees were taken. During evaluation of the X-rays, abnormal findings were noted on the enclosed Hand __ / Knee __ X-ray(s) that require further evaluation by a radiologist.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

The examination is not, and was not intended to be, a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer treatment or engage in any follow-up with the survey participants.

NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III (NHANES III)

Participant Name: Address:

Telephone: Sample Number:

Dear :

Recently, you participated in a voluntary health examination at special mobile facilities operated by the Public Health Service. As part of the examination, real-time ultrasonography of the gallbladder was performed to test for gallstones. During the examination of the gallbladder and the surrounding region, an abnormality was observed that requires your attention. The abnormal results are described on the enclosed radiologist's report. We RECOMMEND that you discuss these abnormal results with your doctor to have them fully evaluated.

Because of the limitations of the accuracy of this examination in a mobile setting, an abnormal ultrasound examination should not be considered conclusive proof of the presence of the abnormality. Only a qualified physician who is familiar with your health of has thoroughly evaluated your health can make this determination. The examination may provide you with some very useful information. However, it was not intended to be a complete physical examination or a substitute for a visit to a doctor. Our survey physicians are not authorized to administer any treatment or follow-up with the survey participants.

The objective of the Survey is to obtain information on the health and nutrition status of the U.S. population. The survey was performed on a random sample of individuals living in your region. Although this may have been the first time that the survey team was sent to your area, this most recent effort is part of the seventh cycle of the survey since its inception in 1960.

If you have any questions, you may call our toll free number 1 800 452-6115, 8 AM to 4 PM Eastern Standard Time, Monday through Friday.

Sincerely yours,

Marsha G. Davenport, M.D., M.P.H. Medical Officer



National Center for Health Statistics 6525 Belcrest Road Hyattsviile, Maryland 20782

REPORT OF GALLBLADDER ULTRASOUND EXAMINATION
THE THIRD NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY
(NHANES III)

| Date: |
|---|
| Participant Name: Address: |
| Age and Sex: Date of Examination: |
| Sample Number: |
| NO GALLSTONES WERE FOUND DURING THE EXAMINATION. |
| - GALLSTONES WERE FOUND DURING THE EXAMINATION. |
| Although ultrasonography is an accurate test for gallstones, limitations at our mobile examination center do not permit an absolutely certain diagnosis of gallstone. Most experts do not recommend any treatment for gallstones unless they cause complications or severe symptoms. However; consideration of treatment must be made on an individual basis. |
| - GALLBLADDER COULD NOT BE SEEN DURING THE EXAMINATION. |
| This means that either your gallbladder has been removed or that problems with the examination kept your gallbladder from being seen. |
| GALLBLADDER POLYPS |
| A mm gallbladder polyp(s) was/were identified arising from the gallbladder wall(s). This/these most likely represent inflammatory cholesterol polyp(s) consistent with cholesterolosis of the gallbladder. |
| CAVERNOUS HEMANGIOMA OF THE LIVER |
| Acm well defined echogenic mass(es) was/were identified in the liver. This/these probably represent(s) (a) cavernous hemangioma(s). Other abnormalities of the liver have a similar appearance and therefore, other diagnostic imaging procedures would be appropriate to confirm this finding. |

(over)

REPORT OF GALLBLADDER ULTRASOUND EXAMINATION THE THIRD NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY (NHANES III)

| Sample Number: | |
|---|-----|
| - LIVER CYSTS | |
| Acm well defined cystic mass(es) with (a) smooth wall(s) was/were identified in the LIVER consistent with benign liver cyst(s). | (a) |
| RENAL CYSTS | |
| A <u>cm</u> well defined cystic mass(es) with (a) smooth wall(s) was/were identified arising from the RIGHT/LEFT KIDNEY consistent with (a) benign renal cyst(s). | |
| OTHER | |
| | |
| | |
| | |
| | |

Hardcopy film enclosed: — YES — NO

If you have any questions, please call collect to the Medical Officer, NHANES III, at 1-800-452-6115, 8 AM to 4 PM Eastern Standard Time, Monday through Friday.

NHANES III GALLELADDER QUALITY CONTROL

Reader # Sample Person # FINAL DIAGNOSIS 18. Normal GB Gallstones or Calcified GB 2 Gallstones One Multiple Gallstones, GB Filled No Conslusion - Echo Clumps, Wall Irregular, Diffuse 6 🔲 Echoes within fluid with only I shadowing view Cholecystectomy - RUQ or EPI Scar, 2 Landmark Observed Cholecystectomy - RUQ Scar, < 2 Landmark Observed No Conclusion - No Scar, No Shadow, 2 Landmark Observed, 9 🗆 SP Fast No Conclusion - No Scar, No Shadow, 2 Landmark Observed, 10 SP Nonfast No Conclusion - No Scar, < 2 Landmark observed 11 🔲 No Conclusion - EPI Scar, <2 Landmark observed 12 Abnormal GB - Focal W.T., No Shadowing, Clumps with NO 13 🔲 movement Abnormal GB - Diffuse W.T., With NO Calcification 14 🔲 Abnormal G8 - Diffuse W.T., with Calcification 15 🗆 Abnormal Bile - No Shadowing, Internal Echoes with Movement 16 🔲 Confidence in Assessment Quality of the Recorded Study 1 🔲 Certain 2 🔲 Likely 2 🔲 Below standard 3 Uncertain 3 Uninterpretable Description for Codes 13-15 or any Non-GB findings Level of Referral

1 🔲 Immediate Care

2 Early Care
3 Routine Care



National Center for Health Statistics 6525 Belcrest Road Hyattsville, Maryland 20782

Dear Participant:

We appreciate your participation in the National Health and Nutrition Examination Survey which was conducted at a Mobile Examination Center operated by the United States Public Health Service. By taking part in this survey, you have helped add to our knowledge about the health status of people living in the United States. The information we collect is used to evaluate the country's health problems, develop health programs, and improve the quality of medical care.

The examination given to you was not a complete examination and was not intended to be a substitute for visits to your medical-care provider. However, the enclosed report contains results of your examination that may be useful to maintaining and promoting your health. If you have any questions about the results of your examination, do not hesitate to contact me. Our toll free number is 1-800-452-6115. To further assist you we have enclosed a list of sources of public health information. Please feel free to write or call them.

Sincerely yours,

Marsha G. Davenport, M.D., M.P.H. Medical Officer

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Enclosure

(La traducción al expañol de esta carta se encuentra del otro lado esta hoja.)



National Center for Health Statistics 6525 Belcrest Road Hyattsville, Maryland 20782

Estimado Participante:

Apreciamos su participación en el Estudio Nacional de Salud y Nutrición, el cual fue realizado en un Centro Móvil de Examenes operado por el Servicio de Salud Pública de los Estados Unidos. Al participar en esta encuesta, usted ha contribuido a nuestro conocimiento sobre el estado de salud de las personas que viven en los Estados Unidos. La información coleccionada se está usando para evaluar los problemas de salud del país, desarrollar programas de salud, y mejorar la calidad del cuidado médico.

El examen que usted recibió no fue un examen completo ni fue diseñado como un substituto para visitas a su proveedor de cuidado médico. No obstante, el reporte adjunto contiene resultados de su examen que le pueden ser útiles en mantener y mejorar su salud. Si tiene alguna pregunta sobre los resultados de su examen, por favor llámenos por teléfono al 1-800-452-6115 (toll free). Para asistirle mejor hemos incluido una lista de fuentes de información de salud pública. Por favor no tenga inconveniente en escribirles o llamarles.

Atentamente,

Marsha G. Davenport, M.D., M.P.H.

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Medical Officer

Enclosure

Health Information Resource List

Information on a variety of health topics is available from the following Federal agencies.

Todas las agencias listadas ofrécen materiales en español.

National Institute on AGING

Federal Building, Room 6C12, 9000 Rockville Pike, Bethesda, MD 20892, (301)496-1752

Publishes brochures and a series of fact sheets called Age Pages, covering a wide variety of topics related to aging.

National AIDS Information Clearinghouse P.O. Box 6003, Rockville, MD 20850 (800)458-5231

Provides information and publications on AIDS and supports a national hotline and resource center.

National Clearinghouse for ALCOHOL and Drug Information, P.O. Box 2345, Rockville, MD 20852, (301)468-2600

Distributes a variety of publications on alcohol and drug abuse.

CANCER Information Service, National Cancer Institute, Building 31, Room 10A24, 9000 Rockville Pike, MD 20892, (800)4-CANCER

Provides information about cancer diagnosis and treatment to patients and families. Spanish-speaking staff members are available in California, Florida, Georgia, Illinois, northern New Jersey, New York, and Texas.

National DIABETES Information Clearinghouse, Box NDIC, Bethesda, MD 20892 (301)468-2162

Collects and disseminates information to consumers and health professionals on diabetes and its complications.

FOOD and Drug Administration, Office of Consumer Affairs, 5600 Fishers Lane (HFE-88) Rockville, MD 20857, (301)443-3170

Responds to inquiries about foods, cosmetics, medical devices, drugs, health fraud, Reye's syndrome, and radiological health and serves as a clearinghouse for related consumer publications.

Office of Disease Prevention and Health Promotion National HEALTH INFORMATION Center P.O. Box 1133, Washington, DC 20013-1133 (800)336-4797 (metropolitan Washington, DC (301)565-4167)

Provides assistance in locating health information resources, and distributes publications on health promotion and disease prevention.

National HEART, Lung, and Blood Institute Education Programs Information Center 4733 Bethesda Avenue, Suite 530, Bethesda, MD 20814, (301)951-3260

Provides information and materials on smoking, cholesterol, high blood pressure, heart disease, stroke, exercise, and other topics related to heart and lung health.

National Center for Education in MATERNAL and Child Health, 38th and R Streets NW. Washington, DC 20057, (202)625-8400

Provides information on pregnancy and childbirth, child and adolescent health, nutrition, high risk infants, chronic illness and disability, genetics, and women's health. Resource Center distributes materials on organizations and programs.

National Institute of MENTAL HEALTH 5600 Fishers Lane, Room ISC-05, Rockville, MD 20857, (301)443-4513

Answers general inquiries about mental health and distributes a variety of publications in English and Spanish at no charge.

Office on SMOKING and Health, Department of Health and Human Services, Park Building Room 1-16, 5600 Fishers Lane, Rockville, MD 20857, (301)443-1690

Distributes consumer publications on smoking and health including smoking and teenagers, smoking and pregnancy, and smoking cessation.



This resource list is a service of the National Center for Health Statistics (NCHS) and the Office of Disease Prevention and Health Promotion (ODPHP).



SAMPLE PERSON NAME SAMPLE PERSON Address City St Zipcode

Age: 41 Years Sex: Male

SAMPLE NUMBER: 172
Examination Date: June 13, 1993

SUMMARY

The results of some of the tests included in this report are outside the medically acceptable range and should be considered abnormal. In the report, these results are labelled "ABNORMAL". In addition, at least one of the results was far outside the medically acceptable range and should be considered extremely abnormal. In the report, these results are labelled "EXTREMELY ABNORMAL". You should have received these extremely abnormal results at an earlier date. We strongly recommend that you discuss with your doctor both the results labelled "ABNORMAL" and "EXTREMELY ABNORMAL".

SAMPLE PERSON NAME SAMPLE PERSON Address City St Zipcode

Age: 41 Years Sex: Male

SAMPLE NUMBER: 172

Examination Date: June 13, 1993

BODY MEASUREMENTS

** A B N O R M A L ** Overweight

WEIGHT: 401.0 lbs

HEIGHT: 74.9 inches

BLOOD PRESSURE

SYSTOLIC: 118 mm Hg DIASTOLIC: 73 mm Hg

ALLERGY TEST

WHITE OAK

NEGATIVE

CAT

NEGATIVE

MITE

**POSITIVE

ALTERNARIA

NEGATIVE

RYE GRASS

**POSITIVE

PEANUT

NEGATIVE

RUSSIAN THISTLE

**POSITIVE **POSITIVE

GERMAN COCKROACH BERMUDA GRASS

**POSITIVE

RAGWEED

NEGATIVE

**POSITIVE represents a reaction of at least 3mm in diameter.

GALLBLADDER AREA ULTRASONOGRAPHY

NO GALLSTONES WERE FOUND DURING THE ULTRASOUND EXAMINATION.

SAMPLE PERSON NAME SAMPLE PERSON Address City St Zipcode

Age: 41 Years Sex: Male

SAMPLE NUMBER: 172 Examination Date: June 13, 1993

LABORATORY RESULTS

| TEST NAME | RESULT | STATUS | MEDICALLY AC RANGE | |
|-------------------------|--------|--------------------------|--------------------|-----------|
| Ferritin | 278 | | 20-2000 | ng/mL |
| Serum Folate | 1.023 | ** EXTREMELY ABNORMAL ** | >=4.0 | ng/mL |
| Protoporphyrin | 45 | | 0-70 | ug/dL RBC |
| RBC Folate | 79 | ** EXTREMELY ABNORMAL ** | >=140 | ng/mL RBC |
| Total Cholesterol | 208 | ** ABNORMAL ** | <200 | mg/dL |
| HDL Cholesterol | 35 | | >=35 | mg/dL |
| Triglycerides | 166 | | <=250 | mg/dL |
| Serum T4 | 7.8 | | 4.5-13.2 | ug/dL |
| Serum TSH | 2.5 | | 0.36-6.70 | սՄ/mL |
| Glycosylated Hemoglobin | 5 | | 0.0-6.1 | percent |
| Glucose(Fasting) | 97.3 | | 60.0-139.9 | mg/dL |
| Glucose (Twohr) | 98.3 | | 60.0-139.9 | mg/dL |
| Sodium | 141.2 | | 138.1-145.6 | mmo1/L |
| Potassium | 4.43 | | 3.57-4.49 | mmol/L |
| Chloride | 106 | | 100.3-110.0 | mmol/L |
| Bicarbonate | 26 | | 21-36 | mmol/L |
| BUN | 16 | | 0-20 | mg/dL |
| Creatinine | 1.3 | | 0.0-1.3 | mg/dL |
| Uric Acid | 8.2 | ** ABNORMAL ** | 0.0-7.5 | mg/dL |
| Calcium | 9 | | 8.7-10.1 | mg/dL |
| Phosphorus | 3.8 | | 2.7-4.6 | mg/dL |
| Total Bilirubin | 0.7 | | 0.0-1.1 | mg/dL |
| AST (SGOT) | 22 | | 0-40 | U/L |
| ALT (SGPT) | 24 | | 0-43 | U/L |
| LDH | 192 | | 0-210 | U/L |
| Alkaline Phosphatase | 55 | | 0-123 | U/L |
| Total Protein | 7.6 | | 6.6-8.1 | g/dL |
| Albumin | 4.3 | | >=3.6 | g/dL |
| Hemoglobin | 14.75 | | 13.30-16.90 | g/dL |
| Hematocrit | 42.9 | | 39.50-49.00 | percent |
| RBC | 4.66 | | 4.30-5.60 | X10**12/L |

SAMPLE PERSON NAME SAMPLE PERSON Address City St Zipcode

Age: 41 Years Sex: Male

SAMPLE NUMBER: 172

Examination Date: June 13, 1993

LABORATORY RESULTS (Continued)

| TEST NAME | RESULT | STATUS | MEDICALLY ACCEPTABLE RANGE |
|----------------------------|--------|--------|---|
| | | | *************************************** |
| MCV | 92.05 | | 81.60-98.50 f1 |
| MCH | 31.65 | | 27.80-33.70 pg |
| MCHC | 34.4 | | 32.00-34.92 percent |
| WBC | 6.15 | | 4.50-11.20 x10**9/L |
| Granulocytes (TOTAL) | 3.35 | | 2.20-7.60 X10**9/L |
| Lymphocytes (TOTAL) | 2.4 | | 1.35-3.40 X10**9/L |
| Monocytes (TOTAL) | 0.4 | | 0.20-0.85 X10**9/L |
| Granulocytes (3-PART DIFF) | 54.2 | | percent |
| Lymphocytes (3-PART DIFF) | 39.35 | | percent |
| Monocytes (3-PART DIFF) | 6.45 | | percent |

National Health and Nutrition Examination Survey Report of Spirometry Findings

National Center for Health Statistics Room 900 6525 Belcrest Road Hyattsville, Maryland 20782 (301) 436-8267

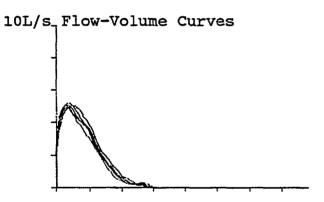
| ID: | Test | | : 163 | Time: 2 cm Sex: 1 | | em: 9 4 7 |
|---|----------|--------------|--------------|-------------------|------|-------------------------------|
| I | rial | FVC | FEV1 | • | | FEF25-75% |
| | 1 2 | 2.79 2.91 | | 70.4% 70.8% | | |
| | 3 4 | | | 73.5% 76.2% | | |
| | 5 | 3.01 | | | | |
| Best Values Predicted V LLN-2 Percent Pre | 'alues-1 | 1.95 | 2.08 1.51 | 66.0% | 5.15 | 1.30 1.89 1.07 69.1% |

Interpretations:

Breathing test results are within normal limits.

Note: Predicted values for subjects older than 70 years are not well established.

- 1 Predicted values from Knudson, Am Rev Respir Dis 1983.2 LLN is the Lower Limit of the Normal range (95th percentile)



Appendix III Household data collection forms, brochures, letters, and administrative documents

| RM | OF FORMS | | ** |
|--|--|--|---|
| Nat | tment of Health and Human Services Public Health Service Centers for Disease Control tional Center for Health Statistics EHOLD SCREENER QUESTIONNAIRE NHANES III Health and Nutrition Examination Survey | NOTICE: Information contained on this form which would permit identification of any individual or establishment has been collected with a gurantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the stabilishment in accordance with section 308(d) of the Public Heatin Service Act (42 USC 242 m). DOTICE: L. Information considered in well-bring the stabilishment of confidence in well-bring the stabilishment on a confidence of the stabilishment of substability of the stabilishment of substability or proposed to establishment of the stabilishment of the stabilis | aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer, Room 721-8, Humphrey Building; 200 Independence Avenue, SW. Washington, O. 20201: ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 2003. Compart of Poblico of Proposter period procedures of the Poblico of Page 1999. Participation of Net-Artis III as seating quis, set procedures of the Poblico of Page 1999. Set of Information: Incluyendo suggestions: post-color, set of Information: Incluyendo suggestions: page 1999. Room, 271-18, Planting-bey Building; 200 Independence Avenue, Set. Westhington, DC 20201; ATTN: PRAY, Is Office of Information, DC 20201; ATTN: PRAY, Is Office of Information of Information of Information, DC 20201; ATTN: PRAY, Is Office of Information. |
| | | | |
| 1 | LANGUAGE OF INTERVIEW ENGLISH | INTERVIEWER ID: | TIME BEGAN:_ 2 pm |
| | SPECIFY SPECIFY | REVIÉWER ID: | 1 am TIME ENDED: _ 2 _ pm |
| | DECK NO. | <u> </u> | |
| | | | |
| TRODUC centry expenses MEMBER your ansu TRODUC trades Un salud de salud de salud de salud de | plaining the survey, which is called the Hea RETTER HAND NEW COPY.) All the Info wers without your specific permission. ITION: (Buenos diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buenas ISTION: (BUENOS diss/Buenas tardes/Buenas ISTION: (BUENAS diss/Buenas ISTION: (BUENAS diss/Buenas diss/Buenas ISTION: (BUENAS diss/Buenas diss/Buenas diss/Buenas ISTION: (BUENas diss/Buenas diss/Buenas diss/Buenas diss/Buenas diss/Buenas ISTION: (BUENas diss/Buenas d | th and Nutrition Examination Survey and is at mation that you give us will be kept in the strict and the strict | Service (SHOW ID CARD). A letter was sent to you yout your family's health. (IF RESIDENT DOES NOT cotest confidence. Your name will not be attached to to una encuesta para al Servicio de Satud Pública de famada el Estudio de Satud y Nutrición, que se frat leformación que usaid nos de será mentenida en la preseo permiso. 1 |
| TRODUC Dently expensive ex | plaining the survey, which is called the Hea RETTER HAND NEW COPY.) All the Info wers without your specific permission. TION: (Buenos diss/Buenas tardes/Buena lidos (SHOW ID CARD). Reclentements as su familia. (IF RESIDENT DOES NOT REM a confidencialidad. Su nombre no será jun would like to verify your address. Please gr. Quistera verificar su dirección. Por tayor de | th and Nutrition Examination Survey and is at mation that you give us will be kept in the strict mation that you give us will be kept in the strict and the | pout your family's health. (IF RESIDENT DOES NOT clest confidence. Your name will not be attached to une encuesta para al Servicio de Salud Pública de Lamada el Estudio de Salud y Nutrición, que se trai circiormación que usad nos de awá frantenida en li preso permiso. 1 SAME AS LABEL |
| FRODUCT FRO | plaining the survey, which is called the Hea RETTER HAND NEW COPY.) All the Info wers without your specific permission. ITION: (Buenos diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buena ISTION: (BUENOS diss/Buenas tardes/Buenas ISTION: (BUENOS diss/Buenas tardes/Buenas ISTION: (BUENAS diss/Buenas ISTION: (BUENAS diss/Buenas diss/Buenas ISTION: (BUENAS diss/Buenas diss/Buenas diss/Buenas ISTION: (BUENas diss/Buenas diss/Buenas diss/Buenas diss/Buenas diss/Buenas ISTION: (BUENas diss/Buenas d | th and Nutrition Examination Survey and is at mation that you give us will be kept in the strict mation that you give us will be kept in the strict and the | pout your family's health. (IF RESIDENT DOES NOT clest confidence. Your name will not be attached to use encuesta para al Servicio de Salud Pública de Lamada el Estudio de Salud y Nutrición, que se fin circlomación que usad nos de será frantenida en lipreso permiso. 1 SAME AS LABEL |
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| TRODUCTONITY exposure of the control | plaining the survey, which is called the Hea RETTER HAND NEW COPY.) All the Info wers without your specific permission. ITION: (Buenos diss/Buenas tardes/Buena idos (SHOW ID CARD). Recientemente se su familia. (IF RESIDENT DOES NOT REM a confidencialidad. Su nombre no será (un would like to verify your address. Please g. Zuislera verificar su dirección. Por taror de MARK BOX OR SPECIFY BELOW IF DIFFER PROVIDE AS MUCH DETAILED INFORMATIO | th and Nutrition Examination Survey and is at mation that you give us will be kept in the strict mation that you give us will be kept in the strict and the | pout your family's health. (IF RESIDENT DOES NOT clest confidence. Your name will not be attached to use accused para al Servicio de Satud Pública di Barnada el Estudio de Satud Pública di Barnada el Estudio de Satud y Nutrición, que se fra fundamendo que usad nos de será mantenda en li preso permiso. 1 SAME AS LABEL 1 SAME AS LABEL |
| TRODUC: cantly expendit expension expe | plaining the survey, which is called the Hea RETTER HAND NEW COPY.) All the Info wers without your specific permission. TION: (Diverse dise/Buenas tardes/Buena lidder (SHOW ID CARD). Recleitsministie se su familia. (IF RESIDENT DOES NOT REM a confidencialidad. Su nombre no seria (un would like to verify your address. Please gr Duisiera verificar su dirección. Por tayor de MARK BOX OR SPECIFY BELOW IF DIFFER PROVIDE AS MUCH DETAILED INFORMATION CITY a this also your malling address? LEs ésta también su dirección postat? MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER WARK BOX OR SPECIFY BELOW IF DIFFER WARK BOX OR SPECIFY BELOW IF DIFFER AMARK BOX OR SPECIFY BELOW IF DIFFER WARK BOX OR SPECIFY BELOW IF DIFFER WARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER WARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER MARK BOX OR SPECIFY BELOW IF DIFFER | th and Nutrition Examination Survey and is at mation that you give us will be kept in the strict mation that you give us will be kept in the strict and the | pout your family's health. (IF RESIDENT DOES NOT clest confidence. Your name will not be attached to use accused para all Servicio de Salud Pública de Ramada el Estudio de Salud Pública de Ramada el Estudio de Salud y Nutrición, que as trist cirdomación que usad nos de aerá mantenida en li preso permiso. 1 SAME AS LABEL 70 de la casa y la calla. |

CDC 64.14 Rev. 1/93

A. HOUSEHOLD COMPOSITION

| 1 a . | To begin, how many people live in this household? | NUMBER | |
|---|--|-------------------------|------------|
| *************************************** | Para comenzar, ¿cuártes personas viven en este hoger? | | |
| b. | What is the name of the person or one of the persons who owns or rents this home? Como se llama la persona d'una de las persones que es dueño o que (rents/alquita) seta casa? ENTER NAME ON FIRST LINE OF Household Composition Table. IF ONLY ONE PERSON LIVES IN HOUSEHOLD, GO TO 1f. OTHERWISE CONTINUE. | | |
| | | | |
| c. | What is the name of (REF. PERSON)'s spouse, if any, who lives in this household? ¿Cómo se llama el esposo(a) de (REF. PERSON), al tiene esposo(a), que vive en este hogar? ENTER NAME ON SECOND LINE OF HOUSEHOLD COMPOSITION TABLE. And the other members of this household who are related to (REF. PERSON): What are their names? Lives the content of th | et's begin with the old | est. |
| | ¿Cómo se flaman los otros miembros de este hogar que son parientes de (HEF, PERSON)? Varnos a se ENTER NAME(S) IN AGE ORDER ON HOUSEHOLD COMPOSITION TABLE. | antak Sindependen kar | 91 |
| •. | Are there any other persons not related to (<u>REF. PERSON</u>) living in this household? Living algunes personas que no son parlantes de (<u>REF. PERSON</u>) pero que viven en sete hogar? IF YES: USE A BLANK SCREENER FOR ADDITIONAL FAMILY, ESTABLISHING A HEAD OF HOUSEHOLD AND ORDERING EACH FAMILY BY SPOUSE AND THEN FAMILY MEMBERS IN AGE ORDER. | 1 🖒 : | 2 <u>N</u> |
| f. | I have listed (READ ALL NAMES). Have I missed: Any babies or small children? | 1 🗆 : | N 2 |
| | Yo he puesto en la lista (<u>BEAD ALL NAMES</u>). ¿He ofvidado: Algunos bebés o niños pequeños? Algunos husapedes, stojados o personas en su empleo que viven siqui? Algunos que vive aquí <u>ususiments</u> pero está fuera de la casa ahora? Algún otro que se queda squi? | 1 D 1 D | 2 |
| g. | Do any of the persons in this household have a home anywhere else? *APPLY HOUSEHOLD MEMBERSHIP RULES. PROBE IF NECESSARY: Where does — usually live and sleep; here or somewhere else? Tienen aligunae de las personas en este hoger un hoger en oualquier otro lugar? *APPLY HOUSEHOLD MEMBERSHIP RULES. PROBE IF NECESSARY: ¿Dônde vive y duerme — usualmente; squí o en otro lugar? | 1 🗀 | 2 🗍 |
| h. | Are any of the persons in this household now on full-time active duty with the Armed Forces of the United States? LEstán algunas de las personas en este hogar en servicio activo de las Fuerzas Armadas de los Estados Unidos a horario completo? | 1 🗍 | 2 [] (k) |
| ī. | Who is this? Anyone else? ¿Quién es? ¿Aigún otro? DELETE PERSON FROM HOUSEHOLD COMPOSITION TABLE BY DRAWING LINE THROUGH NAME. | | |
| j. | FOR EACH PERSON IN ARMED FORCES, ASK: Where does usually live and sleep; here or somewhere else? SPECIFY "Living at home" OR "Not living at home" IN PERSON'S LINE. ¿Donde vive y duerms usualmente; aqui o en otro lugar? "Welendo en el hogar" OR "No viviendo en el hogar" IN PERSON'S LINE. | | |

Before continuing, I would like to review what you have told me. There are (TOTAL NUMBER) persons who either live here now or who are staying here temporarily and have no other home – (READ ALL NAMES LISTED).

Aries de continuar, quistera repasar lo que usted me ha dicho. Hay (TOTAL NUMBER) personas que, o viven aquí ahora que se están quedando aquí temporalmente y no tienen otro hogar - (READ ALL NAMES (USTED).

HOUSEHOLD COMPOSITION TABLE

FAMILY NO.

BOX 1 AFTER LISTING HOUSEHOLD, CIRCLE LINE NO. OF HOUSEHOLD RESPONDENT. ASK QUESTIONS 25-24 AS APPROPRIATE FOR EACH HOUSEHOLD MEMBER.

| W | | | | | | | | |
|-------------|-----------------------|------|---|---|---|---|---|----------|
| LINE NO. | 2a. <u>PRINT</u> NAME | | 2b. IF NOT COMPLETED ASK: What is's relationship to (REF. PERSON/ HEAD*)? ¿Cuál se ei pairentesco. de à (REF. PERSON/ HEAD*)? | 2c. HAND CARD S Do any of thes represent's region or ances LAguno de es representa el conscional o ancier se conscional o ancier yes, Circus BELOW. IF NO, SKIP TO GO TO NEXT HOUSEHOLD MEMBER OR SKIP TO BOX 2. | e groups lational stry? tos grupos irigen estro de =? E NUMBER | | s's r white, black c other? ¿Es reza blance regra otra? | or de |
| FIRST | MIDDLE | LAST | | MEXICAN- AMERICAN | OTHER HISPANIC (SPECIFY) | 8 | В | 0 |
| - O1 | | | REF. PERSON (OR HEAD*) | 1 | 2 | 1 | 2 | 3 |
| G2 , | | | | 1 | 2 | 1 | 2 | 3 |
| CS . | | | | 1 | 2 | 1 | 2 | 3 |
| 04 | 1 | | | 1 | 2 | 1 | 2 | 3 |
| 085 | | | | 1 | 2 | 1 | 2 | 3 |
| 06. | | | | 1 | 2 | 1 | 2 | 3 |
| 07 | | | | 1 | 2 | 1 | 2 | 3 |
| 08: | | | | 1 | 2 | 1 | 2 | 3 |
| OG |] | | | 1 | 2 | 1 | 2 | 3 |
| 10 | | | | 1 | 2 | 1 | 2 | 3 |
| 11 | | | | 1 | 2 | 1 | 2 | 3 |
| 12 |] | [| | 1 | 2 | 1 | 2 | 3 |

^{*&}quot;HEAD" APPLIES IF MORE THAN ONE FAMILY

| BOX 2 | SAMPLING MESSAGE #1 | |
|-------|---------------------|--|
| | | |
| | | |
| | | |
| | | |
| | | |

B. SELECTION OF SP'S

BOX 3

- FOLLOWING INSTRUCTIONS FROM SAMPLING MESSAGE #1 IN BOX 2, LIST AT 3ª ALL HOUSEHOLD MEMBERS IN APPROPRIATE RACE/ETHNICITY TABLES.
- 2. COMPLETE 3b-d FOR EACH HOUSEHOLD MEMBER.
- 3. AT 30 ENTER AN "X" ONLY FOR THOSE PERSONS WHOSE AGES CORRESPOND TO THE COLUMN HEADINGS.
- 4. ASSIGN SP'S NUMBERS IN 3f.
- 5. COMPLETE 3g AFTER OFFICE HAS ASSIGNED A SAMPLE NUMBER.

TABLE 1 - WHITES OR OTHERS (NOT TO INCLUDE BLACKS OR MEXICAN-AMERICANS.)

| LINE NO. | 3a. FIRST NAME | 3b. What is -'s birthdate? ¿Cuát es la fecha de accimiento de? | 3c. AGE CHART | 3d. SE | x | 36. | | 3f. SP NO. | 3g. SAMPLE NO. |
|-------------|-------------------|--|---------------------|-----------|---|-----|--|------------------|----------------------|
| | | | | м | F | | | | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | | |

TABLE 2 - BLACKS

| LINE NO. | 3a. FIRST NAME | 3b. What is -'s birthdate? ¿Cuál es la fecha de nacimiento de? | 3c. AGE CHART | 3d. SE | x | 3e. | | 3f. SP NO. | 3g. SAMPLE NO. |
|-------------|-------------------|---|---------------------|-----------|---|-----|------|------------------|----------------------|
| | | 1 | | м | F | | | | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | _ | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | М | F | | | | |
| | <u> </u> | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | | |

TABLE 3 - MEXICAN-AMERICANS

| LINE NO. | 3a. FIRST NAME | 3b. What is -'s birthdate? Catal se is techa de nactmiento de? | 3c. AGE CHART | 3d. SE | x | Зе. | | 3f. SP NO. | 3g. SAMPLE NO. |
|-------------|-------------------|--|---------------------|-----------|---|-----|--|------------------|----------------------|
| | | | | м | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | М | F | | | | |
| | | | | м | F | | | | |
| | | | | м | F | | | | |

C. ENDING INTERVIEW

| | ASK EVERYONE: | | | | |
|----|---|---|--|---------------------------------|-------------------------------------|
| 4. | Would you give me your t ¿Podria darme su número | elephone number in case ode teléfono en caso que : | my office wants to ch mi offcina desse verifi | eck my work? Icar mi trabajo | |
| | | | TELEPHO | | |
| | | | in whose n | ame is the tel de quilên api | ephone listed? irace at wistono? |
| | | | | , | FIRST |
| | | | | | MIDDLE |
| | | | | | LAST |
| | | | | 1 [7 [| NO TELEPHONE REFUSED |
| 5. | DATE OF INTERVIEW: | _ MONTH | | YEAR | |
| 6. | CODE ONE: 1 | SP'S SELECTED NO SP'S SELECTED | | | |

RECORD TIME ENDED ON COVER PAGE.

| UNI | FOR OUR SAMPLE? | OCCUPIED DWELL | JNG | В. | RECORD BELOW ANY AND VACANCY. | O ALL SIGNS OF |
|------------|---|-----------------|-------------|------|---|--------------------|
| | VACANT | | | | | |
| | NOT A DU, CONDEMNED/DEMOL | ISHED (C) | | | | |
| | NOT A DU, PLACE OF BUSINESS (| C) | | | | |
| | NOT A DU, NO SUCH ADDRESS/N | O SUCH DU (C) | | | | |
| | NOT A DU, VACATION CABIN (C) | | | C. | RECORD BELOW ANY REAL | |
| | NOT A DU, NOT USABLE AS PERM (C) | MANENT RESIDENC | CE | | NOT QUALIFY AS A DWEL AS ANY RELEVANT INFOR OBSERVATIONS. | |
| | NOT A DU, TRANSIENT USE (C) | | | | | |
| | NOT A DU, STILL UNDER CONSTR | RUCTION (C) | | | | |
| | NOT A DU, LISTING PROBLEM, OL | JT OF SEGMENT (| (C) | | | |
| | NOT A DU, OTHER REASON (C) (SPECIFY) | | | | | |
| | *************************************** | | | | | |
| | | EN | ID | | | |
| | | | | | | |
| SCREENE | R NON-RESPONSE | | | | | |
| A. EXPLAIN | I WHY YOU WERE UNABLE TO COM | IPLETE THE SCRE | ENER IN | TER\ | /IEW | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| B. OBTAIN | | | | | | |
| | AS MODITOL THE COLLOWING IN | ORMATION AS PO | SSIBLE. | | | |
| | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | SPANIC ETHNIC ORIGIN (MEXICAN-AMERICAN OR OTHER HISPANIC) | RACE (W/B/OTHER |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
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| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | RACE (W/B/OTHER |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| | PERSONS IN HH | | | HIS | (MEXICAN-AMERICAN | |
| WHO BEC | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |
| WHO PRO | PERSONS IN HH (# OR NAME) | SEX | AGE | HIS | (MEXICAN-AMERICAN OR OTHER HISPANIC) | |

VACANT/NOT A DWELLING UNIT

i.

OMB No.: 0920-0237 Approval Expires: 09/30/94

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

FAMILY QUESTIONNAIRE

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Peports Clearance Office: Room 721-B, Humphrey Building; 200 independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

| CASE NO.: | Stand No. Segment No. Serial No. | Book of books |
|---------------|----------------------------------|---------------|
| FAMILY NO. | | |
| DECK NO. | * 753 * | |
| ADDRESS: | Apt No. City | |
| | State City | Zip Code |
| | INTERVIEWER NO. | EDITOR NO.: |
| | DATE OF INTERVIEW | TIME BEGAN |
| | MONTH DAY YEAR | :1 |
| | LANGUAGE OF INTERVIEW | TIME ENDED |
| | 1 | : 1 |

CDC 64.19

| A. | INDIVIDUAL CHARACTERISTICS | | | | | |
|------|--|---|--|--|--|--|
| | FILL FIRST COLUMN FOR HEAD OF FAMILY, THEN COMPLETE REMAINING COLUMN(S) FOR (OTHER) SAMPLE PERSON(S) IN FAMILY | SAMPLE NUMBER | | | | |
| A1. | NAME (TRANSCRIBE FROM SCREENER) | NAME | | | | |
| A2. | SP NUMBER (TRANSCRIBE FROM SCREENER; USE 99 FOR HEAD, IF NOT SP) | (HEAD OF FAMILY) | | | | |
| АЗ. | AGE (TRANSCRIBE FROM SCREENER, IF AVAILABLE) | less than 1 yr. enter months 1 yr + enter years | | | | |
| A4. | SEX | 1 MALE 2 FEMALE | | | | |
| A5. | ENTER OBSERVED RACE IF YOU ARE ABLE TO OBSERVE | 1 □ W 2 □ B 3 □ O 9 □ Not Obs. | | | | |
| A6. | In what state or foreign country was – born? ENTER NAME OF THE STATE OR FOREIGN COUNTRY. | State or foreign country | | | | |
| A7. | IF UNDER 5 YEARS OLD, MARK "NEVER ATTENDED." What is the highest grade or year of regular school has ever attended? CIRCLE APPROPRIATE NUMBER. | 00 NEVER ATTENDED OR KINDERGARTEN ONLY (A9) Elem 1 2 3 4 5 6 7 8 High 9 10 11 12 College 1 2 3 4 5+ | | | | |
| A8. | Did – finish (NUMBER IN A7) (grade/year)? | 1 Y 2 N | | | | |
| | HAND CARD F1. | | | | | |
| A9. | Are any of those groups's national origin or ancestry? (Where did's ancestors come from?) | 1 ☐ Y 2 ☐ N (A11) | | | | |
| A10. | Which of those groups <u>best</u> describes —'s national origin or ancestry? Please give me the number of the group. | 1 | | | | |
| | HAND CARD F2. | CIRCLE ONLY ONE | | | | |
| A11. | What is the number of the group that <u>best</u> represent –'s race? 1 - Aleut, Eskimo, or American Indian 2 - Asian or Pacific Islander 5 - Another group 3 - Black not listed - specify | 1 2 3 4 5 6 specify | | | | |
| A12. | IF UNDER 14, MARK FIRST BOX AND GO TO A13. OTHERWISE ASK: Is - now married, living together with someone as married, widowed, divorced, separated or has - never been married? | 0 UNDER 14 1 married - spouse in HH 2 married - spouse not in HH 3 living as married 4 widowed 5 divorced 6 separated 7 never married | | | | |
| | IF UNDER 17 YEARS OLD, MARK BOX AND GO TO NEXT SP OR B1. OTHERWISE ASK: | 0 ☐ UNDER 17 (NP) | | | | |
| A13. | Did – ever serve in the Armed Forces of the United States? | 1□Y 2□N | | | | |

| | less than 1 yr. | ☐ less than 1 yr. | ☐ less than 1 yr. |
|-------------|---|--|--|
| A3. | enter months | enter months | enter months |
| | enter years | enter years | enter years |
| A4. | 1 MALE 2 FEMALE | 1 MALE 2 FEMALE | 1 MALE 2 FEMALE |
| A 5. | 1 W 2 B 3 O 9 Not Obs. | 1 W 2 B 3 O 9 Not Obs. | 1 W 2 B 3 O 9 Not Obs. |
| A6. | State or foreign country | State or foreign country | State or foreign country |
| | 00 □ NEVER ATTENDED OR KINDERGARTEN ONLY (A9) | 00 NEVER ATTENDED OR KINDERGARTEN ONLY (A9) | 00 NEVER ATTENDED OR KINDERGARTEN ONLY (A9) |
| A7. | Elem 1 2 3 4 5 6 7 8 High 9 10 11 12 College 1 2 3 4 5+ | Elem 1 2 3 4 5 6 7 8 High 9 10 11 12 College 1 2 3 4 5+ | Elem 1 2 3 4 5 6 7 8 High 9 10 11 12 College 1 2 3 4 5+ |
| A8. | 1 Y 2 N | 1 Y 2 N | 1 Y 2 N |
| A9. | 1 Y 2 □ N (A11) | 1 □ Y 2 □ N (A11) | 1 □ Y 2 □ N (A11) |
| A10. | 1 Mexican/Mexican American 2 other Latin/American or other Spanish | 1 ☐ Mexican/Mexican American 2 ☐ other Latin/American or other Spanish | 1 ☐ Mexican/Mexican American 2 ☐ other Latin/American or other Spanish |
| | 3specify | 3specify | 3specify |
| | CIRCLE ONLY ONE | CIRCLE ONLY ONE | CIRCLE ONLY ONE |
| A11. | 1 2 3 4 5 — 6 specify | 1 2 3 4 5 — 6 specify | 1 2 3 4 5 7 6 specify |
| A12. | 0 UNDER 14 1 married - spouse in HH 2 married - spouse not in HH 3 living as married 4 widowed 5 divorced 6 separated 7 never married | O UNDER 14 1 married - spouse in HH 2 married - spouse not in HH 3 living as married 4 widowed 5 divorced 6 separated 7 never married | O UNDER 14 1 married - spouse in HH 2 married - spouse not in HH 3 living as married 4 widowed 5 divorced 6 separated 7 never married |
| A13. | 0 ☐ UNDER 17 (NP) 1 ☐ Y 2 ☐ N | 0 ☐ UNDER 17 (NP) 1 ☐ Y 2 ☐ N | 0 ☐ UNDER 17 (NP) 1 ☐ Y 2 ☐ N |

| В. | HEALTH INSURANCE | | | | |
|-----|---|--|--|--|--|
| B1. | Medicare is a Social Security health insurance program for certain disabled persons and for persons 65 years old and over. People covered by Medicare have a card that looks like this. HAND CARD F3. | | | | |
| | During the <u>last month</u> (were/was) (NAME(S) OF ALL SPs IN FAMILY) covered by Medicare? 1 ☐ Yes, one or more SPs covered 2 ☐ No, no SPs covered (36) | | | | |
| | ASK TO DETERMINE WHICH SPS IN FAMILY ARE COVERED. MARK BOX IN EACH COLUMN BEFORE ASKING B3. | 1 _ covered 2 _ not covered | | | |
| B2. | During the <u>last month</u> was covered by Medicare? | 9□ DK J | | | |
| | | | | | |
| | FOR EACH SP WITH "COVERED" IN B2, ASK B3. | | | | |
| B3. | May I please see the Medicare card(s) for (and) to record the claim number and type of coverage? | CARD NUMBER | | | |
| | | TYPE OF COVERAGE | | | |
| | TRANSCRIBE THE INFORMATION FROM THE CARD OR MARK THE "CARD NOT AVAILABLE" BOX. | 1 hospital only (Part A) 2 medical only (Part B) 3 both | | | |
| | | 0 ☐ CARD NOT AVAILABLE - ASK B4 AND B5 | | | |
| | IF "CARD NOT AVAILABLE" ASK B4-B5. | | | | |
| B4. | During the <u>last month</u> was – covered by the part of Medicare that pays for hospital bills? | 1 N 2 N 9 DK | | | |
| B5. | Medicare has an optional feature that costs extra and helps pay for doctor bills. During the last month was - covered by the part of Medicare that pays for doctor's bills? | 1 ☐ Y 2 ☐ N (NP) 9 ☐ DK (NP) | | | |
| | | | | | |
| B6. | There is a national program called Medicaid which pays for health care for persons in need. (In this State it is also called) | | | | |
| | During the <u>last month</u> (were/was) (NAME(S) OF ALL SPs IN FAMILY) covered by Medicaid (or −)? SPs covered 2 □ No, no SPs covered (B8) | | | | |
| | ASK FOR EACH SP: | 1 covered 2 not covered (NP) | | | |
| B7. | During the <u>last month</u> was – covered by Medicaid? | 9 DK (NP) | | | |

| B5. | 1 Y 2 N (NP) 9 DK (NP) | 1 □ Y 2 □ N (NP) 9 □ DK (NP) | 1 ☐ Y 2 ☐ N (NP) 9 ☐ DK (NP) |
|-----|--|---|---|
| B4. | 1 Y 2 N 9 DK | 1 | 1 N 2 N 9 DK |
| | 0 ☐ CARD NOT AVAILABLE - ASK B4 AND B5 | 0 ☐ CARD NOT AVAILABLE - ASK B4 AND B5 | 0 ☐ CARD NOT AVAILABLE - ASK B4 AND B5 |
| B3. | CARD NUMBER TYPE OF COVERAGE 1 hospital only (Part A) 2 medical only (Part B) 3 both (B6) | CARD NUMBER TYPE OF COVERAGE 1 hospital only (Part A) 2 medical only (Part B) 3 both (B6) | CARD NUMBER TYPE OF COVERAGE 1 hospital only (Part A) 2 medical only (Part B) 3 both (B6) |
| | CARD NUMBER | | CARD NILLARED |
| | 3 3 3 3 7 | , s | y |
| B2. | 1 covered 2 not covered (NP) 9 DK | 1 covered 2 not covered (NP) 9 DK | 1 covered 2 not covered (NP) 9 DK |
| | | | |

| | During the <u>last month</u> (were/was) (NAME(S) OF ALL SPs IN FAMILY) covered by CHAMPUS, CHAMPVA, the VA, or military health care? | | | | | |
|---------------------------------------|--|-------------------------|--------|-------------------|----------|------------|
| | (These programs cover active duty and 1 ☐ Yes, one or retired career military personnel and their more SPs covered dependents and survivors and also disabled 2 ☐ No, no SPs veterans and their dependents and survivors.) covered (B10) | | | | | |
| · · · · · · · · · · · · · · · · · · · | ASK FOR EACH SP: | | | | | |
| B9. | During the <u>last month</u> was covered by CHAMPUS, CHAMPVA, the VA or military health care? | 1 c 2 n 9 t | | | (NP) | |
| | | | | | | |
| B10. | We are interested in all kinds of health insurance plans except those that pay only for accidents. | | | | | |
| | (Not counting Medicare, Medicaid, or Veteran's Payments) During the <u>last month</u> (were/was) (NAME(S) OF ALL SPs IN FAMILY) covered by a health insurance plan obtained privately or through a current or former employer or union that pays any part of a hospital stay or routine doctor's care? Include membership in a health maintenance organization. | | | | | |
| | 1 ☐ Yes, one or more SPs covered 2 ☐ No, no SPs covered (B12) | | | | | |
| | ASK B11-B11d FOR EACH SP BEFORE ASKING B12. | 4- | | . /D.4. | <u> </u> | |
| l 544 | Diving the feet county was account by one or your best to be seen along | | | d (B11a) | | |
| B11. | During the <u>last month</u> was - covered by one or more health insurance plans obtained privately or through an employer or union? | 2 r 9 [| | ered } | (NP) | |
| B11. | | 1 🗆 e | OK | <u> </u> | | IDV |
| | obtained privately or through an employer or union? | | OK | 2□ N | |] DK |
| B11a. | obtained privately or through an employer or union? FOR EACH SP WITH "COVERED" IN B11, ASK B11a-B11d. | 1 🗆 e |) (| <u> </u> | 9[|]DK |
| B11a. | obtained privately or through an employer or union? FOR EACH SP WITH "COVERED" IN B11, ASK B11a-B11d. Did any of these plans cover any part of hospital expenses? Did any of these plans cover any part of the costs of routine | 9 t | r r | 2 N | 9[| |
| B11a. B11b. B11c. | obtained privately or through an employer or union? FOR EACH SP WITH "COVERED" IN B11, ASK B11a-B11d. Did any of these plans cover any part of hospital expenses? Did any of these plans cover any part of the costs of routine doctor's care? | 1 0 1 | (| 2 N 2 N 2 N | 9[|]DK]DK |
| B11a. B11b. B11c. | obtained privately or through an employer or union? FOR EACH SP WITH "COVERED" IN B11, ASK B11a-B11d. Did any of these plans cover any part of hospital expenses? Did any of these plans cover any part of the costs of routine doctor's care? Did any of these plans cover any part of dental care? Are any of these plans from someone's current or former employer | 1 0 \ | Y (NP) | 2 N 2 N 2 N | 9[|]DK]DK |
| B11a. B11b. B11c. | obtained privately or through an employer or union? FOR EACH SP WITH "COVERED" IN B11, ASK B11a-B11d. Did any of these plans cover any part of hospital expenses? Did any of these plans cover any part of the costs of routine doctor's care? Did any of these plans cover any part of dental care? Are any of these plans from someone's current or former employer or union? | 1 0 \ | Y (NP) | 2 N 2 N 2 N | 9[|]DK]DK |

| B9. | 1 covered 2 not covered 9 DK | NP) | 1 covere 2 not co 9 DK | | (NP) | 1 ☐ covere 2 ☐ not co 9 ☐ DK | | IP) |
|-------------------|-------------------------------|-----------|---------------------------------|-------------------|-----------|------------------------------------|-------------|---------|
| | | | | | | | | |
| | | 144 | | | | | | |
| | | | , | | | | | |
| | 1 | | 1 □ cover | ed (B11a) | | 1 🗆 covere | ed (B11a) | |
| B11. | 2 not covered 9 DK | (NP) | 2 ☐ not α 9 ☐ DK | overed } | (NP) | 2 | | P) |
| B11. | 2 not covered) | (NP) 9 | 2 ⊟ notco | 2 N | (NP) 9 | 2 | | P) 9 |
| | 2 ☐ not covered 9 ☐ DK | | 2 ☐ not α 9 ☐ DK | <u> </u> | | 2 | vered (N | |
| B11a. | 2 not covered 9 DK } | 9 | 2 | 2 N | 9 | 2 | 2 N 2 N | 9□ DK |
| B11a. | 2 | 9 | 2 | 2 N 2 N 2 N | 9 | 2 not co 9 DK 1 Y | 2 N 2 N | 9 |
| B11a. B11b. B11c. | 2 | 9 | 2 | 2 N 2 N 2 N | 9 | 2 not co 9 DK 1 Y | 2 N 2 N 2 N | 9 |

| B13. | CHECK ITEM. REVIEW RESPONSES TO B2, B7, B9, AND B11 AND MARK BOX FOR EACH SP. IF ALL COVERED, GO TO C1. IF NOT CONTINUE. | 1 ☐ 'COVERED' IN B2, B7, B9, OR B11 (C1) 2 ☐ 'NOT COVERED' 9 ☐ DK |
|------|--|---|
| B14. | Many people do not carry health insurance for various reasons. HAND CARD F4. | 2 3 4 5 6 7 |
| | Which of these statements describes why – is currently not covered by any health insurance? | 9 → 10 (NP) specify |
| B15. | Any other reasons? | 1 ☐ Y (REASK B14 <u>AND</u> B15) 2 ☐ N |
| | MARK BOX IF ONLY ONE REASON IS GIVEN IN B14, OTHERWISE ASK: | 0 ☐ ONLY ONE REASON IN B14 |
| B16. | What is the main reason - is currently not covered by any health insurance? | 2 3 4 5 6 7 |
| | | 9 → 10(NP) specify |
| | | , |
| C. | FAMILY BACKGROUND | |
| C1. | CHECK ITEM. REFER TO AGE OF SP AND MARK BOX. | 1 ☐ 17+ YEARS OLD (NP) 2 ☐ UNDER 17 YEARS OLD (C2) |
| C2. | Now I have some questions about's biological parents. | pounds |
| | How much (does's mother/do you) weigh? | or kilograms |
| | IF PREGNANT, RECORD WEIGHT BEFORE PREGNANCY. | 999 □ DK |
| СЗ. | How tall (is -'s mother/are you)? | feet/inches |
| | | or centimeters |
| | | or |
| C4. | How much (does's father/do you) weigh? | orcentimeters |

| 1 ☐ 'COVERED' IN B2, B7, B9, OR B11 (C1) | | | | | | 1 (COVERED' IN B2, B7, B9, OR B11 (C1) | | | | | | 1 ☐ 'COVERED' IN B2, B7, B9, OR B11 (C1) | | | | | | |
|---|---|--|---|---|---|---|-----------------|---|---|--|---|---|--|--|--|--|---|--|
| 2 🗆 'NO' | T COV | /EREI |), | | | 2 🗆 'NC | T CO | /EREI |)' | | | 2□' | NOT | COV | ERED | • | | |
| 9 <u>□</u> DK | | | | | | 9 <u>□</u> DK | | | | | | 9□[| DΚ | | | | | |
| 2 | 3 | 4 | 5 | 6 | 7 | 2 | 3 | 4 | 5 | 6 | 7 | 2 | 2 ; | 3 | 4 | 5 | 6 | 7 |
| 9→10 | | | | | (NP) | 9 → 10 | | | | | (NP) | 9→ | 10 | | | | | (NP) |
| _ | | spe | cify | | | _ | | spe | cify | | | | | | spec | ify | | |
| | | | <u>-</u> | | | | | | | | | | | | | | | |
| 1 🗆 Y (F | REASI | K B14 | <u>AND</u> | B15) | | 1 🗆 Y (| REAS | K B14 | <u>AND</u> I | B15) | | 10 | Y (RE | ASK | B14 / | AND E | 315) | |
| 2 🗆 N | | | | | | 2 🗆 N | | | | | | 2 | N | _ | | | | |
| 0□ ON | LY O | NE RE | ASON | IN B | 14 | 0 🗆 01 | ILY O | NE RE | ASON | I IN B | 14 | ٥. | ONLY | (ON | E REA | ASON | IN B14 | • |
| 2 | 3 | 4 | 5 | 6 [.] | 7 | 2 | 3 | 4 | 5 | 6 | 7 | 2 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9 → 10_ | | | | | (NP) | 9 → 10 | | | | | (NP) | 9→ | 10 | | | | | _ (NP) |
| | | spe | cify | | | | | spe | cify | | | | | | spec | cify | | |
| | | | | | | | | | | | | | | | | | | |
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| | B9, 2 'NO 9 DK 2 9 + 10 1 Y (I) 2 N 0 ON 2 9 + 10 1 17 2 UN 999 999 999 | B9, OR B1 2 □ 'NOT COV 9 □ DK 2 3 9 → 10 □ 1 □ Y (REASI 2 □ N 0 □ ONLY OF 2 3 9 → 10 □ 1 □ 17+ YEA 2 □ UNDER □ pour or kilog 999 □ DK □ feet/ or cent 999 □ DK □ pour kilog 999 □ DK | B9, OR B11 (C) 2 ☐ 'NOT COVERED 9 ☐ DK 2 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 | B9, OR B11 (C1) | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 3 4 5 6 7 2 3 9 → 10 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 3 4 5 6 7 2 3 4 9 → 10 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 3 4 5 6 7 2 3 4 5 9 → 10 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 | B9, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 2 | BS, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 99 □ DK 999 □ DK | BS, OR B11 (C1) 2 ☐ 'NOT COVERED' 9 ☐ DK 9 | BS, OR B11 (C1) □ BS, OR B11 (C1) □ BS, OR B11 (C1) □ COVERED' □ DK | BB, OR B11 (C1) □□ NOT COVERED' □□ DK □□ Specify | B9, OR B11 (C1) 2 □ NOT COVERED' 9 □ DK 3 → 10 □ Specify 1 □ Y (REASK B14 AND B15) 2 □ N 2 □ N 2 □ N 1 □ Y (REASK B14 AND B15) 2 □ N 2 □ N 1 □ Y (REASK B14 AND B15) 2 □ N 2 □ N 1 □ Y (REASK B14 AND B15) 2 □ N 2 □ N 1 □ NLY ONE REASON IN B14 2 □ A 1 5 6 7 2 □ A 1 5 6 7 2 □ N 2 □ N 1 □ NLY ONE REASON IN B14 2 □ A 1 5 6 7 2 □ A 1 5 6 7 2 □ N 2 □ N 1 □ NLY ONE REASON IN B14 2 □ A 1 5 6 7 2 □ A 1 5 6 7 2 □ N 2 □ N 1 □ TY (REASK B14 AND B15) 1 □ TY (REASK B14 AND B15) 1 □ TY (REASK B14 AND B15) 1 □ NLY ONE REASON IN B14 2 □ A 1 5 6 7 2 □ A 1 5 6 7 2 □ N 2 □ N 1 □ NLY ONE REASON IN B14 2 □ A 1 5 6 7 2 □ | B8, OR B11 (C1) 2 □ 'NOT COVERED' 9 □ DK 9 □ 10 □ specify 1 □ Y (REASK B14 AND B15) 2 □ N 0 □ ONLY ONE REASON IN B14 2 3 4 5 6 7 2 3 4 5 6 7 2 3 4 5 6 7 2 3 4 5 6 9 9 □ DK 9 □ 10 □ specify 1 □ Y (REASK B14 AND B15) 2 □ N 0 □ ONLY ONE REASON IN B14 2 3 4 5 6 7 2 3 4 5 6 7 2 3 4 5 6 7 2 3 4 5 6 9 □ DK 9 □ 10 □ specify 1 □ 17+ YEARS OLD (NP) 9 □ 10 □ specify 1 □ 17+ YEARS OLD (NP) 9 □ 10 □ specify 1 □ 17+ YEARS OLD (NP) 1 □ 17+ YEARS OLD (NP) 2 □ UNDER 17 YEARS OLD (NP) 2 □ UNDER 17 YEARS OLD (C2) 1 □ 17+ YEARS OLD (NP) 2 □ UNDER 17 YEARS OLD (NP) 3 □ DK 999 □ DK |

| C6. | Has either of -'s biological parents ever been told by a doctor that he or she had | _ |
|-------------|--|--|
| | a. High blood pressure or stroke before the age of 50? | 1 ☐ Y - Which,'s 2 ☐ N (b) 9 ☐ DK (b) 1 ☐ father 2 ☐ mother, or 3 ☐ both? |
| | b. Heart attack or angina before the age of 50? | 1 ☐ Y - Which,'s 2 ☐ N (c) 9 ☐ DK (c) |
| | c. High blood cholesterol at any age? | 1 |
| | d. Asthma or hay fever at any age? | 1 ☐ Y - Which,'s 2 ☐ N (e) 2 ☐ DK (e) 1 ☐ father 2 ☐ mother, or 3 ☐ both? |
| | e. Diabetes at any age? | 1 ☐ Y - Which,'s 2 ☐ M 2 ☐ DK |
| C7. | How long has lived at this address? | number 1 weeks 2 months 3 years |
| | · | ∞ WHOLE LIFE (C10) |
| C8. | How long has lived in this (city/town/area)? | number 1 weeks 2 months 3 years |
| } | | 00 WHOLE LIFE (C10) |
| C9. | How many times has moved? | times number |
| | | 99 □ DK |
| C10. | In what country (was's mother/were you) born? | 1 🗀 50 U.S. states |
| | | 2 other 3 specify |
| C11. | In what country (was's father/were you) born? | 1 ☐ 50 U.S. states |
| | | 2 other 3 specify |

| | SAMPLE NUMBER | SAMPLE NUMBER | SAMPLE NUMBER | | | | | |
|-----------|--|--|--|--|--|--|--|--|
| Ī | | | | | | | | |
| A1. | NAME | NAME | NAME | | | | | |
| A2. | | | | | | | | |
| C6. a. | 1 | 1 | 1 | | | | | |
| b. | 1 | 1 | 1 | | | | | |
| C. | 1 Y - Which, -'s | 1 | 1 | | | | | |
| d. | 1 | 1 | 1 ☐ Y - Which, –'s 2 ☐ N (e) 2 ☐ DK (e) 1 ☐ father 2 ☐ mother, or 3 ☐ both? | | | | | |
| е. | 1 | 1 Y - Which, -'s | 1 | | | | | |
| C7. | number 1 weeks 2 months 3 years 00 WHOLE LIFE (C10) | number 1 weeks 2 months 3 years 00 WHOLE LIFE (C10) | number 1 weeks 2 months 3 years 00 WHOLE LIFE (C10) | | | | | |
| C8. | number 1 weeks 2 months 3 years | number 1 weeks 2 months 3 years | { 1 | | | | | |
| | 00 ☐ WHOLE LIFE (C10) | ∞ WHOLE LIFE (C10) | 00 ☐ WHOLE LIFE (C10) | | | | | |
| C9. | number times | times | number times | | | | | |
| | 99 □ DK | 99 □ DK | 99 □ DK | | | | | |
| C10. | 1 | 1 | 1 _ 50 U.S. states 2 _ other 3 | | | | | |
| C11. | specify 1 50 U.S. states 2 other 3 specify | specify 1 □ 50 U.S. states 2 □ other 3 specify | 1 | | | | | |

| D. | OCCUPATION OF FAMILY HEAD | |
|------|--|---|
| D1. | CHECK ITEM | 1 HEAD OF FAMILY IS AN SP (E1) 2 HEAD OF FAMILY NOT AN SP (ASK D2-D12 FOR HEAD OF FAMILY) 3 HEAD OF FAMILY ACTIVE MILITARY LIVING AT HOME (D10) |
| D2. | <u>During the past 2 weeks</u> , did work at any time at a job or business, not counting work around the house? | 1 □ Y (D7) 2 □ N |
| | INCLUDE UNPAID WORK IN THE FAMILY FARM OR BUSINESS. | |
| D3. | Even though – did not work during those 2 weeks, did – have a job or business? | 1 □ Y 2 □ N |
| D4. | Was - looking for work or on layoff from a job? | 1 ☐ Y 2 ☐ N (D6) |
| D5. | Which, looking for work or on layoff from a job? | 1 ☐ looking (D8) 2 ☐ layoff (D7) 3 ☐ both (D7) |
| D6. | CHECK ITEM. MARK A BOX ONLY IF "NO" IN D4. | 1 ☐ "Y" IN D3 (D7) 2 ☐ "N" IN D3 (E1) |
| D7. | For whom did – work? | Employer |
| | ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER. | |
| | RECORD RESPONSE AND <u>SKIP TO D9</u> . | |
| D8. | For whom did – work at – <u>last</u> full-time civilian job or business lasting 2 consecutive weeks or more? | |
| | ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER. | |
| D9. | What kind of business or industry is this? (For example, TV and radio, manufacturing, retail shoe store, State Labor Department, farm.) | Industry |
| D10. | What kind of work was - doing? (For example, electrical engineer, stock clerk, typist, farmer.) | Occupation |
| D11. | What were -'s most important activities or duties at that job? (For example, types, keeps account books, files, sells cars, operates printing press, finishes concrete.) | Duties |
| D12. | COMPLETE FROM ENTRIES IN D7 THRU D11. IF NOT CLEAR ASK: - self-employed in own business, professional practice, or farm? IF NOT FARM, ASK: Is the business incorporated? Yes | Class of worker 01 □ P 02 □ F 03 □ S 04 □ L |
| | Was – an employee of a <u>private</u> company, business or individual for wages, salary or commission? | 05 I 06 SE 07 WP 08 ARMED FORCES 00 NEV |

| _ | | |
|------------|---|--|
| E. E1. | When was this (house/structure) originally built? (Was it ?) | 1 ☐ before 1946 2 ☐ 1946-1973 3 ☐ 1974 to present |
| E2. | How many rooms are in this home? Count the kitchen but not the bathroom. | rooms |
| E3. | How long has your family lived at this address? | number |
| E4. | Is your home drinking water bottled or from the tap (faucet)? | 1 |
| E5. | What is the source of your home tap water? | 1 private or public water company 2 private or public well 3 spring 9 DK |
| E6. | Does your home drinking water have a water softening or conditioning system? This includes both systems at the (tap/faucet) and systems for the entire home. | 1 Y 2 N 9 DK |
| E7. | Do any pets live in this home? | 1 ☐ Y 2 ☐ N (E9) |
| E8. | What kind of pet lives here a. a dog? | 1 O Y 2 O N |
| | b. a cat? | 1 T 2 N |
| - - | c. a bird? | 1 Y 2 N |
| | d. any other pet(s)? | 1 ☐ Y 2 ☐ N |
| E9. | During the past 12 months was a furnace that forces out hot air used to heat this place? | 1 Y 2 N (E11) 9 DK (E11) |
| E10. | Was the hot-air furnace fueled by oil, by gas, by electricity or by something else? | 1 oil 2 gas 3 electricity 4 other 5 specify 9 DK |
| E11. | During the <u>past 12 months</u> was one or more space heaters used to heat this place? We are interested only in heaters that are not vented to the outside. | 1 Y 2 N (E13) 9 DK (E13) |
| E12. | Was the room or space heater fueled by electricity, kerosene, propane, or by something else? | 1 electricity 2 kerosene 3 propane 4 other 5 specify |
| E13. | During the past 12 months was one or more wood stoves used here? | 1 N 2 N 9 DK |

| E14. | During the past 12 months was one or mor | 1 🗆 Y | 1 Y 2 N 9 DK | | | | | | |
|------|--|---|------------------|------------------|------------|-------|--|--|--|
| E15. | Is a gas stove or oven used for cooking at | 1 🗆 Y | 2 🗆 N (F1) | | | | | | |
| E16. | Is there an exhaust fan near this stove that | 1□ Y | 2 N (E18) | | | | | | |
| E17. | When the stove or oven is being used, how Would you say it is used always, sometime | 1 always 2 sometimes 3 rarely 4 never 9 DK | | | | | | | |
| E18. | During the past 12 months was the stove of | or oven <u>ever</u> used to | heat this place? | 1 🗆 Y | 2 N | 9⊡ DK | | | |
| | | | | | | i. | | | |
| F. | FAMILY CHARACTERISTICS | | | | | | | | |
| F1. | Does anyone who lives here smoke cigare | ttes in the home? | | 1 ☐ Y 2 ☐ N (F4) | | | | | |
| F2. | Who? Anyone else? RECORD NAME(S), FAMILY NUMBER(S) HOUSEHOLD SCREENER FOR ALL HOL | F3. FOR EACH PERSON RECORDED IN F2 ASK: How many cigarettes per day does – usually smoke in the home? | | | | | | | |
| | a) Name | family no. | line no. | cigarettes | | | | | |
| | b) | family no. | line no. | - | cigarettes | | | | |
| | c)Name | family no. | line no. | _ | cigarettes | | | | |
| | d) | family no. | line no. | _ | cigarettes | | | | |
| | e) | line no. | cigarettes | | | | | | |
| | f) | line no. | _ | cigarettes | | | | | |
| F4. | Which one of the following statements be (you/your family)? Do you have enough food to eat, sometine enough to eat? | 1 enough food to eat (F7) 2 sometimes not enough to eat 3 often not enough to eat | | | | | | | |
| F5. | Thinking about the <u>past month</u> , how man no food or money to buy food? | 00 □ none (F7) days number 99 □ DK | | | | | | | |

| F6. | Which of the following reasons explains why (you have/your family has) had this problem? | | | | |
|-------|--|--|--|------------------|--|
| | a. because of transportation problems? | 1 🗆 Y | 2 🗆 N | | |
| | because you did <u>not</u> have working appliances for storing or preparing foods (such as a stove or refrigerator)? | 1 🗆 Y | 2 🗆 N | | |
| | because you did <u>not</u> have enough money, food stamps, or WIC vouchers to buy food or beverages? | 1 Y | 2□ N | | |
| | d. any other reason? | 1□ Y -> 3 | 2 🗆 N | | |
| | | | specify | | |
| F7. | Thinking about the <u>past month</u> , did (you/adult members of your family) ever cut the size of your meals because there was not enough money for food? | 1 🗆 Y | 2 🗆 N | 9□ DK | |
| | REFER TO SCREENER. IF CHILDREN LESS THAN AGE 17 ASK THIS, OTHERWISE SKIP TO F9. | | | | |
| F8. | Thinking about the <u>past month</u> , did you cut the size of your children's meals or did they skip meals because there was not enough money for food? | 1 🗆 Y | 2 N | 9□ DK | |
| F9. | Did (you/any member of this family) receive benefits from the WIC program, that is, the Women, Infants, and Children program in (NAME OF LAST MONTH)? | 1 🗆 Y | 2 🗀 N | | |
| F10. | Did (you/any member of this family) receive food stamps in <u>any</u> of the <u>last 12 months</u> ? | 1 ☐ Y 2 ☐ N (F 9 ☐ DK (| - | | |
| F11. | (Are you/Is your family) receiving food stamps at the present time? | 1 🗆 Y | 2□ N | 9 | |
| | | * | *** | | |
| | The following questions are about different types of <u>family income</u> . We ask them to see if there is a relationship between <u>family income</u> and health. | | | | |
| F12a. | During the <u>last month</u> , did anyone in the <u>family</u> receive income from working for an employer or from self-employment? | 1 Y 2 N (F 9 DK | | | |
| F12b. | Who was that? | REFER TO <u>SCREENER HOUSEHOLD</u> COMPOSITION TABLE AND CODE THE <u>LINE NO.</u> FOR EACH <u>FAMILY</u> MEMBER RECEIVING THIS INCOME. | | | |
| | | CODE A | LL THAT APPI | _Y . | |
| | | 01 02 03 04 05 06 | 07 [08 [09 [10 [11 [12 [|]]]] | |
| F12c. | Anyone else? | 1 🗆 Y (F 2 🗆 N | REASK F12b A | ND F12c) | |

| F13a. | During the <u>last month</u> , did anyone in the <u>family</u> rec Railroad Retirement payments? | 1 ☐ Y 2 ☐ N (F14a) 9 ☐ DK (F14a) | | | | | |
|-------|--|--|---|--|---|--|--|
| F13b. | Who was that? | REFER TO SCREENER HOUSEHOLD COMPOSITION TABLE AND CODE THE UNE NO. FOR EACH FAMILY MEMBER RECEIVING THIS INCOME. | | | | | |
| | | | | CODE ALL THAT | r apply. | | |
| | | 01 02 03 04 05 06 06 0 | 07 08 09 10 11 12 | | | | |
| F13c. | Anyone else? | | | 1 ☐ Y (REASK I 2 ☐ N | F13b AND F13c) | | |
| F13d. | RECORD A SEPARATE ANSWER FOR EACH PERSON LESS THAN 65 ANSWERING YES TO F13a. | LINE NO | 1 🔲 rei | O | LINE NO 1 retired 2 disabled | | |
| | What is the reason — is getting Social Security or Railroad Retirement? Is it because — is retired, disabled, widowed, a surviving child, a spouse or a dependent child? | at is the reason – is getting Social Security Railroad Retirement? Is it because – is 4 surviving child 4 surviving child 5 spouse | | | | | |
| F14a. | During the <u>last month</u> , did anyone in the <u>family</u> re Security Income) payments from the Federal Gov | | ı | 1 Y 2 N (F15a) 9 DK (F15a) | | | |
| F14b. | Who was that? | | REFER TO SCREENER HOUSEHOLD COMPOSITION TABLE AND CODE THE LINE NO. FOR EACH FAMILY MEMBER RECEIVING THIS INCOME. | | | | |
| | | | | CODE ALL THAT APPLY. | | | |
| | | | | 01 | 07 08 09 10 11 12 | | |
| F14c. | Anyone else? | | | 1 ☐ Y (REASK F14b AND F14c) 2 ☐ N | | | |
| F15a. | During the <u>last month</u> , did anyone in the <u>family</u> re disability payment other than Social Security or R | | | 1 ☐ Y 2 ☐ N (F16a) 9 ☐ DK (F16a) | | | |
| F15b. | Who was that? | | | COMPOSITION THE LINE NO. I | EENER HOUSEHOLD TABLE AND CODE OR EACH FAMILY EIVING THIS INCOME. | | |
| | | | CODE ALL THA | | | | |
| | | | | 01 | 07 08 09 10 11 12 | | |
| F15c. | Anyone else? | | 1 ☐ Y (REASK 2 ☐ N | F15b AND F15c) | | | |

| F16a. | During the <u>last month</u> , did anyone in the <u>family</u> receive Public assistance or welfare payments from the State or Local welfare office? Do not include SSI. | 1 Y 2 N (F17a) 9 DK (F17a) |
|-------|--|--|
| F16b. | Who was that? | REFER TO SCREENER HOUSEHOLD COMPOSITION TABLE AND CODE THE LINE NO. FOR EACH FAMILY MEMBER RECEIVING THIS INCOME. CODE ALL THAT APPLY. |
| | | 01 07 07 02 08 03 09 04 10 05 11 06 12 07 07 07 07 07 07 07 0 |
| F16c. | Anyone else? | 1 📋 Y (REASK F16b AND F16c) 2 🔲 N |
| F16d. | During the <u>last month</u> , did anyone in the <u>family</u> receive *Aid to Families with Dependent Children,* sometimes called AFDC or ADC? | 1 ☐ Y 2 ☐ N (F17a) 9 ☐ DK (F17a) |
| F16e. | Who was that? | REFER TO SCREENER HOUSEHOLD COMPOSITION TABLE AND CODE THE LINE NO. FOR EACH FAMILY MEMBER RECEIVING THIS INCOME. |
| | | CODE ALL THAT APPLY. |
| | | 01 |
| F16f. | Anyone else? | 1 ☐ Y (REASK F16e AND F16f) 2 ☐ N |
| F17a. | During the <u>last month</u> , did anyone in the <u>family</u> receive income from any other source such as veteran's payments, workman's compensation, rental income, interest and dividend income, or child support and alimony? | 1 Y 2 N (F18) 9 DK (F18) |
| F17b. | Who was that? | REFER TO SCREENER HOUSEHOLD COMPOSITION TABLE AND CODE THE LINE NO. FOR EACH FAMILY MEMBER RECEIVING THIS INCOME. |
| | | CODE ALL THAT APPLY. |
| | | 01 07 02 08 03 09 04 10 05 11 06 12 07 07 07 07 07 07 07 0 |
| F17c. | Anyone else? | 1 ☐ Y (REASK F17b AND F17c) 2 ☐ N |

| a ara | | 4 | | | | |
|-------|---|--|--|--|--|--|
| F18. | Including wages, salaries, self-employment, and any other source of income we just talked about, was the total combined family income during the last 12 months - (that is, yours, READ NAMES OF ALL FAMILY MEMBERS, INCLUDING ARMED FORCES MEMBERS LIVING AT HOME) - more or less than \$20,000? | 2 \$20,00 (HAND | 1 ☐ Less than \$20,000 (HAND CARD F5) 2 ☐ \$20,000 or more (HAND CARD F6) 0 ☐ No income (F21) | | | |
| | READ PARENTHETICAL PHRASE IF ARMED FORCES MEMBER LIVING AT HOME OR IF NECESSARY. | | CARD F5 | | | |
| F19. | Of those income groups, which letter best represents the total combined family income during the last 12 months (that is, yours, READ NAMES, INCLUDING ARMED FORCES MEMBERS LIVING AT HOME)? Include all sources of income we just talked about. | 01 A 02 B 03 C 04 D 05 E 06 F 07 G 08 H 09 I 10 J | 11 K 12 L 13 M 14 N 15 O 16 P 17 Q 18 R 19 S 20 T | 21 U 22 V 23 W 24 X 25 Y 26 Z 27 ZZ 28 AA 29 BB 30 CC | | |
| | HAND CARD F7. | | CARD F7 | | | |
| F20. | Now, please think about your <u>family income</u> during (NAME OF LAST MONTH). Which letter best represents the <u>total combined family income</u> during (NAME OF LAST MONTH) (that is, yours, READ NAMES, INCLUDING ARMED FORCES MEMBERS LIVING AT HOME)? Again, include all sources of income we just talked about. | 01 A 02 B 03 C 04 D 05 E 06 F 07 G 08 H 09 I 10 J | 11 K 12 L 13 M 14 N 15 O 16 P 17 Q 18 R 19 S 20 T | 22 □ U 23 □ V 24 □ W | | |
| | | 21 Respondent indicates annu income as reported in F19 divided by 12. | | | | |
| | | 99 □ DK | | | | |

| F21. | 21. The National Center for Health Statistics may wish to contact you again to obtain additional health related information. Please give me the name, address, and telephone number of two relatives or friends who would know where you could be reached in case we have trouble reaching you. Please give me the names of persons who are not currently living in the household. PRINT ITEMS F21 a-e AND F22 a-e. | | | | | | | | | | | |
|------|---|--|-------------|------------|---------------------------|--|--|--|--|--|--|--|
| | a. | NAME OF <u>FIRST</u> CONTACT PERSON (PRINT) LAST | FIRST | | MIDDLE | | | | | | | |
| | b. | ADDRESS (NUMBER AND STREET) | | | | | | | | | | |
| | c. | CITY | STATE | | ZIP CODE | | | | | | | |
| | d. | AREA CODE/TELEPHONE NUMBER O NONE | | PRINT NAME | PHONE NUMBER LISTED UNDER | | | | | | | |
| | | 7 REFUSED 9 DK | | | FIRST | | | | | | | |
| | | | | | LAST | | | | | | | |
| | е. | What is (CONTACT'S) relationship to you? | | | | | | | | | | |
| F22. | SEC | COND CONTACT PERSON | | | | | | | | | | |
| | a. | NAME OF <u>SECOND</u> CONTACT PERSON (PRINT) LAST | FIRST | | MIDDLE | | | | | | | |
| | b. | ADDRESS (NUMBER AND STREET) | • | | | | | | | | | |
| | C. | CITY | STATE | | ZIP CODE | | | | | | | |
| | d. | AREA CODE/TELEPHONE NUMBER O NONE TO REFUSED ON DK | | PRINT NAME | PHONE NUMBER LISTED UNDER | | | | | | | |
| | | _ . | | | MIDDLE | | | | | | | |
| | е. | What is (CONTACT'S) relationship to you? | | | <u>-</u> | | | | | | | |
| F23. | | HO RESPONDED TO FAMILY QUESTIONNAIRE | 2.00F. W1 0 | <u> </u> | | | | | | | | |
| | RE | EFER TO SCREENER. | | FAMILY | NO. LINE NO. | | | | | | | |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

HOUSEHOLD ADULT QUESTIONNAIRE (Ages 17 + Years)

NOTICE: Information contained on this form which would permit identification of any individual or establishment has been collected with a guarante that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without th consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242 m).

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to PHS Reports Clearance Officer; Roor 721-B, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulator Affairs, Office of Management and Budget, Washington, DC 20503.

| CASE NO: | STAND NO. SEGMEN | IT NO. SERIAL | NO. | | EDITOR NO. |
|---------------|-------------------------------|----------------|-------------------------|----------------|--|
| FAMILY NO: | | - | | NAME | : |
| SP NO. | | | | Middle Last | |
| SAMPLE NO. | | | | AGE | SEX 1 MALE 2 FEMALE |
| DECK NO. | # ? 5 6 * | TIME BE | GAN 1 AM 2 PM 3 NOON | | DATE OF EXAMINATION / / MO DY YR TIME |
| | INTERVIEWER NO: | TIME EN | DED 1 AM 2 PM 3 NOON | | TRANSPORTATION |
| | DATE OF INTERVIEW / MO DY YR | LANGUAGE OF 1 | | | 1 TAXI 2 SELF 3 STAFF |

CDC 64.45 REV. 10/91

HOUSEHOLD ADULT QUESTIONNAIRE

AGES 17 + YEARS

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| ORIENTATION (AGES 17+ YEARS) | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| As part of this interview I will be measuring your pulse and blood pressure. Although I will be doing this procedure towards the end of our meeting, I would like to request that you do not smoke, eat, or drink coffee or alcohol now or during the interview because these factors can affect your pulse and blood pressure. | | | | | | | | | | |
| Now I would like to begin the interview. | | | | | | | | | | |
| A1. Did you receive an introductory letter in the mail about our survey? | 1 Y 2 N 9 DK | | | | | | | | | |
| A2. Did you hear about the survey in any other way? | 1 | | | | | | | | | |
| A3. CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 60 YEARS OR PROXY RESPONDENT (B1) 2 60 + YEARS | | | | | | | | | |
| First, I need to verify some information. A4. What is today's date? PROBE FOR MISSING DATE INFORMATION. | MONTH DAY YEAR | | | | | | | | | |
| A5. What is the day of the week? | S M T W T F S 3 OFF BY MORE THAN ONE DAY | | | | | | | | | |
| A6. What is your complete street address? PROBE FOR CITY/TOWN, STATE OR ZIP CODE IF MISSING. IF MAILING ADDRESS GIVEN, CODE AS CORRECT. | a 1 CORRECT street address 2 ERROR | | | | | | | | | |
| | b 1 | | | | | | | | | |
| | c1 CORRECT state 2 ERROR | | | | | | | | | |
| | d 1 CORRECT zip code 2 ERROR | | | | | | | | | |

| HEAL | HEALTH SERVICES (AGES 17+ YEARS) | | | | | | | | | |
|------|---|---|--|--|--|--|--|--|--|--|
| B1. | Would you say your health in general is excellent, very good, good, fair, or poor? | 1 excellent 2 very good 3 good 4 fair 5 poor | | | | | | | | |
| B2. | ls there a particular clinic, health center, doctor's office, or other place that you <u>usually</u> go to if you are sick, need advice about your health, or for routine care? | 1 Y 2 N (B4) | | | | | | | | |
| В3. | Is there <u>one</u> particular doctor or health professional you usually see? | 1 N 2 N | | | | | | | | |
| B4. | During the <u>past 12 months</u> , how many different times did you stay in the hospital overnight or longer? | 00 NONE times | | | | | | | | |
| B5. | During the <u>past 12 months</u> , about how many times did you see or talk to a medical doctor or assistant? (Do not count doctors seen while an overnight patient in a hospital.) | 00 NONE times number | | | | | | | | |
| B6. | About how long has it been since you <u>last</u> saw or talked to a medical doctor or other health professional about your health? Include health professionals seen while a patient in a hospital. | 00 | | | | | | | | |
| B7. | IF UNDER 60 YEARS OLD, MARK BOX, OTHERWISE ASK: During the <u>past 12 months</u> , about how many times have you been in a nursing or convalescent home? | 01 UNDER 60 YEARS 00 NONE times number | | | | | | | | |

| SELE | SELECTED CONDITIONS (AGES 17+ YEARS) | | | | | | | | | | | | | | | | | |
|------|--|---|-------------|---|----------------------------|---|--|--------|------------|---------------|--------------------------|----------|---|----------|------------------------------|--|--|---|
| C1. | Has a doctor <u>ever</u> told you that you had C2. Do you still have ? IF "YES," ASK C2 AND C3 BEFORE GOING TO NEXT | | | | | | | | | | | СЗ. | How old were you when you were <u>first</u> told you had? | | | | | |
| | | VDITION. | | | | | | | | ************* | | | | | | | | |
| | a. | Arthritis? | 1 | | Y (C3) | 2 | | N (c) | | | | | | | | | | age |
| | b. | Which type of arthritis was it? Was it rheumatoid arthritis or osteoarthritis? | 1 2 9 | _ | Rheumat Osteoarth DK | | | s | | 1,004,004.01 | ******** | ******* | | 020 041) | | - | | |
| | с. | Congestive heart failure? | 1 | | Y (C3) | 2 | | N (d) | ********** | ***** | erux | | ¢14200448 | | 16 ko X es es es es es es es | | | age |
| | d. | Stroke? | 1 | | Y (C3) | 2 | | N (e) | | | | | | | | | | age |
| | е, | Asthma? | 1 | | Y (C2) | 2 | | N (f) | 1 | | Y | 2 | | N | 9 🗌 | DK | | age |
| | f. | Chronic bronchitis? | 1 | | Y (C2) | 2 | | N (g) | 1 | | Υ | 2 | | N | 9 🗌 | DK | | age |
| | g. | Emphysema? | 1 | | Y (C3) | 2 | | N (h) | | | | | | | | | | age |
| | h. | Hay fever? | 1 | | Y (C2) | 2 | | N (i) | 1 | | Y | 2 | | N | 9 🗌 | DK | | age |
| | i. | Cataracts? | 1 | | Y (C3) | 2 | | N (j) | | | | •••• | | ••••• | •••••• | ***** | | age |
| | j. | Goiter? | 1 | | Y (C2) | 2 | | N (k) | 1 | | Υ | 2 | | N | 9 □ | DK | | age |
| | k. | Other thyroid disease? | 1 | | Y (C2) | 2 | | N (I) | 1 | | Y | 2 | | N | 9 🔲 | DK | | age |
| | 1. | Lupus? | 1 | | Y (C3) | 2 | | N (m) | | | | | | | | | | age |
| | m. | Gout? | 1 | | Y (C3) | 2 | | N (n) | | | | | | | *************** | 1+4+1+1 (1+4+++++++++++++++++++++++++++++++++++ | | age |
| | n. | Skin cancer? | 1 | | Y (C3) | 2 | | N (o) | | | (#30) to to ² | ******** | | ******* | | | | age |
| | 0. | Other cancer? | 1 | | Y (C3) | 2 | | N (C4) | | | | V | Vhere | was f | | | | you were <u>first</u> told? ODED → SPECIFY |

| | Next, I'd like to ask you a few questions about your family's health. | | | | | | |
|--------|--|--|--|--|--|--|--|
| C4. | Including living and deceased, were any of your <u>blood</u> relatives (including grandparents, parents, brothers, sisters) <u>ever</u> told by a doctor that they had | C5. Which biological family members? MARK ALL THAT APPLY. | | | | | |
| | a. diabetes? | 1 grandmother | | | | | |
| | 1 Y (C5) | 2 grandfather | | | | | |
| | 2 N (b) | 3 mother | | | | | |
| | 9 DK (b) | 4 father | | | | | |
| | – | 5 Sister | | | | | |
| | | 6 brother | | | | | |
| | | 7 aunt | | | | | |
| | | 8 uncle | | | | | |
| | | 9 cousin | | | | | |
| •••••• | b. a heart attack before the age of 50? | Which biological family members? | | | | | |
| | 1 Y (C5) | MARK ALL THAT APPLY. | | | | | |
| | 2 N (C6) | 1 grandmother | | | | | |
| | 9 DK (C6) | 2 grandfather | | | | | |
| | | 3 mother | | | | | |
| | | 4 father | | | | | |
| | | 5 sister | | | | | |
| | | 6 brother | | | | | |
| | | 7 aunt | | | | | |
| | | 8 uncle | | | | | |
| | | 9 Cousin | | | | | |
| C6. | Was your biological mother ever told by a doctor that she had osteoporosis, sometimes called thin or brittle bones? | 1 | | | | | |
| C7. | Did your biological mother ever fracture her hip? | 1 Y How 2 N (D1) 9 DK (D1) many times? | | | | | |
| | | number | | | | | |
| C8. | ASK FOR FIRST HIP FRACTURE ONLY: About how old was she when she fractured her hip (the first time)? | age OR under 50 | | | | | |
| L | | | | | | | |

| DIAB | ETES (AGES 17+ YEARS) | |
|------|---|--|
| D1. | Have you ever been told by a doctor that you have diabetes or sugar diabetes? | 1 Y 2 N (E1) 9 DK (E1) |
| | IF "BORDERLINE" OR "PREDIABETIC", CODE 2. | |
| D2. | CHECK ITEM. REFER TO SEX OF SP. | 1 MALE (D5) 2 FEMALE |
| D3. | Were you pregnant when you were told that you had diabetes? | 1 Y 2 N (D5) |
| D4. | Other than during pregnancy, has a doctor ever told you that you have diabetes or sugar diabetes? | 1 Y 2 N (E1) |
| D5. | How old were you when a doctor <u>first</u> told you that you had diabetes (not including during pregnancy)? | age |
| D6. | Are you <u>now</u> taking insulin? | 1 Y 2 N (D10) |
| D7. | About how often do you take insulin? | times per } 1 |
| D8. | On the average, how many units per day do you take? | units per day |
| D9. | For how long have you been taking insulin? | 00 LESS THAN 1 MONTH 1 months 2 years |
| D10. | Are you <u>now</u> taking diabetes pills to lower your blood sugar? These are sometimes called oral agents or oral hypoglycemic agents. | 1 Y 2 N |
| D11. | On your own, how often do you check yourself for a. glucose or sugar in your urine? | times per |
| | b. glucose or sugar in your blood? | times per |
| | | 00 NEVER |

| D12. | How long ago was the <u>last</u> time you had your eyes examined by a doctor? | 1 days 2 weeks 3 months 4 years | |
|------|---|---------------------------------|---|
| | | 00 NEVER (D14) | |
| | | 99 DK (D14) | |
| D13. | How long has it been since you had an eye exam in which your pupils were dilated? (This would have made you temporarily sensitive to bright light.) | 1 | |
| D14. | Have you ever had photographs taken of the retina of your eyes? | 1 Y 2 N 9 DK | - |
| D15. | Has a doctor ever told you that diabetes has affected your eyes or that you had retinopathy? | 1 | |

| HIGH | HIGH BLOOD PRESSURE/CHOLESTEROL (AGES 17+ YEARS) | | | | | | |
|--|---|--|--|--|--|--|--|
| E1. | About how long has it been since you <u>last</u> had your blood pressure taken by a doctor or other health professional? | 1 | | | | | |
| E2. | Have you ever been told by a doctor or other health professional that you had hypertension, also called high blood pressure? | 1 Y 2 N (E6) 9 DK (E6) | | | | | |
| E3. | Were you told on 2 or more <u>different</u> visits that you had hypertension, also called high blood pressure? | 1 | | | | | |
| E4. | ASK TREATMENTS IN E4a-d, THEN GO TO E5a-d FOR EACH TREATMENT WITH "YES" IN E4. Because of your (high blood pressure/hypertension), have you ever been told by a doctor or other health professional to | FOR EACH "YES" IN E4, ASK: E5. Are you <u>now</u> | | | | | |
| | a. take prescribed medicine? 1 Y 2 N | a. taking prescribed medicine? 1 TY 2 N | | | | | |
| ••••• | b. control your weight or lose weight? 1 Y 2 N | b. controlling or losing weight? 1 Y 2 N | | | | | |
| *********** | c. cut down on salt or sodium in your diet? 1 Y 2 N | c. using less salt or sodium in your diet? 1 Y 2 N | | | | | |
| | d. do anything else? 1 Y What else? 2 N | d. (<u>ACTIVITY SPECIFIED</u> <u>IN E4d.</u>)? | | | | | |
| | IF YES, MARK ALL THAT APPLY 2 ALCOHOL RESTRICTION | 1 Y 2 N 1 Y 2 N 1 Y 2 N 1 Y 2 N | | | | | |
| E6. Have you ever had your blood cholesterol checked? | | 1 Y 2 N (E10) 9 DK (E10) | | | | | |
| E7. Have you ever been told by a doctor or other health professional that your blood cholesterol level was high? | | 1 Y 2 N (E10) | | | | | |

| | ASK TREATMENTS IN E8a-d. THEN GO TO E9a-d FOR EACH TREATMENT WITH "YES" IN E8. | FOR EACH "YES" IN E8, ASK: |
|------|---|--|
| E8. | Because of your high blood cholesterol, have you ever been told by a doctor or other health professional to | E9. To lower your blood cholesterol, are you now following this advice to |
| | a. eat fewer high fat or high cholesterol foods? 1 Y 2 N | a. eat fewer high fat or high cholesterol foods? 1 Y 2 N |
| | b. control your weight or lose weight? 1 Y 2 N | b. control your weight or lose weight? 1 Y 2 N |
| | c. exercise? 1 Y 2 N | c. exercise? 1 Y 2 N |
| | d. take prescribed medicine? 1 Y 2 N | d. take prescribed medicine? 1 Y 2 N |
| E10. | CHECK ITEM. MARK <u>FIRST</u> APPLICABLE BOX. | 1 "NO" OR "DK" IN E6, OR "NO" IN E7 (ASK ALL OF E11a-c) 2 "NO" TO EITHER E8a, b, OR c (ASK CORRESPONDING E11a-c ITEM) 3 OTHERWISE (F1) |
| E11. | To lower your blood cholesterol, have you made any lasting and major changes on your own? Specifically a. do you eat fewer high fat or high cholesterol foods? | 1 🗀 Y 2 🗀 N |
| | b. have you controlled your weight or lost weight? | 1 🗌 Y 2 🗍 N |
| | c. do you exercise more? | 1 🗌 Y 2 🗍 N |

| CAR | DIOVASCULAR DISEASE (AGES 17+ YEARS) | |
|------|--|--|
| F1. | Have you ever had any pain or discomfort in your chest? | 1 Y 2 N (F10) |
| F2. | Do you get it when you walk uphill or hurry? | 1 Y 2 N (F9) 3 never walks uphill or hurries |
| F3. | Do you get it when you walk at an ordinary pace on level ground? | 1 Y 2 N |
| F4. | What do you do if you get it while you are walking? Do you stop or slow down, or continue at the same pace? CHECK "STOP OR SLOW DOWN" IF SP CARRIES ON AFTER TAKING NITROGLYCERINE. | 1 stop or slow down 2 continue at the same pace (F9) |
| F5. | If you stand still, what happens to it? Is the pain or discomfort relieved or not relieved? | 1 relieved 2 not relieved (F9) |
| F6. | How soon is the pain relieved? | 1 |
| F7. | Where is the pain or discomfort located? | MARK ALL AREAS INDICATED. |
| | MARK ALL THAT APPLY. | RIGHT LEFT |
| | PROBE IF NECESSARY: Please show me where it is located. | 1 |
| F8. | Do you feel it anywhere else? | 1 |
| F9. | Have you ever had a <u>severe</u> pain across the front of your chest <u>lasting for half an hour or more</u> ? | 1 Y 2 N 9 DK |
| F10. | Has a doctor ever told you that you had a heart attack? | 1 Y 2 N (F14) |
| F11. | How many heart attacks have you had? | number |
| | | 99 |

| F12. | How old were you when you had your (first) attack? | age |
|-------------|--|---|
| | | 99 DK |
| F10 | IF ONLY ONE ATTACK IN F11, GO TO F14. OTHERWISE, ASK: | age |
| F13. | How old were you when you had your <u>last</u> attack? | 99 DK |
| F14. | Do you get pain in either leg while you are walking? | 1 N (F23) |
| F15. | Does this pain ever begin while you are standing still or sitting? | 1 🔲 Y (F23) 2 🗍 N |
| F16. | In what part of your leg do you feel it? | 1 PAIN INCLUDES CALF/CALVES |
| | IF CALVES NOT MENTIONED, PROBE: Anywhere else? | 2 PAIN DOES NOT INCLUDE CALF/CALVES (F23) |
| F17. | Do you get it if you walk uphill or hurry? | 1 🔲 Y |
| | | 2 N (F23) |
| · · · · · · | | 3 never walks uphill or hurries |
| F18. | Do you get it if you walk at an ordinary pace on level ground? | 1 Y 2 N |
| F19. | Does this pain ever disappear while you are walking? | 1 |
| F20. | What do you do if you get it while you are walking? Do you stop or slow down or continue at the same pace? | 1 stop or slow down 2 continue at the same pace (F23) |
| F21. | What happens to it if you stand still? Is the pain relieved or not relieved? | 1 relieved 2 not relieved (F23) |
| F22. | How soon is it relieved? | 1 10 minutes or less |
| <u> </u> | | 2 more than 10 minutes |
| F23. | Have you ever had weakness or paralysis in one side of your face, an arm, or a leg lasting more than 5 minutes? | 1 Y 2 N |
| F24. | Have you ever had pronounced numbness, tingling, or loss of sensation involving one side of your face or body and lasting more than 5 minutes? | 1 Y 2 N |
| F25. | Have you ever had a spell of marked loss of vision in one eye or pronounced blurring of vision in both eyes <u>lasting more than 5 minutes</u> ? | 1 Y 2 N |
| F26. | Have you ever had a spell of severe dizziness lasting more than 5 minutes? | 1 N 2 N |
| F27. | Have you ever had a spell during which you experienced a problem with your ability to speak, or to understand what someone was saying to you? | 1 Y 2 N |

| MUS | CULOSKELETAL CONDITIONS (AGES 20+ YEARS) | |
|-----|---|---|
| G1. | CHECKITEM. REFER TO AGE OF SP. | 1 UNDER 20 YEARS (H1) 2 20+ YEARS |
| G2. | Have you ever had pain in your back on most days for at least one month? | 1 Y 2 N (G5) 9 DK (G5) |
| G3. | Have you had this pain within the past 12 months? | 1 Y 2 N 9 DK |
| G4. | HAND CARD HAQ-2. In what part of your back (is/was) the pain usually located? | MARK ALL AREAS INDICATED. |
| | | 1 2 3 |
| G5. | Has a doctor ever told you that you had broken or fractured your | G6. How many times have you broken or fractured your? |
| | a. Hip? 1 Y (G6) 2 N (b) | times number |
| | b. Wrist? 1 Y (G6) 2 N (c) (Not forearm or hand) | times number |
| | c. Spine? 1 Y (G6) 2 N (G7) | times number |

| G7. | CHECK ITEM. REFER TO G5. | | 1 | |
|------|---|--|-----------------|--|
| G8. | REFER TO G5. FOR EACH FRACTURE REPORTED, RECORD SITE AND THEN ASK G9. | G9. About how old were you fractured your (1st/2nd) time]? | | G10. IF AGE 50 OR OLDER IN G9, ASK: Did that fracture occur as a result of a fall from standing height or less, or did it occur because of a harder fall, or dld it occur from a car accident or other severe trauma? |
| 1 | SITE OF FRACTURE | OR | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| 2. | | age OR | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| 3. | | age OR OR G666 | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| 4. | | OR OR 666 | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| 5. | | 000 | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| 6. | | age | under 50 50+ | 1 standing height or less 2 harder fall 3 severe trauma |
| G11. | Has a doctor ever told you that you had called thin or brittle bones? | nad osteoporosis, sometimes | | 1 Y 2 N (G13) 9 DK (G13) |
| G12. | Were you treated for osteoporosis? | | | 1 Y 2 N 9 DK |

| G13. | CHECK ITEM. REFER TO AGE OF SP. | 1 |
|------|--|---|
| G14. | About how many times have you fallen in the past 12 months and landed on the floor or hit an object? | 00 NONE (G16) times |
| G15. | Did (that fall/any of those falls) cause a broken bone, a serious injury like a head injury, or cause you to seek medical care? | 1 Y 2 N 9 DK |
| G16. | Have you ever had <u>pain</u> in your hands <u>on most days for at least</u> <u>6 weeks</u> ? This also includes aching and stiffness. | 1 Y 2 N (G18) 9 DK (G18) |
| G17. | Please show me which joints have been painful or stiff in either your ri | ight hand, left hand, or both hands. |
| | SP SHOULD INDICATE JOINTS ON THEIR OWN HANDS. | |
| | CIRCLE ALL AREAS INDICATED. | |
| | 513 3 4 5 11 6 13 6 13 6 15 6 11 6 15 6 11 6 15 6 15 | 16 31 18 19 20 26 23/ 24/ 25 23/ 24/ 25 28/ 29/ 28/ 28/ 29/ 28/ 29/ 28/ 28/ 28/ 29/ 28/ 28/ 28/ 28/ 28/ 28/ 28/ 28/ 28/ 28 |
| | RIGHT | LEFT |

| G18. | Have you ever had <u>swelling</u> in your hands that hurt when the joint was touched on <u>most days for at least 6 weeks</u> ? | 1 Y 2 N (G20) 9 DK (G20) |
|------|---|-------------------------------------|
| G19. | Please show me which joints have been swollen in either your right has SP SHOULD INDICATE JOINTS ON THEIR OWN HANDS. CIRCLE ALL AREAS INDICATED. | and, left hand, or both hands. |
| | 013 + 3 013 + 5 014 5 015 | 18 19 20 21 23 24 25 27 28 29 |
| | RIGHT | LEFT |

| G20. | Have you ever had stiffness in your hands when first getting out of bed in the morning on most days for at least 6 weeks? | 1 | | Y | 2 | | N (G22) | 9 | | DK (G22) |
|------|--|------------------|------|--|----------|------|---------|---|--|----------|
| G21. | How long after getting up and moving around does the morning stiffness last? | 1 2 3 4 | 2 | less than 30 minutes 30 min 1 hour 1-3 hours more than 3 hours | | | | | | |
| G22. | Have you ever had <u>pain</u> in your knees on <u>most days for at least</u> <u>6 weeks</u> ? This also includes aching and stiffness. | 1 | i | Υ | 2 | | N (G25) | 9 | | DK (G25) |
| G23. | Did you have the pain in your right knee, left knee, or both knees? | 1 | | right | 2 | | left | 3 | | both |
| G24. | When the knee pain is present, does it hurt at rest as well as when moving? | 1 | I | Υ | 2 | | N | 9 | | DK |
| G25. | Have you ever had swelling in your knees that hurt when the joint was touched on most days for at least 6 weeks? | 1 | ı | Y | 2 | | N (G27) | 9 | | DK (G27) |
| G26. | Did you have the swelling in your right knee, left knee, or both knees? | 1 | 1 | right | 2 | | left | 3 | | both |
| G27. | Have you ever had stiffness in your knees when first getting out of bed in the morning on most days for at least 6 weeks? | 1 | 1 | Y | 2 | | N (G30) | 9 | | DK (G30) |
| G28. | Did you have the stiffness in your right knee, left knee, or both knees? | 1 | 1 | right | 2 | | left | 3 | | both |
| G29. | How long after getting up and moving around does the morning stiffness last? | 3 | 2 | less tha 30 min. 1-3 hou more th | 1 irs | hour | | | | |
| G30. | Have you ever had pain in your hips on most days for at least 6 weeks? | 1 | 1 | Υ | 2 | | N (G32) | 9 | | DK (G32) |
| G31. | Did you have the pain in your right hip, left hip, or both hips? | 1 | 1 | right | 2 | | left | 3 | | both |
| G32. | Has a doctor ever told you that you had hip dysplasia? | 1 | 1 | Y | 2 | | N | 9 | | DK |
| G33. | Has a doctor ever told you that you had scoliosis? | 1 | 1 | Y | 2 | | N | 9 | | DK |
| G34. | Do you have a chronic limp (a limp that has lasted more than 3 months)? | | 1 | Y | 2 | | N | | | |

| PHY | PHYSICAL FUNCTIONING QUESTIONS (AGES 17+ YEARS) | | | | | | | |
|------|--|------------------|--------------------|--------------------|-----------------|---------------------|--|--|
| | HAND CARD HAQ-3. | | <u>-</u> | | | | | |
| | Now I am going to read a list of activities with which some people have difficulty because of a health or physical reason. Using the categories on this card, please tell me if you have no difficulty, some difficulty, much difficulty or are unable to do these activities at all when you are by yourself and without the use of aids. | | | | | | | |
| | DO NOT INCLUDE <u>TEMPORARY</u> CONDITIONS <u>LIKE</u> PREGNANCY OR BROKEN LIMBS. | No difficulty | Some difficulty | Much difficulty | Unable to do | DK OR DOESN'T DO | | |
| H1. | Walking for a quarter of a mile (that is about 2 or 3 blocks)? | 1 🔲 | 2 🗍 | 3 🗌 | 4 🔲 | 9 🗌 | | |
| H2. | Walking up 10 steps without resting? | 1 🔲 | 2 🗌 | 3 🗌 | 4 🗆 | 9 🗌 | | |
| Н3. | Stooping, crouching, or kneeling? | 1 🗆 | 2 📋 | 3 🗌 | 4 🗆 | 9 🗌 | | |
| H4. | Lifting or carrying something as heavy as 10 pounds (like a sack of potatoes or rice)? | 1 | 2 🗌 | 3 🗍 | 4 🗆 | 9 🗍 | | |
| H5. | Doing chores around the house (like vacuuming, sweeping, dusting, or straightening up)? | - | 2 🗌 | 3 🗌 | 4 🗆 | 9 🗌 | | |
| H6. | Preparing your own meals? | 1 🔲 | 2 🗌 | 3 🗍 | 4 🔲 | 9 🗌 | | |
| H7. | Managing your money (such as keeping track of your expenses or paying bills)? | 1 [| 2 🗌 | 3 🗌 | 4 🗆 | 9 🗌 | | |
| H8. | Walking from one room to another on the same level? | 1 🗆 | 2 🗌 | 3 🗌 | 4 🔲 | 9 🗌 | | |
| H9. | Standing up from an armless straight chair? | 1 🔲 | 2 🗌 | 3 🗌 | 4 🔲 | 9 🗌 | | |
| H10. | Getting in or out of bed? | 1 🗆 | 2 🗌 | 3 🗌 | 4 🔲 | 9 🗌 | | |
| H11. | Eating, like holding a fork, cutting food or drinking from a glass? | 1 🗆 | 2 🗌 | з 🗌 | 4 🔲 | 9 🗌 | | |
| H12. | Dressing yourself, including tying shoes, working zippers, and doing buttons? | 1 🗆 | 2 | 3 🗌 | 4 🗍 | 9 🗌 | | |
| H13 | Because of any impairment or health problem, do you need the help of other persons with personal care needs such as eating, bathing, dressing or getting around this home? | 1 🗆 | Y (H15) 2 | □ N | | | | |
| H14 | Because of any impairment or health problem, do you need the help of other persons in handling routine needs, such as everyday household chores, doing necessary business, shopping or getting around for other purposes? | 1 🗆 | Y 2 | N | | | | |
| H15 | Do you usually use any device to help you get around such as a cane, wheelchair, crutches or walker? | 1 🗆 | Y 2 | : | | | | |
| H16 | . Do you usually use any special eating utensils? | 1 🗆 | Y 2 | : | | | | |
| H17 | . Do you usually use any aids or devices to help you dress (such as button hooks, zipper pulls, long-handled shoe horn, etc.)? | 1 🗆 | Y 2 | : | 9 [|] DK | | |

| GALI | GALLBLADDER DISEASE (AGES 17+ YEARS) | | | | | | |
|------|---|-----------------------------------|--|--|--|--|--|
| JO. | CHECK ITEM. REFER TO AGE OF SP. | 1 | | | | | |
| J1. | HAND CARD HAQ-4. Please look at this diagram. During the past 12 months have you had pain in the area shaded on the diagram? FOR FEMALES DO NOT INCLUDE MENSTRUAL PAIN. Sometimes people have more than one type of pain. I am going to ask you a few questions about the pain that has been the most uncomfortable in the past 12 months. For the pain that was most uncomfortable please show me where the pain was located. | 1 | | | | | |
| | | 1 2 3 | | | | | |
| J3. | During the <u>past 12 months</u> , what is the longest time that one episode of this pain has lasted? | 1 minutes 2 hours 3 days | | | | | |
| J4. | On how many days in the past 12 months have you had this pain? | days number | | | | | |
| J5. | When you had this pain, was it continuous, or did it tend to come and go? | 1 continuous 2 come and go 3 both | | | | | |
| J6. | When you had the pain, if you moved around, did you hurt more, less, or was there no difference? | 1 | | | | | |
| J7. | Have you ever seen a doctor about this pain? | 1 Y 2 N (J9) | | | | | |

| J8. | What did the doctor say caused the pain? | 01 | |] GALL | GALLSTONES/GALLBLADDER PROBLEMS (J11) | | | | | | |
|------|---|----|----|--------|---------------------------------------|------|-------|-----------------------|-------|-------|----------|
| | | 02 | | ULCE | ULCER | | | | | | |
| | | 03 | | APPE | APPENDICITIS OR APPENDIX PROBLEMS | | | | | MS | |
| | | 04 | |] SPAS | SPASTIC COLON OR IRRITABLE BOWEL | | | | | EL | |
| | | 05 | Е | DIVE | RTIC | CULI | TIS O | R DIVERTI | CUL | OSIS | |
| | | 06 | |] отні | ER | 07 | • | SPE | CIFY | , | |
| J9. | Has a doctor ever told you that you had gallstones? | 1 | Γ |) Y | | 2 | | N (J12) | 9 | | DK (J12) |
| J10. | What was the reason you visited the doctor the time that he told you that you had gallstones? | 1 | | pain | | | | | | | |
| | triat you nad gailstories? | 2 | | other | r 3 | | | spe | ecify | | |
| J11. | Have you ever had medical treatment to dissolve or remove gallstones? Do not include surgery. | 1 | |] Y | | 2 | | N | 9 | | DK |
| J12. | Have you ever had gallbladder surgery? | 1 | |] Y | | 2 | | N (J14) | 9 | | DK (J14) |
| J13. | How old were you when you had your gallbladder surgery? | | - | age | | | | | | | |
| J14. | CHECK ITEM. REFER TO J8, J10, AND J12. | 1 | | | | | | LL BLADD B AND YES | | | |
| | | 1 | | PAIN | l (1) | MAF | RKED | IN J10 AN | D YE | S (1) | IN J12 |
| | | 2 | _[| Пто [| ER (| (K1) | | | | | |
| J15. | Did the pain that caused you to visit the doctor continue after your gallbladder surgery? | 1 | |] Y (K | 1) | 2 | | N (K1) | 9 | | DK (K1) |
| J16. | Has a doctor ever told you that you had galistones? | 1 | |] Y | | 2 | | N | 9 | | DK |
| J17. | Have you ever had gallbladder surgery? | 1 | |] Y | | 2 | | N (K1) | 9 | | DK (K1) |
| J18. | How old were you when you had your gallbladder surgery? | | - | age | | | | | | | |

| KIDN | EY CONDITIONS (AGES 17+ YEARS) | |
|-------|---|---|
| K1. | Have you ever had kidney stones? | 1 Y 2 N (K4) |
| K2. | How many times have you passed a kidney stone? | 00 NEVERtimes number |
| • КЗ. | Have you ever had any of the following kinds of treatment for kidney stones | |
| - | a. medication? | 1 Y How old were you 2 N when you had your first treatment? |
| | b. a treatment used to crush kidney stones called lithotripsy? | 1 Y How old were you 2 N when you had your first treatment? |
| | c. surgery for removing kidney stones? | 1 Y How old were you 2 N when you had your first treatment? |
| K4. | How many times have you had a bladder infection, also called urinary tract infection, UTI, or cystitis? | 1 |
| K5. | How many of these infections did you have during the past 12 months? | 00 NONEinfections number |
| K6. | Have you ever had symptoms of a bladder infection (such as pain in your bladder and frequent urination) that lasted more than 3 months? | 1 Y 2 N (K9) 9 DK (K9) |
| K7. | When you had this condition, were you told that you had interstitial cystitis or painful bladder syndrome? | 1 Y 2 N (K9) 9 DK (K9) |
| K8. | How old were you when you were <u>first</u> told that you had interstitial cystitis or painful bladder syndrome? | years number 99 DK |
| K9. | (Not including during pregnancy) how many times a night do you usually get up to urinate (pass water)? | 1 |
| K10. | When you urinate (pass water) do you <u>usually</u> feel like you have not completely emptied your bladder? | 1 Y 2 N |
| K11. | Do you usually have trouble starting to urinate (pass water)? | 1 🛮 Y 2 🗒 N |

| K12. | CHECK ITEM. REFER TO SEX AND AGE OF SP. | 1 FEMALES (L1) |
|------|--|-----------------------------|
| | | 2 MALES UNDER 60 YEARS (L1) |
| | | 3 MALES 60+ YEARS |
| K13. | Has the force of your urinary stream or water <u>decreased</u> over the years? | 1 Y 2 N |
| K14. | Have you ever had surgery for your prostate not related to cancer? | 1 🗆 Y 2 🗀 N |

| RESF | RESPIRATORY AND ALLERGY (AGES 17+ YEARS) | | | | | | |
|------|--|---|--|--|--|--|--|
| L1. | Do you usually cough on most days for <u>3 consecutive months or more</u> during the year? | 1 Y 2 N (L3) | | | | | |
| L2. | For how many years have you had this cough? | 00 less than 1 year | | | | | |
| | | years number | | | | | |
| L3, | Do you bring up phiegm on most days for <u>3 consecutive months</u> or more during the year? | 1 Y 2 N (L5) | | | | | |
| L4. | For how many years have you had trouble with phiegm? | 00 less than 1 year | | | | | |
| | | years number | | | | | |
| L5. | Are you troubled by shortness of breath when hurrying on level ground or walking up a slight hill? | 1 🗌 Y 2 🗍 N | | | | | |
| L6. | Have you had wheezing or whistling in your chest at any time in the past 12 months? | 1 N (L10) | | | | | |
| L7. | How many episodes of wheezing or whistling have you had in the past 12 months? | episodes number | | | | | |
| L8. | How many times in the <u>past 12 months</u> were you hospitalized overnight or longer for these episodes of wheezing or whistling? | 00 NONE | | | | | |
| | | times number | | | | | |
| L9. | During the past 12 months, how many times have you gone to a doctor's office or a hospital emergency room for one of these | 00 NONE | | | | | |
| | episodes of wheezing or whistling? | times number | | | | | |
| L10. | Apart from when you have a cold, does your chest ever sound wheezy or whistling? | 1 🗌 Y 2 🗍 N | | | | | |
| L11. | During the past 12 months, have you had any episodes of | | | | | | |
| | a. stuffy, itchy, or runny nose? | 1 Y 2 N | | | | | |
| | b. watery, itchy eyes? | 1 Y 2 N | | | | | |
| | IF NO IN BOTH L11 a AND b, CODE NONE. | 000 NONE | | | | | |
| L12. | During the <u>past 12 months</u> , how many episodes of stuffy, itchy, or runny nose, or watery, itchy eyes, have you had? | 666 CONSTANTLY/CONTINUOUSLY | | | | | |
| | | episodes number | | | | | |
| L13. | CHECKTIEM, REFER TO L6 - L11. | 1 YES IN AT LEAST ONE OF L6, L10 OR L11a-b. | | | | | |
| | | 2 "NO" IN ALL OF L6, L10 AND L11a-b. (L16) | | | | | |

| L14. | Are any of the symptoms we have just talked about brought on by IF NECESSARY STATE SYMPTOMS: "Wheezing, whistling, | |
|--------|---|---|
| | stuffy, itchy, or runny nose, watery, itchy eyes." a. exercise or cold air? | 1 |
| | b. animals? | 1 |
| •••••• | c. house dust? | 1 |
| | d. work environment (PROBE: Do you feel better on days off)? | 1 |
| | e. pollen? | 1 Y 2 N (L16) 9 DK (L16) |
| L15. | During which months of the year does pollen make your symptoms worse? | 1 ALL MONTHS |
| | CIRCLE ALL THAT APPLY. | J F M A M J J A S O N D |
| L16. | Within an hour after eating something, have you ever had a severe reaction, such as itching all over, trouble breathing, flushing, hives, or swelling of the face or hands or feet? | 1 Y 2 N |
| L17. | Within an hour after receiving allergy shots or allergy tests, have you ever had a severe reaction, such as itching all over, trouble breathing, flushing, hives, or swelling of the face or hands or feet? | 1 Y 2 N NEVER RECEIVED ALLERGY SHOTS OR TESTS DK |
| L18. | Have you <u>ever</u> given up or had to avoid a pet because of allergies? | 1 Y 2 N |
| L19. | During the past 12 months, have you had any of the following conditions? | L20. How many episodes of have you had in the past 12 months? |
| | a. Cold or flu? 1 Y (L20) 2 N (b) | aepisodes number |
| | b. Sinusitis or sinus problems? 1 Y (L20) 2 N (c) | b. episodes number |
| | c. Pneumonia? 1 Y (L20) 2 N (M1) | cepisodes number |

| DIET (AGES 17+ YEARS) | | | | | | |
|-----------------------|--|----------------------------------|--|--|--|--|
| M1. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 60 YEARS (M4) | | | | |
| | | 2 | | | | |
| | Now I'm going to ask you some general questions about your eating habits. | | | | | |
| M2. | Some cities, churches, and other organizations provide meals for senior citizens. Do you receive meals from any such programs? | 1 Y 2 N (M4) | | | | |
| M3. | Are these meals ever delivered to your home, such as Meals on Wheels? | 1 Y 2 N | | | | |
| M4. | How often do you eat <u>breakfast</u> - every day, on some days, | 1 every day | | | | |
| | rarely, never, or on weekends only? | 2 some days | | | | |
| | | 3 rarely | | | | |
| | | 4 never | | | | |
| | | 5 weekends only | | | | |
| M5. | How tall are you without shoes? | feet/ inches | | | | |
| | | or centimeters | | | | |
| | | 999 DK | | | | |
| M6. | How much do you weigh without clothes or shoes? | pounds | | | | |
| | FEMALES: IF CURRENTLY PREGNANT, ASK: | or kilograms | | | | |
| | About how much did you weigh before your pregnancy? | 999 DK | | | | |
| M7. | CHECK ITEM. REFER TO AGE OF SP. | 1 25 YEARS OR LESS (M10) | | | | |
| | | 2 26 YEARS THROUGH 35 YEARS (M9) | | | | |
| | | 3 36 YEARS AND OLDER | | | | |
| M8. | How much did you weigh 10 years ago? | pounds | | | | |
| | | or kilograms | | | | |
| | <u> </u> | 999 DK | | | | |
| M9. | How much did you weigh when you were 25 years old? | pounds | | | | |
| | | or kilograms | | | | |
| | | 999 DK | | | | |
| M10. | Up to the present time, what is the most you have ever | pounds | | | | |
| | weighed? (FEMALES): Do not include any times when you were pregnant. | or kilograms | | | | |
| | | 999 | | | | |
| | | <u> </u> | | | | |

| M11. | Do you consider yourself <u>now</u> to be overweight, underweight, or about the right weight? | 1 overweight 2 underweight 3 about the right weight |
|------|---|---|
| M12. | Would you like to weigh more, less, or stay about the same? | 1 more 2 less 3 stay about the same |
| M13. | During the past 12 months, have you tried to lose weight? | 1 🗌 Y 2 🗍 N |
| M14. | During the <u>past 12 months</u> , have you changed what you eat because of any medical reason or health condition? | 1 Y 2 N (N1) |
| M15. | What was the medical reason or health condition that caused you to change what you eat? MARK ALL THAT APPLY. | 01 OVERWEIGHT/OBESITY 02 HIGH BLOOD PRESSURE/HYPERTENSION 03 HIGH BLOOD CHOLESTEROL 04 DIABETES 05 HEART DISEASE 06 ALLERGY 07 ULCER 08 OTHER 10 SPECIFY 99 DK |

| FOOD FREQUENCY (AGES 17+ YEARS) | | | | | | | |
|---------------------------------|--|---|--|--|--|--|--|
| | Now | D CARD HAQ-5. I'm going to ask you how often you usually eat | The North Mark | | | | |
| | certain foods. When answering think about your usual diet over the past month. Tell me how often you usually ate or drank these foods per day, per week, per month, or not at all. | | Times Day Week Month Never DKper 1 D 2 W 3 M or 4 N 9 DK | | | | |
| N1. | MILK | AND MILK PRODUCTS | | | | | |
| | | are milk and milk products. Do not include their use oking. | | | | | |
| ******* | a, | How often did you have chocolate milk and hot cocoa? | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| ******* | b. | How often did you have milk to drink or on cereal? Do not count <u>small</u> amounts of milk added to coffee or tea. | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| ********* | с. | CHECK ITEM. REFER TO RESPONSES IN N1a AND N1b. | 1 TNEVER" IN BOTH N1a AND N1b (N1e) 2 OTHER | | | | |
| | d. | What type of milk was it? Was it <u>usually</u> whole, 2%, 1%, skim, nonfat, or some other type? | 01 whole/regular 02 2%/low fat | | | | |
| | | IF SP CANNOT PROVIDE USUAL TYPE, MARK ALL THAT APPLY. | 03 | | | | |
| i | | | 05 buttermilk 06 evaporated | | | | |
| | | | 07 other 08 | | | | |
| ••••• | | | 99 DK specify | | | | |
| | е. | Yogurt and frozen yogurt | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| | f. | Ice cream, ice milk, and milkshakes | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| | g. | Cheese, all types including American, Swiss, cheddar, and cottage cheese | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| | h. | Pizza, calzone, and lasagna | per 1 D 2 W 3 M or 4 N 9 DK | | | | |
| | i. | Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadilias | per 1 D 2 W 3 M or 4 N 9 DK | | | | |

| N2. | 2. MAIN DISHES, MEAT, FISH, CHICKEN, AND EGGS | | Times | Day | Week | Month | | Never | DK |
|--------|---|--|------------|-------|-------|-------|----|--------|---------------|
| | Next | are main dishes, meat, fish, chicken, and eggs. | ,,,,,,,,,, | 1 □ D | 2 | 3 🗌 M | or | 4 □ N | 9 □ DK |
| | | | | | | | | | |
| •••••• | a. | How often did you eat any type of stew or soup containing vegetables, including minestrone, tomato, and split pea? | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 □ DK |
| | b. | Spaghetti and pasta with tomato sauce | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 <u></u> DK |
| •••••• | C. | Bacon, sausage (chorizo) and luncheon meats such as hot dogs, salami, and bologna | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 🗌 DK |
| | d. | Liver and other organ meats such as heart, kidney, tongue, and tripe (menudo) | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 □ N | 9 DK |
| | е. | Beef, including hamburger, steaks, roast beef, and meatloaf | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 🗌 N | 9 🗌 DK |
| | f. | Pork and ham, including roast pork, pork chops, and spare ribs | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🗌 DK |
| | g. | Shrimp, clams, oysters, crab, and lobster | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🗌 DK |
| | h. | Fish including fillets, fish sticks, fish sandwiches, and tuna fish | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 🗌 N | 9 🗌 DK |
| | i. | Chicken, all types, including baked, fried, chicken nuggets, and chicken salad. Include turkey | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 🗌 N | 9 🗌 DK |
| | j. | How often did you have eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad? | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 □ DK |
| N3. | FRU | IIT AND FRUIT JUICES | | | | | | | |
| | | t are fruit juices and fruit. Include all forms - fresh, en, canned, and dried. | | | | | | | |
| | a. | How often did you have orange juice, grapefruit juice and tangerine juice? | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 <u></u> DK |
| | b. | Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectars | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 □ N | 9 🗌 DK |
| | c. | Citrus fruits including oranges, grapefruits, and tangerines | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 <u>D</u> K |
| | d. | Melons including cantaloupe, honeydew, and watermelon | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 □ N | 9 <u></u> DK |
| | ₽. | Peaches, nectarines, apricots, guava, mango, and papaya | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| | f. | How often did you have any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries? (Include plantains.) | pe | 1 □ □ | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 <u>□</u> DK |

| N4. | | TABLES | Times | Day | Week | Month | | Never | DK |
|---|------|---|-------|----------------|-------|-------|---|---|---------------|
| | reme | e next questions are about vegetables. Please mber to include fresh, raw, frozen, canned, and | per | 1 🔲 D | 2 🗌 W | з∏м | ог | 4 □ N | 9 |
| | COOK | ed vegetables. | | | | | | | |
| ********** | a. | How often did you have carrots and vegetable mixtures containing carrots? | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| ****** | b. | Broccoli | per | 1 🔲 D | 2 | з∏м | or | 4 🗌 N | 9 <u>□</u> DK |
| ******* | с. | Brussels sprouts and cauliflower | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u>∏</u> ⊅K |
| | d. | White potatoes, including baked, mashed, boiled, french-fries, and potato salad | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 <u></u> DK |
| *************************************** | e. | Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin | per | 1 🗌 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| *************************************** | f. | Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa | per | 1 🗌 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| ******** | g. | Spinach, greens, collards, and kale | per | 1 <u>□</u> D | 2 🗌 W | з∏м | or | 4 □ N | э∏рк |
| 40004400 | h. | Tossed salad | per | 1 🔲 D | 2 🗌 W | з∐м | or | 4 □ N | 9 <u>∏</u> DK |
| | i. | Cabbage, cole slaw, and sauerkraut | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 |
| | j. | Hot red chili peppers. Do not count ground red chili peppers | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 □ N | 9 <u></u> DK |
| ********* | k. | Peppers including green, red, and yellow peppers | per | 1 <u>□</u> D | 2 🗌 W | з∏м | or | 4 □ N | 9 |
| | 1. | Any other vegetables such as green beans, corn, peas, mushrooms, and zucchini | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| N5. | BEA | NS, NUTS, CEREALS, AND GRAIN PRODUCTS | | | | | | | |
| | a. | How often did you have beans, lentils, and (chickpeas/garbanzos)? Include kidney, pinto, refried, black, and baked beans. | per | 1 🗆 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| | b. | Peanuts, peanut butter, other types of nuts, and seeds | per | 1 🗌 D | 2 🗌 W | з∏м | or | 4 □ N | э∏рк |
| | Now | I'm going to ask how often you ate certain cereals. | | ************** | | , | *************************************** | *************************************** | •••••••••••• |
| | c. | How about All-Bran, All-Bran Extra Fiber, 100% Bran, and Fiber One | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 |
| | d. | Total, Product 19, Most, and Just Right | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 ∏ DK |

| N5. | BEAN | NS, NUTS, CEREALS, AND GRAIN PRODUCTS (cont.) | | | 141- 1 | 10-25 | | Nover | |
|---------|------|--|-------|---------|--------|---------------|----|-------------|---------------|
| | | | Times | Day | Week | Month | 01 | Never | DK |
| | | | per | 1 D | 2 🗌 W | 3 <u>M</u> | or | 4 □ N | 9 DK |
| | e. | All other cold cereals like corn flakes, Cheerios, Rice Krispies, and presweetened cereals | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 🗌 DK |
| | f. | Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🗌 DK |
| | | let's talk about white bread products only. I'll ask It dark breads next. | | | | | | | |
| ••••• | g. | How often did you have white bread, rolls, bagels, biscuits, English muffins, and crackers? Include those used for sandwiches. | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 □ DK |
| ******* | h. | Dark breads and rolls, including whole wheat, rye, and pumpernickel | per | 1 🔲 D | 2 🗌 W | з∏М | or | 4 □ N | 9 <u> </u> |
| | i. | Corn bread, corn muffins, and corn tortillas | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🗌 DK |
| 1112 | j. | Flour tortillas | per | 1 🗌 D | 2 🗌 W | з∏М | or | 4 🗌 N | 9 <u></u> DK |
| | k. | Rice | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🔲 DK |
| l | l. | Salted snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn | per | 1 🗌 D | 2 🗌 W | 3 🗌 M | or | 4 □ N | 9 <u>□</u> DK |
| N6. | DES | SSERTS, SWEETS, AND BEVERAGES | | | | | | | |
| | a. | How often did you have cakes, cookies, brownies, pies, doughnuts, and pastries? | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 <u></u> DK |
| | b. | Chocolate candy and fudge | per | 1 🔲 D | 2 🗌 W | з∏М | or | 4 □ N | 9 <u>□</u> DK |
| | Nex | t are hot and iced beverages. | | | | | | | |
| | C. | How often did you have Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with <u>added vitamin</u> <u>C</u> ? | per | 1 🔲 D | 2 🗌 W | 3 🗌 M | or | 4 🗌 N | 9 <u></u> DK |
| | d. | Diet colas, diet sodas, and diet drinks such as Crystal Light | рег | 1 🗆 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u>D</u> K |
| | е. | Regular colas and sodas, not diet | pe | · 1 🔲 D | 2 🗌 W | 3 <u></u> M | or | 4 □ N | 9 🗌 DK |
| | f. | Regular coffee with caffeine | pe | r 1 🗌 D | 2 🗌 W | з∏м | or | 4 □ N | 9 🗌 DK |
| | g. | Regular tea with caffeine | pe | r 1 🔲 D | 2 🗌 W | з∏м | or | 4 🔲 N | 9 🔲 DK |
| | h. | Beer and lite beer | pe | r 1 🔲 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u>∏</u> DK |
| | i. | Wine, wine coolers, sangria, and champagne | pe | r 1 🔲 D | 2 🗌 W | '3 <u>∏</u> M | or | 4 🗌 N | 9 |
| | j. | Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed | pe | r 1 🔲 D | 2 🗌 W | ⁄ З∏М | or | 4 <u></u> N | 9 <u></u> DK |

| N7. | FATS | Y | | | | | | | | |
|------------|--------------|--|---|---|------------------------|-------------------------|-------------------------------|---------------------------|---------------------------|------------------------------|
| | | _ | | Times | Day | Week | Month | | Never | DK |
| | prep | often were these items ad aration? For example, this | would include on top of | per | 1 🔲 D | 2 🗌 W | з∐м | or | 4 🗌 N | 9 |
| | yege | tables or baked potatoes, or | as a spread on bread. | | | | | | | |
| ********** | a. | Margarine | >>>××××××××××××××××××××××××××××××××××× | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 🗌 DK |
| | b. | Butter | | per | 1 🔲 D | 2 🗆 W | з∏м | or | 4 🗌 N | 9 🗌 DK |
| | c. | Oil and vinegar, mayonna such as Italian and Tho those added to salads and | usand Island, including | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 | э∏рк |
| N8. | | i missed any other foods or ast once per week in the past | | PROBE: How or | iten did yo | u eat in | the past m | onth? | | |
| | 1 | Y (specify) —, | 2 N (N9) | | | | | | | |
| | a. | 1 | | per | 1 🗆 D | 2 🗌 W | з∏м | or | 4 □ N | 9 <u></u> DK |
| | b. | 1 | | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 🗌 DK |
| | c. | 1 | | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 🗌 DK |
| | đ. | 1 | | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 | 9 <u>□</u> DK |
| | e. | 1 | | per | 1 🔲 D | 2 🗌 W | з 🗌 м | or | 4 🗌 N | 9 |
| | f. | 1 | | per | 1 🔲 D | 2 🗌 W | з∏м | or | 4 🗌 N | 9 🔲 DK |
| N9. | CHE | CK ITEM. REFER TO AGE O | F SP. | 1 UNDE | R 20 YEAF | RS (P1) | | | | |
| | | | | | 'EARS | | | | | |
| N10 | REF REA | ER TO AGE OF SP. HAND C D RESPONSE CATEGORIES | ARD HAQ-6. TO SP IF NECESSARY. | | | | | | | |
| | Now durit | I am going to ask how often ng different times in your life ool, at home with children, on | n you drank milk over you e. Then think of certain e | ur <u>lifetime</u> . Try to events that might h | remembei nave occur | whether y red during | ou were a leach time | milk drinke period; fo | er or a non r example, | -milk drinker were you in |
| | How add | often did you drink any typ ed to coffee or tea. | e of milk, including milk a | added to cereal, w | hen you w | /ere a | ? Do | not count | small amo | ounts of milk |
| | <u>Tir</u> | ne period (age) | more than once once per day per day | less than once per day but more tha once per wee | n p | ce er ek | less than once per week | nev | rer | don't know |
| | a. | Child (5-12) | 1 2 | 3 | 4 | | 5 | 0[|] | 9 🗌 |
| | b. | Teenager (13-17) | 1 2 | 3 🗌 | 4 | | 5 | 0[| | 9 🗌 |
| | C, | Young adult (18-35) | 1 2 | 3 🔲 | 4 | | 5 🗌 | 0[|] | 9 🗌 |
| | d. | Middle-aged adult (36-65) | 1 2 | 3 🗌 | 4 | | 5 <u> </u> | 0 | | 9 🗌 |
| | €. | Older adult (over 65) | 1 2 | 3 🗌 | 4[| | 5 | 0[| | 9 🗌 |

| VISIC | VISION AND HEARING (AGES 17+ YEARS) | | | | | | |
|-------|---|--|--|--|--|--|--|
| P1. | Do you have total blindness in one or both eyes? IF "YES," ASK: Which, one or both? | 1 | | | | | |
| P2. | Do you use eyeglasses, contact lenses or both? INCLUDE EYEGLASSES THAT JUST MAGNIFY. | 9 DK 1 eyeglasses 2 contact lenses 3 both 4 neither | | | | | |
| P3. | Do you have trouble seeing with one <u>or</u> both eyes (even when wearing glasses or contact lenses)? | 1 Y 2 N | | | | | |
| P4. | (When wearing your eyeglasses/contact lenses) can you see well enough to recognize a friend across the street? | 1 | | | | | |
| P5. | (When wearing your_eyeglasses/contact lenses) can you see well enough to recognize a friend across a room? | 1 | | | | | |
| P6. | (When wearing your eyeglasses/contact lenses) can you see well enough to recognize a friend who is at arm's length away? | 1 | | | | | |
| P7. | (When wearing your eyeglasses/contact lenses) can you see well enough to recognize a friend if you get close to his/her face? | 1 | | | | | |
| P8, | (When wearing eyeglasses/contact lenses) can you see well enough to read ordinary newspaper print? | 1 | | | | | |
| P9. | (When wearing eyeglasses/contact lenses) can you see well enough to read large print such as newspaper headlines? | 1 | | | | | |

| P10. | Do you now have total deafness in one or both ears? | 1 Y ——> In one or both ears? |
|------|--|---|
| | IF "YES" ASK: Which, one or both? | 1 one |
| | | 2 Doth |
| | | 2 🗍 N |
| | | 9 |
| P11. | Do you use a hearing aid? | 1 Y 2 N |
| P12. | Do you have trouble hearing (even when wearing your hearing aid)? | 1 🔲 Y 2 🗍 N |
| | Let's be more specific. | |
| P13. | (With a hearing aid) can you hear most of the things people say? | 1 Y (P15) 2 N 9 DK |
| P14. | (With a hearing aid) can you hear <u>only a few words</u> people say or <u>loud noises</u> ? | 1 Y 2 N 9 DK |
| P15. | Do you have difficulty using a telephone because of hearing | 1 🗌 Y |
| | problems? | 2 🔲 N |
| | | 3 NO PHONE |
| | | 9 |
| P16. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 60 YEARS OR PROXY RESPONDENT (Q1) |
| | | 2 |
| P17. | I am going to name 3 objects. After I have said them, I want you | 1 CORRECT |
| | to repeat them. Remember what they are because I am going to ask you to name them again in a few minutes. | APPLE: 2 ERROR |
| | "Apple" "Table" "Penny" | 1 CORRECT |
| | Could you repeat the 3 items for me? | TABLE: 2 ERROR |
| | a. SCORE <u>FIRST</u> TRIAL. | 1 CORRECT |
| | | PENNY: 2 ERROR |
| | b. REPEAT OBJECTS UNTIL ALL 3 ARE LEARNED OR UNTIL YOU HAVE REPEATED THESE 3 TIMES. RECORD NUMBER OF TRIALS UNTIL OBJECTS ARE LEARNED. | TRIALS NUMBER |

| P18. | If you have \$20 and you take away \$3, how many dollars do you have left? Keep subtracting \$3 from the answer until I tell you to stop. RECORD ANSWERS, WHETHER CORRECT OR NOT. a. (\$17) b. (\$14) c. (\$11) d. (\$8) | SAYS CAN'T DQ \$ 66 | OTHER REFUSAL 99 |
|------|--|----------------------|-------------------|
| | STOP | | |
| P19. | Now what were the 3 objects I asked you to remember? Could you repeat the 3 items for me? | APPLE: | 1 CORRECT 2 ERROR |
| | SCORE <u>FIRST</u> TRIAL. DO NOT REPEAT ITEM TO RESPONDENT. | TABLE: | 1 CORRECT 2 ERROR |
| | | PENNY: | 1 CORRECT 2 ERROR |

| DEN | DENTAL CARE AND STATUS (AGES 17+ YEARS) | | | | | | | |
|-----|---|----|----|--|--|--|--|--|
| Q1. | How would you describe the condition of your natural teeth: excellent, very good, good, fair or poor? | 1 | | excellent | | | | |
| | | 2 | | very good | | | | |
| | | 3 | | good | | | | |
| | | 4 | | fair | | | | |
| | | 5 | | poor | | | | |
| | | 6 | | HAS NO NATURAL TEETH | | | | |
| Q2. | What type of dental care do you need now? HAND CARD HAQ-7. | 01 | | teeth filled or replaced (for example, fillings, crowns and/or bridges) | | | | |
| | MARK ALL REPORTED. | 02 | | teeth pulled | | | | |
| | | 03 | | gum treatment | | | | |
| | | 04 | | denture work | | | | |
| | | 05 | | relief of pain | | | | |
| | | 06 | | work to improve appearance (for example, braces or bonding) | | | | |
| | | 10 | | CLEANING | | | | |
| | | 07 | | other 08specify | | | | |
| | | 09 | | NOTHING | | | | |
| | | 99 | | DK | | | | |
| Q3. | How long ago was your <u>last</u> visit to a dentist <u>or</u> dental hygienist? | | nu | mber | | | | |
| | | 00 | | NEVER (Q5) | | | | |
| Q4. | How often do you go to the dentist or dental hygienist? | 1 | | at least once a year | | | | |
| | MARK <u>FIRST</u> APPLICABLE BOX. | 2 | | every 2 years | | | | |
| | | 3 | | less often than every 2 years | | | | |
| | : | 4 | | whenever needed - no regular schedule | | | | |
| | | 5 | Ш | other 6specify | | | | |
| | | 9 | | DK | | | | |
| Q5. | Have you had "cold sores" or "fever blisters" on your lips in the past 12 months? | 1 | | Y 2 N 9 DK | | | | |
| Q6. | Have you had "canker sores" or other ulcers or sores inside your mouth in the past 12 months? | 1 | | Y 2 N 9 DK | | | | |
| Q7. | CHECK ITEM. REFER TO AGE OF SP. | 1 | | 50+ YEARS (R1) | | | | |
| | | 2 | | UNDER 50 YEARS | | | | |

| Q8. | Have you ever received orthodontic treatment such as wearing braces, bands, or removable appliances to straighten your teeth? | 1 🗌 Y | 2 N (R1) | |
|-----|---|-----------|----------|--|
| Q9. | How old were you when you <u>started</u> your <u>most recent</u> orthodontic treatment? | age 99 | | |

| TOE | TOBACCO (AGES 17+ YEARS) | | | | | | |
|-----|--|--|--|--|--|--|--|
| R1. | Now I'd like to ask you about tobacco use. Have you smoked at least 100 cigarettes during your entire life? APPROXIMATELY 5 PACKS. | 1 Y 2 N (R14) | | | | | |
| R2. | How old were you when you <u>first</u> started smoking cigarettes fairly regularly? | age OOO NEVER SMOKED REGULARLY | | | | | |
| | | 999 DK | | | | | |
| R3. | Do you smoke cigarettes <u>now</u> ? | 1 Y 2 N (R11) | | | | | |
| R4. | About how many cigarettes do you smoke per day? | 000 LESS THAN 1 PER DAY 1 Cigarettes per day 1 packs per day Number 2 packs per day 666 VARIES | | | | | |
| R5. | For approximately how many years have you smoked this amount? | years number | | | | | |
| R6. | Was there ever a period of a year or more when you smoked more than (NUMBER IN R4) cigarettes per day? | 1 Y 2 N (R9) | | | | | |
| R7. | During the period when you were smoking the most, about how many cigarettes per day did you <u>usually</u> smoke? | number | | | | | |
| R8. | For how many years did you smoke that amount? | years number | | | | | |
| R9. | Have you ever quit smoking for a period of one year or longer? | 1 N (R14) | | | | | |
| R10 | . Since you <u>first</u> started smoking; how many years <u>altogether</u> have you stayed off cigarettes? | 000 LESS THAN 1 YEAR (R14) years (R14) number | | | | | |
| R11 | About how old were you when you <u>last</u> smoked cigarettes (fairly regularly)? PROBE: How old were you when you quit smoking cigarettes? | age 999 | | | | | |
| R12 | 2. About how many cigarettes per day did you usually smoke at that time? | 000 LESS THAN 1 PER DAY 1 cigarettes per day number 2 packs per day 666 VARIED | | | | | |
| R13 | 3. Did you quit smoking because you <u>had</u> a health problem that was caused <u>or</u> made worse by smoking? | 1 | | | | | |
| R14 | Have you ever used chewing tobacco or snuff? | 1 N (R23) | | | | | |

| | ····· | | | | |
|------|--|-------|---------|-----|--------------------------------|
| R15. | At what age did you <u>first</u> start using chewing tobacco or snuff fairly regularly? | | _ | age | 9 |
| | IF BOTH USED, ENTER EARLIEST AGE. | 000 | | | NEVER USED REGULARLY (R20) |
| | | 999 | | | DK |
| R16. | Do you use chewing tobacco or snuff now? | 1 | |] | Y 2 N (R20) |
| R17. | Which - chewing tobacco or snuff? | 1 | | J | chewing 2 snuff 3 both tobacco |
| R18. | How many containers do you use per day or per week? | 1 | | _ | snuff per } 1 |
| | RECORD FOR SNUFF OR CHEWING TOBACCO OR BOTH. | ' | Ļ | | containers 2 week |
| | | 2 | [| | chew containers per } 1 |
| R19. | Where in your mouth do you usually place the (chewing tobacco/snuff)? | | <u></u> | | |
| | a. In the right side, left side, or front of your mouth? | 1 | [| | right 2 eft 3 front |
| | b.In the top or bottom of your mouth? | 1 | | | top |
| | | 2 | 2 | | bottom |
| | | 3 | 3 | | OTHER 4 SPECIFY (R23) |
| | | | 5 | | NO SPECIAL PLACE |
| R20 | . About how old were you when you <u>last</u> used (chewing tobacco/ snuff) fairly regularly? | | | a | <u> </u> |
| | | 999 | • | | DK |
| R21 | . Which did you use - chewing tobacco or snuff? | | 1 | | chewing 2 snuff 3 both tobacco |
| R22 | . Did you quit using (chewing tobacco/snuff) because you had a problem that was caused or made worse because you used (it/them)? | | 1 | | Y 2 N 9 DK |
| R23 | . Have you ever smoked at least 20 cigars in your entire life? | | 1 | | Y 2 N (R26) |
| R24 | . Do you <u>now</u> smoke cigars? | | 1 | | Y 2 N (R26) |
| R25 | i. How many cigars do you smoke per day? | | | nu | cigars mber |
| R26 | 5. Have you <u>ever</u> smoked at least 20 pipefuls of tobacco in your entire life? | ļ | 1 | | Y 2 N (S1) |
| R27 | 7. Do you <u>now</u> smoke a pipe? | | 1 | | Y 2 N (S1) |
| R28 | How many pipefuls of tobacco do you smoke per day? | | | nu | pipefuls mber |
| | | | | | |

| occi | OCCUPATION/LANGUAGE USAGE (AGES 17+ YEARS) | | | | | | |
|--------------|--|--------------------|--|--|--|--|--|
| | part of the survey I will ask about topics including your work once, school attendance, and where you were born. | | | | | | |
| First I'll | ask about what you are doing now. | | | | | | |
| S1. | During the <u>past 2 weeks</u> , did you work at any time at a job or business, not counting work around the house? | 1 Y (S6) 2 N | | | | | |
| | INCLUDE UNPAID WORK IN THE FAMILY (FARM/ BUSINESS). | | | | | | |
| \$2. | Even though you did not work during those 2 weeks, did you have a job or business? | 1 🗌 Y 2 🗍 N | | | | | |
| S3. | Were you looking for work or on layoff from a job? | 1 Y 2 N (S5) | | | | | |
| S4. | Which, looking for work or on layoff from a job? | 1 looking (S7) | | | | | |
| | | 2 layoff (S6) | | | | | |
| | | 3 both (S6) | | | | | |
| \$5 . | CHECK ITEM. REFER TO \$2. | 1 | | | | | |
| | | 2 "NO" IN S2 (S17) | | | | | |
| S6. | For whom did you work? | Employer: | | | | | |
| | ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER. | | | | | | |
| | RECORD RESPONSE AND <u>SKIP TO S8</u> . | | | | | | |
| S7. | For whom did you work at your last full-time civilian job or business lasting 2 consecutive weeks or more? | | | | | | |
| | ENTER NAME OF COMPANY, BUSINESS, ORGANIZATION, OR OTHER EMPLOYER. | | | | | | |
| S8. | What kind of business or industry is this? (For example, TV and radio manufacturing, retail shoe store, state labor department, farm.) | Industry: | | | | | |
| S9. | What kind of work were you doing? (For example, electrical engineer, stock clerk, typist, farmer.) | Occupation: | | | | | |
| S10. | What were your most important activities or duties? (For example - types, keeps account books, files, sells cars, operates printing press, finishes concrete.) | Duties: | | | | | |
| S11. | COMPLETE FROM ENTRIES IN S6 THRU S10. IF NOT CLEAR, ASK: | | | | | | |
| | Were you an employee of a private company, | Class of worker | | | | | |
| | business or individual for wages, salary or commission? | 1 ∐ P | | | | | |
| | a <u>Federal g</u> overnment employee? F | 2 ∐ F | | | | | |
| | - a <u>State</u> government employee? | 3 ∐ S | | | | | |
| | - self employed in own business, professional practice, or farm? IF NOT FARM, ASK: Is the | 4 🗌 L | | | | | |
| | business incorporated? Yes | 5 🗍 1 | | | | | |
| | No SE working without pay in family business or | 6 🔲 SE | | | | | |
| | farm? | 7 🔲 WP | | | | | |
| | job lasting 2 weeks or more? NEV | 0 NEV | | | | | |

| \$12. For how long (have you worked/did you work) at that job? 1 12 months or less | months |
|---|----------|
| | |
| S13. CHECK ITEM. REFER TO S1 AND S2. | years |
| | |
| 2 | |
| S14. At work, how many hours per day are you close enough to people who smoke so that you can smell the smoke? | |
| hours number | |
| S15. In your job as (S9 OCCUPATION FOR S10 INDUSTRY OR EMPLOYER), do you ever wear protective equipment such as safety glasses, protective gloves, a dust mask, or a respirator? | OK (S17) |
| S16. Do you <u>ever</u> wear any of the following equipment? | |
| a. Safety glasses, goggles, or other eye protection such as face shields or welding hoods? 1 Y 2 N | |
| b. Protective gloves (other than gloves for cold weather)? 1 Y 2 N | |
| c. Dust mask? | |
| d. Respirator? | |
| S17. Thinking of all the <u>paid</u> jobs or businesses you ever had, what kind of work were you doing the <u>longest?</u> (For example, electrical engineer, stock clerk, typist, farmer.) 1 NEVER WORKED (S22) | |
| IF IN THE ARMED FORCES, MARK "AF". | · |
| occupation | |
| | |
| S18. Considering all your employers, for how long did you do this kind of work? | |
| years number | |
| MARK BOX IF "AF" MARKED IN S17. 2 AF | |
| \$19. What kind of business or industry did you work in the longest period of time as a (ENTRY IN \$17)? | |
| S20. What were your main job activities or work duties when you were a (OCCUPATION IN S17) in (INDUSTRY IN S19)? | |
| duties | |
| S21. CHECK ITEM. REFER TO S1 AND S12. 1 "YES" IN S1 AND MORE THAN 12 MONTH S12 (S23) | HS IN |
| r I | |

| S22. | What were you doing most of the past 12 months, working at a job or business, retired, keeping house, going to school, or something else? PRIORITY IF 2 OR MORE ACTIVITIES REPORTED: (1) SPENT MOST TIME DOING; (2) CONSIDERS MOST IMPORTANT. IF "SOMETHING ELSE", PROBE: What were you doing? | 1 working 2 retired (S24) 3 keeping house (S24) 4 going to school (S25) 5 something else 6 (S25) | |
|------------|--|--|------|
| S23. | Are you limited in the kind or amount of work you can do because of any impairment or health problem? | 1 Y (S26) 2 N (S25) | |
| S24. | Are you limited in the kind or amount of housework you can do because of any impairment or health problem? | 1 Y (S26) 2 N | |
| S25. | Are you limited in any way in any <u>activities</u> because of an impairment or health problem? | 1 🗌 Y 2 🗍 N | |
| S26. | Have you <u>ever</u> changed your job, stopped working, or made any changes in your housework because of a disability or health problem? | 1 Y 2 N (\$28) | |
| S27. | Did you | | ٦ |
| ********** | a. change permanently to an easier job? | 1 Y 2 N | |
| | b. change temporarily to an easier job? | 1 | |
| | c. cut down to part-time work only? | 1 | |
| ••••• | d. have to stop working for a few months? | 1 Y 2 N | |
| ••••• | e. retire because of a disability? | 1 Y 2 N | |
| •···· | f. have to cut down on housework? | 1 Y 2 N | |
| ••••• | g. stop doing all housework? | 1 Y 2 N | •••• |
| | h. make some other change? | 1 Y 2 N | |
| | | specify | |
| S28. | Which language do you mainly speak at home? | 1 English | |
| | | 2 Spanish | |
| | | 3 other 4 | _ |
| | | specify | |
| S29. | IF NOW WORKING OR IN SCHOOL, ASK: | 1 DOESN'T WORK OR GO TO SCHOOL | |
| | What language do you mainly speak at (work/school)? | 2 English | |
| | | 3 Spanish | |
| | | 4 other 5 specify | |

| EXERCISE (AGES 17+ YEARS) | | | |
|---------------------------|---|--------------------------|--|
| Т1. | In the <u>past month</u> , how often did you walk a mile or more at a time without stopping? | | 1 day 2 week 3 month |
| | The next questions are about your <u>leisure</u> during the <u>past month</u> . We are intere exercises, sports, or physically active he have done. | ested in the following | |
| | In the <u>past month</u> did you | | In the <u>past month</u> how often did you |
| T2. | jog or run? | 1 Y (T3) 2 N (T4) | T3. |
| T4. | ride a bicycle or an exercise bicycle? | 1 Y (T5) 2 N (T6) | T5. |
| T6. | swim? | 1 Y (T7) 2 N (T8) | T7. |
| T8. | do aerobics or aerobic dancing? | 1 | T9. 1 day 2 week 3 month |
| T10. | do other dancing? | 1 | T11. 1 day 2 week 3 month |
| T12. | do calisthenics or exercises? | 1 Y (T13) 2 N (T14) | T13. times number per 1 |
| T14. | garden or do yard work? | 1 | T15. Times Tim |
| T16. | lift weights? | 1 | T17. |

| T18. In the <u>past month</u> , have you done any other exercises, sports, or physically active hobbies not mentioned? | In the <u>past month</u> how often did you? |
|---|---|
| PROBE: What? T19. 1 (T20) specify | T20. |
| PROBE: Any others? T21. 1 (T22) specify | T22. |
| PROBE: Any others? T23. 1 (T24) specify | T24. |
| PROBE: Any others? T25. 1 (T26) specify | T26. times 1 day 2 week 3 month |
| T27. How does the amount of activity that you reported for the <u>past month</u> compare with your physical activity for the <u>past 12 months</u> ? During the <u>past month</u> , were you more active, less active, or about the same? | 1 |
| T28. Compared with most (men/women) your age, would you say that you are more active, less active, or about the same? | 1 |
| T29. CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 30 YEARS (V1) 2 30 + YEARS |
| T30. Compared with yourself 10 years ago, would you say that you are more active now, less active now, or about the same? | 1 |

| soc | SOCIAL SUPPORT/RESIDENCE (AGES 17+ YEARS) | | | |
|-----|--|--|--|--|
| V1. | Now I want to ask a few questions about how you spend your time. In a typical week, how many times do you talk on the telephone with family, friends, or neighbors? | times | | |
| V2. | How often do you get together with <u>friends or relatives</u> ; I mean things like going out together or visiting in each other's homes? | times 1 | | |
| V3. | About how often do you visit with any of your other neighbors, either in their homes or in your own? | times 1 | | |
| V4. | How often do you attend church or religious services? | times number per 1 | | |
| V5. | Do you belong to any clubs or organizations such as church groups, unions, fraternal or athletic groups, or school groups? | 1 N (V7) | | |
| V6. | Altogether, how often do you attend meetings of the clubs or organizations you belong to? | times number per | | |
| V7. | How long have you lived at this address? | number 1 weeks 2 months 3 years 00 WHOLE LIFE (V12) | | |

| | | ······································ |
|-----------------|--|--|
| V8. | How long have you lived in this (city/town/area)? | 1 whole life (V12) |
| | IF SP LIVED IN AREA OFF AND ON, DO NOT INCLUDE PERIODS AWAY FROM THE AREA. | 2 20+ years |
| | | 3 11-20 years |
| | | 4 5-10 years |
| | | 5 3-4 years |
| | | 6 1-2 years |
| | | 0 less than 1 year |
| <u>V9.</u> | Have you lived anywhere longer than you lived here? | 1 [] Y 2 [] N·(V12) |
| V10. | Where did you live the longest? | |
| | PROBE FOR CITY OR TOWN. IF OUTSIDE OF THE U.S. RECORD COUNTRY. | city state or |
| | | country |
| | | Cultily |
| V11. | How long did you live in (PLACE IN V10)? | 1 20+ years |
| | DO NOT INCLUDE PERIODS AWAY FROM PLACE IN V10. | .2 11-20 years |
| | | 3 5-10 years |
| | | 4 3-4 years |
| | | 5 1-2 years |
| | | 0 less than 1 year |
| V12. | In what state or country were you born? | |
| ĺ | PRINT THE FULL NAME OF THE STATE OR MARK THE | state |
| APPROPRIATE BOX | APPROPRIATE BOX. | 072 Puerto Rico 078 Virgin Islands |
| | | 080 Mexico 066 Guam |
| | | 063 Cuba 098 All other countries |
| | | 093 Canada specify |
| V13 | . IF BORN IN THE US, SKIP TO NEXT SECTION. OTHERWISE ASK: | 00 LESS THAN 1 YEAR |
| | How long have you lived in the United States? | years number |

| VITAMIN, MINERAL AND MEDICINE USAGE (AGES 17+ YEARS) | | | | | |
|--|---|---|-------------|----------|--|
| | The following questions concern your use of vitamins, minerals, medicines, and certain products in the past month. | | | | |
| X1. | a. | Have you taken any vitamins or minerals in the <u>past month</u> ? Please include those that are prescribed by a doctor and those that are not prescribed. DO NOT INCLUDE TOPICAL VITAMINS. | 1 2 9 | | N DK |
| | b. | Have you taken or used medicines for which a doctor's or dentist's prescription is needed, in the <u>past month?</u> This includes any products which cannot be obtained without a doctor's or dentist's prescription. Include those medicines you may have already mentioned. DO NOT INCLUDE PRESCRIPTION VITAMINS WHICH SHOULD BE RECORDED AT X1a. | 1 2 9 | | Y N DK |
| | c. | Have you taken antacids in the <u>past month</u> ? INCLUDE PRESCRIPTION ANTACIDS HERE. | 1 2 9 | | Y N DK |
| X2. | IF ANY YES: May I see the containers for all of the (vitamins/minerals/prescription medicines/antacids) you took in the past month? Also, if there are things that you need to do at this time such as going to the bathroom, please do so now so that I will be able to take your pulse and blood pressure immediately after the next section is completed. IF NECESSARY, ASK SP TO MOVE TO A SUITABLE LOCATION TO RECORD LABEL INFORMATION AND TO TAKE THE PULSE AND BLOOD PRESSURE READINGS. | | | a. b. c. | "Y" IN ANY OF X1a-c. ENTER REPORTED NUMBER OF EACH BELOW. VITAMINS/MINERALS PRESCRIPTION MEDICINES ANTACIDS COMPLETE APPROPRIATE PRODUCT TABLE(S). VERIFY THAT THE NUMBER OF PRODUCTS ENTERED AGREES WITH THE NUMBER OF PRODUCT COLUMNS COMPLETED IN THE SUBSEQUENT PAGES. "N" OR "DK" IN ALL OF X1a-c (X18) |
| | | | | Ш | N ON UN IN ALL OF A 18-C (X18) |

| VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK X6 - X8. | | | |
|--|--|--|--|
| | PRODUCT ≭ 1 | PRODUCT #2 | |
| X3. ENTER <u>COMPLETE NAME</u> OF VITAMIN/ MINERAL FROM LABEL OR PROBE RESPONDENT. | NAME: | NAME: | |
| X4. CHECK ITEM. | 1 CONTAINER SEEN (X5) 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT (X6) 3 PRODUCT NAME NOT ON CONTAINER (X6) | 1 CONTAINER SEEN (X5) 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT (X6) 3 PRODUCT NAME NOT ON CONTAINER (X6) | |
| X5. ENTER MANUFACTURER'S OR DISTRIBU- TOR'S NAME AND ADDRESS (CITY AND STATE). | name city state | name city state | |
| X6. How often did you take/use (PRODUCT) in the past month? | 1 | times per number | |
| X7. How much (PRODUCT) did you take/use each time you took it? | 01 | number 01 | |
| X8. For how long have you been taking/using this type of product? | 1 less than one month 2 months 3 years 999 DK | number 1 | |

VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK X6 - X8. PRODUCT #3 PRODUCT #4 ENTER COMPLETE NAME OF VITAMIN/ ХЗ. NAME: NAME: MINERAL FROM LABEL OR PROBÉ RESPONDENT. CHECK ITEM. **CONTAINER SEEN (X5)** X4. **CONTAINER SEEN (X5)** 1 CONTAINER NOT SEEN. 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED PRODUCT NAME FURNISHED BY RESPONDENT (X6) BY RESPONDENT (X6) PRODUCT NAME NOT ON PRODUCT NAME NOT ON 3 CONTAINER (X6) **CONTAINER (X6)** ENTER MANUFACTURER'S OR DISTRIBU-X5. TOR'S NAME AND ADDRESS (CITY AND STATE). name name city state city state X6. How often did you take/use (PRODUCT) in day day the past month? week week times times 3 🗍 3 month month per per number number other 5 4 other 5 specify specify DK 999 DK 999 X7. How much (PRODUCT) did you take/use capsules, capsules, 01 01 tablets/pills each time you took it? tablets/pills 02 teaspoons 02 teaspoons tablespoons 03 🔲 03 tablespoons Ω4 fluid ounces/ fluid ounces/ ounces ounces drops/droppers 05 drops/droppers 05 number number packets/packs/ packets/packs/ 06 paks/packages paks/packages 07 ml. 07 ml. 80 wafers 08 wafers 09 📋 other 10 other 10 specify specify variable amounts 666 variable amounts 666 DK 999 DK 999 less than one less than one X8. For how long have you been taking/using this type of product? month month months months number number 3 3 years years DK DK 999 🔲 999

VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK X6 - X8. PRODUCT #5 PRODUCT #7 PRODUCT #6 NAME: NAME: NAME: **CONTAINER SEEN (X5) CONTAINER SEEN (X5)** CONTAINER SEEN (X5) 1 CONTAINER NOT SEEN. CONTAINER NOT SEEN. 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED PRODUCT NAME FURNISHED PRODUCT NAME FURNISHED BY RESPONDENT (X6) BY RESPONDENT (X6) BY RESPONDENT (X6) PRODUCT NAME NOT ON PRODUCT NAME NOT ON PRODUCT NAME NOT ON CONTAINER (X6) **CONTAINER (X6)** CONTAINER (X6) name name name city state state city state city X6. day day day week week week times times times per 3 🗀 month per 3 month per 3 month number number number 4 other 5 other 5 other 5 4 specify specify specify 999 999 🔲 999 capsules, X7. 01 01 capsules, 01 capsules, tablets/pills tablets/pills tablets/pills 02 teaspoons teaspoons 02 teaspoons 02 03 tablespoons 03 tablespoons 03 tablespoons 04 fluid ounces/ 04 fluid ounces/ 04 fluid ounces/ ounces ounces ounces 05 drops/droppers 05 drops/droppers 05 drops/droppers number number number packets/packs/ 06 | | packets/packs/ 06 packets/packs/ 06 paks/packages paks/packages paks/packages 07 ml. 07 ml. ml. wafers 08 wafers 08 wafers 80 09 09 other 10 other 10 09 specify specify specify 666 666 variable amounts 666 variable amounts variable amounts DK DK 999 999 DK 999 less than one X8. less than one less than one 1 | | month month month 2 [months 2 months 2 months number number number years 3 3 years 3 🔲 years DK DK 999 🗔 DK 999 999

PRESCRIPTION MEDICINES: RECORD LABEL INFORMATION AND ASK X11-X12 FOR EACH MEDICATION.

| | MEDICATION #1 | MEDICATION #2 | MEDICATION #3 |
|------|--|--|--|
| X9. | NAME: | X9. NAME: | X9. NAME: |
| | | | |
| X10. | CHECK ITEM. | X10. CHECK ITEM. | X10. CHECK ITEM. |
| 1 🗆 | CONTAINER SEEN. | 1 CONTAINER SEEN. | 1 CONTAINER SEEN. |
| 2 | CONTAINER NOT SEEN - MEDICATION INFORMATION FURNISHED BY RESPONDENT. | 2 CONTAINER NOT SEEN - MEDICATION INFORMATION FURNISHED BY RESPONDENT. | 2 CONTAINER NOT SEEN - MEDICATION INFORMATION FURNISHED BY RESPONDENT. |
| X11. | What is the health problem you had for which you took the (MEDICINE)? | X11. What is the health problem you had for which you took the (MEDICINE)? | X11. What is the health problem you had for which you took the (MEDICINE)? |
| | PROBE FOR SYMPTOM OR CONDITION. | PROBE FOR SYMPTOM OR CONDITION. | PROBE FOR SYMPTOM OR CONDITION. |
| | | | |
| X12. | For how long have you been taking (MEDICINE)? | X12. For how long have you been taking (MEDICINE)? | X12. For how long have you been taking (MEDICINE)? |
| | 1 days | 1 🔲 days | 1 days |
| | 2 weeks | 2 weeks | 2 weeks |
| | number 3 months | number 3 months | number 3 months |
| | J 4 ☐ years | J 4 L years | ∫ 4 years |
| | 999 DK | 999 | 999 DK |

PRESCRIPTION MEDICINES: RECORD LABEL INFORMATION AND ASK X11-X12 FOR EACH MEDICATION. MEDICATION #4 MEDICATION #5 MEDICATION #6 X9. NAME: X9. X9. NAME: NAME: X10. CHECK ITEM. X10. CHECK ITEM. X10. CHECK ITEM. CONTAINER SEEN. CONTAINER SEEN. CONTAINER SEEN. 1 CONTAINER NOT SEEN -**CONTAINER NOT SEEN -**2 **CONTAINER NOT SEEN -**MEDICATION INFORMATION MEDICATION INFORMATION MEDICATION INFORMATION FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT. X11. What is the health problem you had X11. What is the health problem you had X11. What is the health problem you had for which you took the (MEDICINE)? for which you took the (MEDICINE)? for which you took the (MEDICINE)? PROBE FOR SYMPTOM OR CONDITION. PROBE FOR SYMPTOM OR CONDITION. PROBE FOR SYMPTOM OR CONDITION. X12. For how long have you been taking X12. For how long have you been taking X12. For how long have you been taking (MEDICINE)? (MEDICINE)? (MEDICINE)? days 1 days days weeks weeks weeks number 3 number number 3 🗍 months months months

4 years

999 DK

years

999 DK

years

999 DK

| ANTACIDS: RECORD LABEL INFORMATION AND ASK X15 - X17. | | | |
|--|---|---|--|
| | PRODUCT ¥1 | PRODUGT #2 | |
| X13. ENTER <u>COMPLETE NAME</u> OF ANTACID FROM LABEL OR PROBE RESPONDENT. | NAME: | NAME: | |
| X14. CHECK ITEM. | 1 ANTACID SEEN. | 1 ANTACID SEEN. | |
| | 2 ANTACID NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT. | 2 ANTACID NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT. | |
| X15. How often did you take (ANTACID) in the past month? | times per l day 2 week 3 month 4 other 5 specify | times per la control day 2 week 3 month 4 other 5 specify | |
| X16. How much (<u>ANTACID</u>) did you take each time you took it? | number 1 | 1 | |
| | 999 DK | 999 DK | |
| X17. For how long have you been taking this antacid? | 1 days 2 weeks 3 months 4 years | 1 | |

| X18. | Next ar | e questions about <u>non-prescription</u> pain relief medicines. | X19. How often did you take during the past month? |
|---|----------|---|--|
| | In the g | ast month, have you taken any aspirin, Anacin, Bufferin, Ecotrin, Ascriptin, or Midol? 1 Y (X19) 2 N (b) 9 DK (b) | times per } 1 |
| | b. | Tylenol, Anacin-3, or acetaminophen? 1 Y (X19) 2 N (c) 9 DK (c) | times per } 1 |
| ********** | c. | Advii, Nuprin, Medipren, or ibuprofen? 1 Y (X19) 2 N (d) 9 DK (d) | times.per. } 1 |
| *************************************** | d. | other? 1 | times per } 1 |
| | е. | other? 1 | times per } 1 |
| | f. | other? 1 | times per } 1 |
| | g. | other? 1 | times per } 1 |

| NAM | NAME/SSAN (AGES 17+ YEARS) | | | | | |
|-------|---|--|--|--|--|--|
| again | ould like to know how people's health practices and conditions relate to st the vital statistics records maintained by the National Center for Healt for statistical purposes and no individual identification will be shown in any | h Statistics of the U.S. Public Health Service. The results will only be | | | | |
| Y1. | What is your full name, including middle name? | | | | | |
| | PRINT AND VERIFY SPELLING. | first | | | | |
| | | middle | | | | |
| | | last | | | | |
| Y2. | How old are you? | years | | | | |
| | RECORD AGE AS OF HAQ (TODAY'S) INTERVIEW DATE. | number | | | | |
| Y3. | What is your date of birth? | month day year | | | | |
| Y4. | What is your father's last name? | | | | | |
| | PRINT AND VERIFY SPELLING. DO NOT WRITE "SAME." | father's last name | | | | |
| Y5. | We would like to have your Social Security Number. This will have no effect on your benefits. This information is voluntary and is collected under the authority of the U.S. Public Health Service Act (42 U.S.C. 242K Section 306). | 0 REFUSED | | | | |
| | What is your Social Security Number? | _ | | | | |
| | | Social Security Number | | | | |
| Y6. | CHECK ITEM: MARK ONE BOX. | 1 SAMPLE PERSON (Y9) | | | | |
| | MARK MAIN RESPONDENT FOR HOUSEHOLD ADULT Q. SPECIFY FAMILY NO. AND LINE NO. IF OTHER THAN SP. | 2 MOTHER | | | | |
| | SPECIFY FAMILY NO. AND LINE NO. IF OTHER THAN SF. | 3 FATHER FAM. NO | | | | |
| | | 4 SPOUSE | | | | |
| | | 8 DAUGHTER | | | | |
| | | 9 SON | | | | |
| | | 5 OTHER 6 SPECIFY | | | | |
| Y7. | IF OTHER THAN SAMPLE PERSON, EXPLAIN REASON FOR ACCEPTING PROXY RESPONDENT. | 1REASON | | | | |
| Y8. | IF MAIN RESPONDENT WAS NOT THE SAMPLE PERSON, WAS THE SAMPLE PERSON PRESENT DURING ANY PART OF THE INTERVIEW? | 1 Y (Y10) 2 N (Y10) | | | | |
| Y9. | IF SAMPLE PERSON MARKED IN Y6, WAS ANYONE ELSE PRESENT DURING THE INTERVIEW? | 1 Y 2 N | | | | |
| Y10 | . QUALITY OF INTERVIEW. | 1 RELIABLE | | | | |
| | | 2 UNRELIABLE | | | | |

| The state of the s | | | |
|--|-------------------|-----------------|------------------|
| Y11. OBSERVED CHARACTERISTICS OF THE SP: | | | |
| a. IN BED? | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| b. IN WHEELCHAIR? | 1 🗌 Y | 2 🔲 N | 9 🔲 DK |
| c. USES CANE, CRUTCHES, OR WALKER? | 1 🗆 Y | 2 🔲 N | 9 <u></u> DK |
| d. WALKS SLOWLY OR SHUFFLES? | 1 🗌 Y | 2 🗌 N | 9 <u></u> DK |
| e. PARALYSIS IN HANDS OR LEGS? | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| f. HEARING IMPAIRMENT? | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| g. SPEECH PROBLEMS (NOT LANGUAGE)? | 1 🗌 Y | 2 🔲 N | 9 🗌 DK |
| h. COUGHS CONTINUOUSLY? | 1 🗆 Y | 2 🔲 N | 9 <u></u> DK |
| i. DRESSED IN STREET CLOTHES? | 1 🔲 Y | 2 🔲 N | 9 <u></u> DK |
| j. WEIGHT? | VERY 1 OVERWEIGHT | ABOUT 2 AVERAGE | VERY 3 🔲 THIN |
| k. OTHER PHYSICAL CHARACTERISTICS? | 1 | | |
| | | <u>.</u> | |
| | | | |
| I. COMMENTS: 1 | | | |
| | | | |
| | | | |
| | | | |
| | | | |

RECORD TIME ON COVER

| BLOOD PRESSURE MEASUREMENT (AGES 17+ YEARS) | | | | | |
|---|---|--|--|--|--|
| IF SETTING IS INAPPROPRIATE FOR BLOOD PRESSURE MEASUREMENT, GO TO ZA9. | | | | | |
| Now I will explain the procedure for measuring your pulse and blood pressure. It is important that you remain relaxed and seated for the measurement which will take about 15 minutes. I would like to suggest that should the phone or doorbell ring that I answer it for you. Would that be all right? | | | | | |
| First, I will find the pulse in your right arm. Next, I will wrap the blood pressure cuff around your arm. I will take your pulse and then inflate the cuff. You will feel a sensation of pressure on your arm when the cuff is inflated. I will be inflating the cuff a maximum of five times. While I am measuring your blood pressure, it is best that we refrain from any conversation. If you have any questions, I will be happy to answer them for you before or after the measurements are taken. | | | | | |
| | EWELRY AND TO ROLL UP SLEEVE. OBSERVE <u>SP's</u> ARM FOR CONDITIONS S ARE PRESENT, RECORD IN ZA9 AND DISCONTINUE PROCEDURE. | | | | |
| ZA1. Do you know of any medical reason why this procedure should not be done? | 1 ☐ Y What is the medical reason? → 01 ☐ RECENT SURGERY 02 ☐ UPPER BODY CIRCU- LATORY PROBLEM (END) | | | | |
| CODE YES ONLY IF THE PROBLEM EXISTS ON BOTH ARMS. | 03 PAIN/INJURY 04 OTHER 05 SPECIFY | | | | |
| IF BLOOD PRESSURE PROCEDURE SHOULD NOT BE DONE DUE TO MEDICAL REASONS, DO NOT TAKE THE MEASUREMENT. | 2 N (GO TO ZA2) | | | | |
| IF SP OBSERVED RECORD, OTHERWISE ASK: ZA2. Have you consumed any food, alcohol, or coffee or smoked any cigarettes within the last 30 minutes? | 1 ☐ Y Which have you had? → MARK ALL THAT APPLY 1 ☐ Food 2 ☐ Alcohol 3 ☐ Coffee 2 ☐ N 4 ☐ Cigarettes | | | | |
| ZA3. I will now take your pulse and blood pressure. | CUFF SIZE SELECTED: 1 | | | | |
| ZA4. ARM SELECTED | 1 RIGHT 2 LEFT REASON: 01 INJURY, RASH 02 CAST, DRESSING 03 PLACEMENT OF EQUIPMENT 04 OTHER 05 SPECIFY | | | | |
| ZA5. SP'S PULSE RATE FOR 30 SECONDS | i PULSE (GO TO ZA6) 00 NEVER FOUND PULSE (GO TO ZA9) | | | | |
| ZA6. PULSE REGULAR/RHYTHMIC | 1 | | | | |

| ZAT | ZA7. MAXIMUM INFLATION LEVEL (MIL) ATTEMPTS ENTER A READING OR "NOT DONE" REASON. | | | | | | |
|-----|--|---------------------|---|--|--|--|--|
| | | READING | MIL NOT DONE | | | | |
| a. | <u>FIRST</u> ATTEMPT | <u> </u> _ MIL | 1 NOT ATTEMPTED 2 FAILED ATTEMPT (MISSED READING, OPEN VALVE, ETC.) 3 EQUIPMENT FAILURE (ZA9) | | | | |
| b. | SECOND ATTEMPT | | 1 NOT ATTEMPTED 2 2 ATTEMPTS FAILED (ZA9) 3 EQUIPMENT FAILURE | | | | |

ZA8. BLOOD PRESSURE ATTEMPTS

ENTER A READING OR A "NOT DONE/REFUSED" REASON FOR EACH ATTEMPT NECESSARY.

| | | READING | BP NOT DONE | BP REFUSED |
|----|-------------------|--|--|---|
| a. | FIRST ATTEMPT | _ _ _ SBP _ _ _ DBP | 666 MISSED READING (INTERRUP- TION, NOISE, OPEN VALVE, ETC.) 667 EQUIPMENT FAILURE | 997 TIME CON- STRAINTS 998 DISCOMFORT 999 OTHER SPECIFY |
| b. | SECOND ATTEMPT | | 666 MISSED READING (INTERRUP- TION, NOISE, OPEN VALVE, ETC.) 667 EQUIPMENT FAILURE | 997 TIME CON- STRAINTS 996 DISCOMFORT 999 OTHER SPECIFY GO TO ZA10 IF AT LEAST ONE BP OBTAINED. OTHER- WISE, GO TO ZA9) |
| C. | THIRD ATTEMPT | (GO TO ZA10 _ _ ONLY IF 3 READINGS OR 5 INFLA- TIONS OBTAINED. OTHERWISE, GO TO ZA8d) | 666 MISSED READING (INTERRUP- TION, NOISE, OPEN VALVE, ETC.) 667 EQUIPMENT FAILURE (IF LESS THAN 5 INFLATIONS GO TO ZA8d. IF 5 INFLATIONS AND AT LEAST ONE BP, GO TO ZA10. OTHERWISE, GO TO ZA9) | 997 TIME CON- STRAINTS 998 DISCOMFORT 999 OTHER SPECIFY (GO TO ZA10 IF AT LEAST ONE BP OBTAINED. OTHER- WISE, GO TO ZA9) |
| d. | FOURTH ATTEMPT | _ _ _ SBP _ _ _ DBP | 666 MISSED READING (INTERRUP- TION, NOISE, OPEN VALVE, ETC.) 667 EQUIPMENT FAILURE (GO TO ZA10 IF AT LEAST ONE BP OBTAINED. OTHERWISE, GO TO ZA9) | 997 TIME CON- STRAINTS 998 DISCOMFORT 999 OTHER SPECIFY GO TO ZA10 IF AT LEAST ONE BP OBTAINED. OTHER. WISE, GO TO ZA9) |

| ZA9. | REASON FOR NOT TAKING BLOOD PRESSURE MEASUREMENT: | | ZA10. IF ZAS HAS A | TI | HEN | IF ZA HAS | A | THEN |
|-------|---|-------|--|-------------------------|------------------------------|-------------------|-------------------------|----------------|
| | 01 SP REFUSED (NO TIME, DISINTEREST) | | READING FO | OR AVE | RAGE | READIN | G FOR | AVERAGE |
| | 02 WITHERED ARMS, INJURY, | | 01 🔲 a,b,c | į i | э,с | 08 □ | b,c | c |
| | DRESSING, RASH (<u>ON</u> <u>BOTH ARMS</u>) | | 02 🗌 a,b,d | 1 | o,d | 09 □ | b,d | d |
| | 03 2 FAILED MIL | (T) | 03 🔲 a,c,d | į (| c,d | 10 🗀 | c,d | d |
| | 04 INAPPROPRIATE SETTING | (END) | 04 🔲 b,c,d | (| c,d | 11 🗆 | a | а |
| | 05 EQUIPMENT FAILURE | | 05 🗌 a,b | 1 | ь | 12 🗌 | b | b |
| | 06 COULD NOT LOCATE PULSE IN EITHER ARM | | 06 | ı | С | 13 🗀 | c | С |
| | 07 OTHER, SPECIFY: | | 07 🔲 a,d | | đ | 14 🔲 | d | d |
| | | | | 1 | | | 1 | |
| 200 | SYSTOLIC / DIASTOI | LIC | ZA12. CINCL | ENTERS | ECTION | DIASTOLI | | TOLIC |
| ZA11. | | | ZA12. CIRCL | E INTERS | ECTION O | F SYSTOL | IC & DIAS | TOLIC |
| | | | SYSTOLIC | | | DIASTOLIC | C I | |
| | | | | - 04 | 85-89 | 00.404 | | |
| | | | | ≤ 84 | 00-09 | 90-104 | 105-114 | >115 |
| | TOTAL | | <u><</u> 139 | <u><</u> 84 | 2 | 3 | 105-114 | >115 5 |
| | TOTAL | | <u><</u> 139 | | | | | |
| | TOTAL | | | 1 | 2 | 3 | 4 | 5 |
| | | | 140-159 | 1 | 2 | 3 | 4 | 5 |
| | | | 140-159 160-199 | 1 3 4 4 RAGE OF BLOOD F | 2 3 4 4 BP READI | 3 3 4 4 NGS AND I | 4 4 4 PULSE ON | 5 5 5 N REPORT |
| ZA13. | | IS: 1 | 140-159 160-199 200 + ENTER AVE | 1 3 4 4 RAGE OF BLOOD F | 2 3 4 4 BP READI | 3 3 4 4 NGS AND I | 4 4 4 PULSE ON | 5 5 5 N REPORT |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics
HOUSEHOLD ADULT QUESTIONNAIRE
SHORT FORM
NHANES III

National Health and Nutrition Examination Survey

NOTICE: Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 306(d) of the Public Health Service Act (42 USC 242 m). NOTICE La Información contenida en este formulario que permitira identificar a cualquier incividuo o establecimiento ha sido recolectada con la garantia que será mentenida en la más estricia confidencialidad, será usade sólo para los propôsitos establecidos para este estadio, y no està disappada o entregada a cisca sin el consentimiento del lindividuo o del establecimiento de acuerdo con la sección 308(d) de la Lay det Servicio de Sakid Pública - Public Health Benvice Act (42 USC 242m).

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Room 721-H, Humphrey Building; 200 independence Avenue; SW; Washington, DC 20201; ATTN: PRA, and to the Office of information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

Carga af público de reportaje para participación completa en el NHANES af as estima que, en promecto, sea cinco horas. Envie comentarios respeto a esta carga o qualquier otro aspecto de esta colección de información, incluyendo sugerencias para reducir esta carga af PHS Reports Classance Officer: Room 721-H, Humphrey Building; 200 independence Aventes, 69; Yeshington, DC 20201; ATTH: PFA, y a Office of Menagement and Budgel, Washington, DC 20503.

| CASE NO: | Stand No. Segment No. Serial No. |
|---------------|----------------------------------|
| FAMILY NO. | NAME (First, Middle, Last) |
| SP NO. | AGE SEX 1 Male 2 Female |
| SAMPLE NO: | |
| DECK NO. | 656A |

CDC 64.07 REV. 09/90

HOUSEHOLD ADULT QUESTIONNAIRE: SHORT FORM (AGES 17+ YEARS)

| ZZ31. Would you say your health in general is excellent, very good, good, fair, or poor? ZD6fe ush-dicus on general su salud as excelente, mily buens, buens, regular o make? | | | 1 | ∞ 2 □ .m 3 □ M | Seget seue nii proese |
|--|---|--|-----------------------|--|-----------------------------|
| ZZ32. | Do you smoke cigarettes <u>now?</u> CFurns cigariffos <u>alters</u> ? | | 1 🗆 Y | 2 🔲 N | |
| ZZ33. | OBSERVED PHYSICAL CHARACTERISTICS OF THE SP: | / <u>HEALTH</u> CONDITIONS | | | |
| | a. IN BED? | | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| ļ | b. IN WHEELCHAIR? | | 1 🗌 Y | 2 🗌 N | 9 🔲 DK |
| | c. USES CANE, CRUTCHES, OR WALKER | | 1 🗌 Y | 2 🔲 N | 9 🗌 DK |
| | d. WALKS SLOWLY OR SHUFFLES? | *************************************** | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| | e. PARALYSIS IN HANDS OR LEGS? | | | 2 🔲 N | |
| | f. HEARING IMPAIRMENT? | | | 2 🔲 N | 9 🔲 DK |
| | g. SPEECH PROBLEMS (NOT LANGUAGE | | 1 🗆 Y | 2 🔲 N | 9 🔲 DK |
| | h. COUGHS CONTINUOUSLY? | | ļ | 2 🔲 N | |
| | i. DRESSED IN STREET CLOTHES? | | | 2 🔲 N | |
| | j. WEIGHT? | | 1 OVERW | ABOUT | |
| | k. OTHER PHYSICAL CHARACTERISTICS, HEALTH CONDITIONS? ATTEMPT #1 | ATTEM | PT #2 | Ante | # ₹3 |
| ZZ3 | 4. DATE OF INTERVIEW/OBSERVATION | ZZ34: DATE OF INTER | MEW/OBSERVATION | ZZ34. DATE OF INTER | MEW/OBSERVATION |
| | MONTH DAY YEAR | MONTH D | YEAR | MONTH I | DAY YEAR |
| Z23 | ZZ35. L'ANGUAGE OF INTERVIEW ZZ35. L'ANGUAGE OF II 1 | | H 개 | ZZ35. LANGUAGE OF 1 | SH SH |
| 223 | S. INTERVIEWER NUMBER | IUMBER | ZZ36. INTERMEWER! | NUMBER | |
| | 77. MARKAUL THAT APPLY 1. | APPLY SED SESPONSE (SESERVED STED | ZZ37. MARK ALL THA 1 | SED RESPONSE Y DBSERVED | |
| | 0 NONE 11 7221 2 7222 3 2233 | 0 ☐ NONE 1 ☐ ZZ31 2 ☐ ZZ32 3 ☐ ZZ33 | | 0 NONE 1 2231 2 2232 3 2233 | end to |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

HOUSEHOLD YOUTH QUESTIONNAIRE (Ages 2 Months - 16 Years)

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| ASE O: | | | | | | EDITOR NO. |
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| AMPLE O. | | | | ☐ MONTHS | NOMOCA | SEX 1 |
| . | | | | YEARS _ | NUMBER | |
| ECK O. | * 755 * | | TI | ME BEGAN 1 | | DATE OF EXAMINATION / / MO DY YR |
| | INTERVIEWER NO: | | T1 | ME ENDED 1 | | TIME 1 ☐ AM : — 2 ☐ PM |
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| | DATE OF INTERVIEW / MO DY YR | _ | 1 | GE OF INTERVIE GLISH ANISH HER | w | 1 TAXI 2 SELF 3 STAFF |

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REV. 10/91

HOUSEHOLD YOUTH QUESTIONNAIRE

AGES 2 MONTHS - 16 YEARS

| TOPIC | | <u>PAGE</u> |
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| BIR | TH (AGES 2 MONTHS - 11 YEARS) | · |
|-----|--|--|
| A1. | CHECK ITEM. REFER TO AGE OF SP. | 1 |
| A2. | How old (was's biological mother/were you) when was born? | age 99 DK |
| АЗ. | Did ('s mother/you) smoke at any time while (she was/you were) pregnant with? | 1 Y 2 N (A6) 9 DK (A6) |
| A4. | At any time during the pregnancy did (-'s mother/you) quit or refrain from smoking for the rest of the pregnancy? | 1 Y 2 N (A6) 9 DK (A6) |
| A5. | About what month of the pregnancy did ('s mother/you) stop smoking? USE ROUNDING RULE IF NECESSARY. | CIRCLE NUMBER OF MONTH 1 2 3 4 5 6 7 8 9 99 |
| A6. | Did receive any newborn care in an intensive care unit, premature nursery, or any other type of special care facility? | 1 Y How many days? 2 N days number |
| A7. | How much did weigh at birth? PROBE FOR OUNCES IF NOT REPORTED. ENTER RESPONSE IN POUNDS AND OUNCES OR IN GRAMS. | lbs/oz. (B1) number . number OR grams (B1) number 9999 DK (A8) |
| A8. | Did weigh more than 5-1/2 pounds (2500 grams) or less? | 1 |
| A9. | Did weigh more than 9 pounds (4100 grams) or less? | 1 |

| INF | ANT FEEDING PRACTICES/DIET (AGES 2 MONTHS - 11) | /EARS) |
|-----|--|--|
| | Now I'm going to ask you some general questions about -'s eating habits. | |
| B1. | CHECK ITEM. REFER TO AGE OF SP. | 1 |
| B2. | Was ever breastfed or fed breastmilk? | 1 Y 2 N (B6) |
| B3. | How old was when was <u>first</u> fed something other than breastmilk or water? | 00 NEVER (B11) |
| | INCLUDE FORMULA, JUICE, SOLID FOODS. | number 2 weeks 3 months |
| B4. | How old was when was first fed formula on a daily basis? | 00 NEVER |
| | INCLUDE CHILDREN RECEIVING ONLY FORMULA <u>AND</u> THOSE RECEIVING FORMULA <u>AND</u> BREASTMILK AT THE SAME TIME. | number } 1 |
| B5. | How old was when completely <u>stopped</u> breastfeeding or being fed breastmilk? | 000 STILL BREASTFEEDING 1 days 2 weeks 3 months (B7) |
| B6. | How old was when was first fed formula on a daily basis? | 00 NEVER ON A DAILY BASIS (B8) |
| | INCLUDE CHILDREN RECEIVING ONLY FORMULA AND THOSE RECEIVING FORMULA AND BREASTMILK AT SAME TIME. | number 1 days 2 weeks 3 months |
| | IF "NEVER" IN B4, THEN SKIP TO B8. | 00 STILL DRINKING FORMULA |
| B7. | How old was when completely <u>stopped</u> drinking formula? | number |
| B8 | How old was when was <u>first</u> fed milk on a daily basis? DO NOT INCLUDE BREASTMILK OR FORMULA. | 00 NEVER ON A DAILY BASIS (B10) 1 days 2 weeks 3 months |

| B9. What type of milk was first fed on a daily basis? | 01 regular whole milk |
|---|-------------------------------------|
| | 02 lowfat milk (1% or 2%) |
| | 03 Skim milk (1/2% or nonfat) |
| | 04 nonfat dry milk (reconstituted) |
| | 05 evaporated milk |
| | 06 goat's milk |
| | 07 other 08 specify |
| | 99 DK |
| B10. How old was when - started eating solid foods (such as strained | 00 NEVER ON A DAILY BASIS |
| foods or any other non-liquid foods) on a daily basis? | 1 days |
| | number 2 weeks |
| | J 3 months |
| B11. Has – ever used a baby bottle? | 1 N (B13) |
| B12. How old was when stopped using a baby bottle? | 00 STILL USING BABY BOTTLE |
| | number 1 months |
| | ∫ 2 ☐ years |
| | 99 DK |
| B13. CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 1 YEAR (B16) |
| | 2 1-11 YEARS |
| B14. How often does eat breakfast: every day, on some days, rarely, | 01 every day |
| never, or on weekends only? | 02 some days |
| | 03 rarely |
| | 04 never |
| | 05 weekends only |
| B15. During the past 12 months, has - changed - eating habits to try to lose weight? | 1 N 2 N |
| B16. During the past 12 months, has changed what eats for any medical reason or health condition? | 1 N (B18) |
| B17. What was the medical reason or health condition that caused to | 01 OVERWEIGHT/OBESITY |
| change what eats? | 02 HIGH BLOOD PRESSURE/HYPERTENSION |
| MARK ALL THAT APPLY. | 03 HIGH BLOOD CHOLESTEROL |
| | 04 ALLERGY |
| | 05 DIABETES |
| | 06 OTHER 07 |
| | SPECIFY 99 DK |
| | 1 |

| B18. How (tall/long) is without shoes? | feet/inches orcentimeters 9999 |
|---|---|
| B19. How much doesweigh without clothes or shoes? | pounds or kilograms 9999 DK |
| B20. Do you consider to be overweight, underweight, or about the righ weight? | 1 overweight 2 underweight 3 about the right weight |

| МОТ | MOTOR AND SOCIAL DEVELOPMENT (AGES 2 MONTHS - 3 YEARS) | | | | | | | | | |
|-----|---|--|-----|---------|--|---------------------------------|--|----------------------------------|-----|----|
| C1. | CHECK ITEM. REFER TO AGE OF SP. | 1 2 | |] | 4+ YEARS (D UNDER 4 YEA | • | | | | |
| | Now I would like to ask a few questions about various things children do at different ages. | | | | | ···• · | <u>, , , , , , , , , , , , , , , , , , , </u> | | | |
| C2. | CHECK ITEM. RECORD AGE IN MONTHS AS OF HYQ (TODAY'S) INTERVIEW. THEN MARK CORRECT BOX AND ASK THE 15 QUESTIONS INDICATED FOR THAT AGE. | 01 02 03 04 05 06 07 | |] | 0-3 MONTHS 4-6 MONTHS 7-9 MONTHS 10-12 MONTH 13-15 MONTH 16-18 MONTH 19-21 MONTH 22 MONTHS (C35 - C50) | OLD OLD IS OL IS OL IS OL IS OL | (C10 - C24 (C14 - C28 D (C20 - C D (C24 - C D (C28 - C | 4) 8) C34) C38) C42) | OLD | |
| C3. | When lying on (his/her) stomach, did - ever lift (his/her) head off the surface for a moment? | 1 | Ε |] | Y 2 | | N | 9 | | DK |
| C4. | When lying on (his/her) stomach, has ever turned (his/her) head from side to side? | 1 | Ε |] | Y 2 | | N | 9 | | DK |
| C5. | Have -'s eyes ever followed a moving object? | 1 | |] | Y 2 | | N | 9 | | DK |
| C6. | Have's eyes ever followed a moving object all the way from one side to the other? | 1 | |] | Y 2 | | N | 9 | | DK |
| C7. | When lying on (his/her) stomach, has ever raised (his/her) head and chest from the surface while resting (his/her) weight on (his/her) lower arms or hands? | 1 | |] | Y 2 | | N | 9 | | DK |
| C8. | Has ever turned (his/her) head around to look at something? | 1 | |] | Y 2 | | N | 9 | | DK |
| C9. | While lying on (his/her) back and being pulled up to a sitting position, did ever hold (his/her) head stiffly so that it did not bend back as (he/she) was pulled up? | 1 | |] | Y 2 | | N | 9 | | DK |
| C10 | Has ever laughed out loud without being tickled or touched? | 1 | | <u></u> | Y 2 | | N | 9 | | DK |
| C11 | Has ever held in one hand a moderate size object such as a block or a rattle? | 1 | |] | Y 2 | | N | 9 | | DK |
| C12 | Has ever rolled over on (his/her) own on purpose? | 1 | ٦ | <u></u> | Y 2 | | N | 9 | | DK |
| C13 | Has – ever looked around with (his/her) eyes for a toy which was lost or not nearby? | 1 | · [|] | Y 2 | | N | 9 | | DK |
| C14 | Has – ever smiled at someone when that person talked to or smiled at but did not touch (him/her)? | 1 | | <u></u> | Y 2 | | N | 9 | | DK |
| C15 | . Has ever seemed to enjoy looking in the mirror at (himself/ herself)? | 1 | Е | | Y 2 | | N | 9 | | DK |

| C16. Has ever picked up small objects such as raisins or cookie crusing only (his/her) thumb and first finger? | umbs, 1 |
|---|---|
| C17. Has ever sat alone with no help except for leaning forwa (his/her) hands or with just a little help from someone else? | ard on 1 Y 2 N GO TO D1. OTHERWISE CONTINUE WITH C18. |
| C18. Has ever said any recognizable words such as "mama" or "dad | da"? 1 |
| C19. Has ever shown by (his/her) behavior that (he/she) known names of common objects when somebody else names the loud? | |
| C20. Has ever walked at least 2 steps with one hand held or holding something? | g on to 1 |
| C21. Has ever sat for 10 minutes without any support at all? | 1 Y 2 N 9 DK |
| C22. Has ever crawled when left lying on (his/her) stomach? | 1 Y 2 N 9 DK |
| C23. Has ever been pulled from a sitting position to a standing p and supported (his/her) own weight with legs stretched out? | osition 1 TY 2 N 9 DK |
| C24. Has ever waved good-bye without help from another person? | 1 Y 2 N IF SP IS 4-6 MONTHS OLD, GO TO D1. OTHERWISE CONTINUE WITH C25. |
| C25. Has – ever pulled (himself/herself) to a standing position without from another person? | out help 1 Y 2 N 9 DK |
| C26. Has ever stood alone on (his/her) feet for 10 seconds o without holding on to anything or another person? | or more 1 |
| C27. Has ever walked at least 2 steps without holding on to anyt another person? | thing or 1 TY 2 N 9 DK |
| C28. Has ever shown that (he/she) wanted something by p pulling, or making pleasant sounds rather than crying or whining the pulling of th | |
| C29. Has ever said the name of a familiar object, such as ball? | 1 Y 2 N 9 DK |
| C30. Has ever crawled up at least 2 steps? | 1 Y 2 N 9 DK |
| C31. Has said 2 recognizable words besides "mama" or "dada"? | 1 Y 2 N 9 DK |
| C32. Has — ever let someone know, without crying, that wear (soiled) pants or diapers bothered (him/her)? | ing wet 1 Y 2 N 9 DK |
| C33. Did – ever walk up at least 2 steps with one hand held or hole rail? | ding the 1 Y 2 N 9 DK |

| C34. Has ever run? | 1 🗆 Y 🗎 |
|---|--|
| | IF SP IS 10-12 MONTHS OLD, 2 N GO TO D1. OTHERWISE |
| | CONTINUE WITH C35. |
| C35. Has ever made a line with a crayon or pencil? | 1 Y 2 N 9 DK |
| C36. Has ever fed (himself/herself) with a spoon or fork without spilling much? | 1 Y 2 N 9 DK |
| C37. Has - ever spoken a partial sentence of 3 words or more? | 1 Y 2 N 9 DK |
| C38. Has ever said (his/her) first and last name together without someone's help? | 1 Y IF SP IS 13-15 MONTHS OLD, |
| NICKNAME MAY BE USED FOR FIRST NAME. | 2 N GO TO D1. OTHERWISE CONTINUE WITH C39. |
| | 9 DK) |
| C39. Has ever walked up stairs by (himself/herself) without holding on to a rail? | 1 |
| C40. Has - ever counted 3 objects correctly? | 1 |
| C41. Has - ever walked up stairs by (himself/herself) with no help, stepping on each step with only one foot? | 1 Y 2 N 9 DK |
| C42. Does know his/her own age and sex? | 1 Y) IF OR IO 40 40 MONTH IN OLD |
| | IF SP IS 16-18 MONTHS OLD, GO TO D1. OTHERWISE |
| | 9 DK CONTINUE WITH C43. |
| C43. Has ever said the names of at least 4 colors? | 1 Y 2 N 9 DK |
| C44. Has ever pedaled a tricycle at least 40 feet? | 1 Y 2 N 9 DK |
| C45. Has ever done a somersault without help from anybody? | 1 Y IF SP IS 19-21 MONTHS OLD, |
| | 2 N GO TO D1. OTHERWISE |
| | 9 DK CONTINUE WITH C46. |
| C46. Has ever washed and dried (his/her) hands without any help except for turning the water on and off? | 1 Y 2 N 9 DK |
| C47. Has – ever dressed (himself/herself) without any help except for tying shoes (and buttoning the backs of dresses)? | 1 N 2 N 9 DK |
| C48. Has ever gone to the toilet alone? | 1 N 2 N 9 DK |
| C49. Has ever counted out loud up to 10? | 1 N 2 N 9 DK |
| C50. Has ever drawn a picture of a man or woman with at least 2 parts of the body besides a head? | 1 Y 2 N 9 DK |

| HEA | HEALTH SERVICES AND FUNCTIONAL IMPAIRMENT (AGES 2 MONTHS - 16 YEARS) | | | | | | |
|------|--|--|--|--|--|--|--|
| D1. | Would you say's health in general is excellent, very good, good, fair, or poor? | 1 | | | | | |
| D2. | Is there a particular clinic, health center, doctor's office, or other place that — usually goes to if — is sick, needs advice about health or for routine care? | 1 Y 2 N (D4) | | | | | |
| D3. | Is there <u>one</u> particular doctor or health professional that usually sees? | 1 Y 2 N | | | | | |
| D4. | About how long has it been since (-/you/anyone) last saw or talked to a medical doctor or other health professional about -? include doctors seen while a patient in a hospital. | 1 less than 1 year 2 1 year, less than 2 years 3 2 years, less than 5 years 4 5 years or more 5 NEVER 9 DK | | | | | |
| D5. | Since – was born, how many different times has – stayed in the hospital overnight or longer? Do not include the hospitalization when – was born. | 00 none times number | | | | | |
| D6. | CHECK ITEM. REFER TO AGE OF SP. | 1 | | | | | |
| D7. | Is able to take part at all in any of the usual kinds of activities done by most (children/babies) 's age? | 1 Y 2 N (D10) | | | | | |
| D8. | ls limited in the kind or amount of activities can do because of an impairment or health problem? | 1 Y (D10) 2 N (E1) | | | | | |
| D9. | Does any impairment or health problem <u>now</u> keep – from attending school? | 1 Y 2 N (E1) | | | | | |
| D10. | Does attend a special school or special classes because of any impairment or health problem? | 1 | | | | | |
| D11. | Does - need to attend a special school or special classes because of any impairment or health problem? | 1 N 2 N | | | | | |
| D12. | How long ago was the impairment or health problem <u>first</u> noticed? | 1 | | | | | |

| SEL | SELECTED CONDITIONS (AGES 2 MONTHS - 16 YEARS) | | | | | | | | |
|-----------|--|--|-------------------------|---|-----------------------------|---|--|--|--|
| E1. | IF "Y | a doctor <u>ever</u> say that 'ES" ASK E2 - E4 BE T CONDITION. | | E2. How old was – when – <u>first</u> had? | E3. Does <u>still</u> have? | E4. Has – <u>ever</u> been treated by a doctor for? | | | |
| ********* | a. | Rheumatic fever/ rheumatic heart disease? | 1 Y (E2) 2 N (b) | number } 1 | 1 Y 2 N 9 DK | 1 Y 2 N 9 DK | | | |
| ********* | b. | Epilepsy/fit/ convulsion? | 1 Y (E2) 2 N (c) | number } 1 | 1 | 1 | | | |
| ****** | с. | Cerebral palsy? | 1 Y (d) 2 N (d) | | | | | | |
| | d. | Mental retardation? | 1 Y (e) 2 N (e) | | | | | | |
| | e. | Muscle weakness or paralysis of the arms? | 1 Y (E2) 2 N (f) | number } 1 | 1 Y 2 N 9 DK | | | | |
| | f. | Muscle weakness or paralysis of the legs? | 1 [Y (E2) 2 [N (g) | number } 1 | 1 Y 2 N 9 DK | | | | |
| | g. | Asthma? | 1 Y (E2) 2 N (h) | number } 1 | 1 | 1 Y 2 N 9 DK | | | |
| | h. | Chronic bronchitis? | 1 Y (E2) 2 N (i) | number } 1 | 1 Y 2 N 9 DK | 1 Y 2 N 9 DK | | | |
| | i. | Hayfever? | 1 Y (E2) 2 N (E5) | number } 1 | 1 Y 2 N 9 DK | 1 | | | |

| E5. | E5. CHECK ITEM. REFER TO AGE OF SP. | | | 1 UNDER 4 YEARS (E15) 2 4+ YEARS | | | | | | |
|-------|---|-------------------------|---------------------|----------------------------------|--|---|--|--|--|--|
| | Did a doctor <u>ever</u> say that had IF "YES" ASK E7 - E9 BEFORE GOING TO NEXT CONDITION. | E7. How old was v | vhen – <u>first</u> | E8 | 3. Does <u>still</u> have? | E9. Has <u>ever</u> been treated by a doctor for? | | | | |
| ••••• | a. Hypertension or 1 Y (E7) high blood pressure? 2 N (b) | number } 1 | mos yrs | | 1 | 1 Y 2 N 9 DK | | | | |
| | b. High blood 1 Y (E7) cholesterol? 2 N (E10) | number } 1 2 | mos yrs | | 1 | 1 Y 2 N 9 DK | | | | |
| E10. | Has – ever seen a psychiatrist, psychologist, cany emotional, mental, or behavioral problems | | 1 | | Y 2 N | | | | | |
| E11. | During the <u>past 12 months</u> , has taken any p drugs to help control activity or behavior? | rescribed medicines or | 1 | | Y 2 N | | | | | |
| E12. | E12. During the <u>past 12 months</u> , how often did complain of headaches? Would you say never, rarely, sometimes, frequently, or always? | | | | never rarely sometimes frequently always | | | | | |
| E13. | E13. During the <u>past 12 months</u> , how often did complain of stomach aches? Would you say never, rarely, sometimes, frequently, or always? DO NOT INCLUDE MENSTRUAL CRAMPS. | | | | never rarely sometimes frequently | | | | | |
| E14. | Does have any speech defect, such as stulisping? | ttering, stammering, or | 1 | | Y 2 N | | | | | |
| E15. | E15. Has — <u>ever</u> had anemia, sometimes called "tired blood" or "low blood?" | | | | Y 2 N | 9 | | | | |
| E16. | E16. Has ever been tested for lead poisoning? | | | | Y 2 N (E | E21) 9 🔲 DK (E21) | | | | |
| E17. | How long ago was tested? | | 00 | nur | LESS THAN ONE MONT mber | nths | | | | |

| E18. Did the results indicate that - had high lead or lead poisoning? | 1 |
|--|-----------------------------|
| E19. Has - ever been treated in a hospital for lead poisoning? | 1 Y 2 N (E21) |
| E20. How long ago was treated? | 00 LESS THAN ONE MONTH |
| | number } 1 |
| | 1 2 years |
| E21. Now I will ask about some immunizations that - may have received. It may be easier to recall this information if you have a record of -'s | 1 SHOT RECORD AVAILABLE |
| shots. Do you have a shot record for that I can see? | 2 SHOT RECORD NOT AVAILABLE |
| E22. Has - ever received a DPT or tetanus shot? A DPT shot is to prevent diphtheria, tetanus, and pertussis or whooping cough. | 1 Y 2 N (E24) 9 DK (E24) |
| VERIFY ANSWER WITH SHOT RECORD IF AVAILABLE | |
| E23. How long ago was's last DPT or tetanus shot? | number } 1 months |
| VERIFY ANSWER WITH SHOT RECORD IF AVAILABLE | 1 2 years |
| E24. During the past 12 months, did have an accident, injury or poisoning, excluding lead poisoning, that required medical attention? | 1 Y How many times? 2 N |
| potentially stated and the potential and the pot | number times |

| DENTAL CARE AND STATUS (AGES 2 - 16 YEARS) | |
|--|---|
| F1. CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 2 YEARS (G1) 2 2+ YEARS |
| F2. How would you describe the condition of's natural teeth: excellent, very good, good, fair or poor? | 1 excellent 2 very good 3 good 4 fair 5 poor 6 HAS NO NATURAL TEETH |
| F3. What type of dental care does need now? HAND CARD HYQ-1. MARK ALL REPORTED. | 01 |
| F4. How long ago was's <u>last</u> visit to a dentist <u>or</u> dental hygienist? | 1 |
| F5. How often does – go to the dentist <u>or</u> dental hygienist? MARK <u>FIRST</u> APPLICABLE BOX. | 1 at least once a year 2 every 2 years 3 less often than every 2 years 4 whenever needed - no regular schedule 5 other 6 |

| F6. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 8 YEARS (G1) | | | | | | | |
|------|---|----------------------|-----|-------|-----|--------|---|----|--|
| | | 2 | | 8+ YE | ARS | | | | |
| F7. | Has - ever received orthodontic treatment such as wearing braces, bands, or removable appliances to straighten - teeth? | 1 | | Υ | 2 | N (F9) | | | |
| F8. | How old was when started most recent orthodontic treatment? | | | | | | | | |
| | | | age | • | | | | | |
| | | 99 | | DK | | | | | |
| F9. | Has - had "cold sores" or "fever blisters" on - lips in the past 12 months? | 1 | | Y | 2 | N | 9 | DK | |
| F10. | Has had "canker sores" or other ulcers or sores inside mouth in the past 12 months? | 1 | | Y | 2 | N | 9 | DK | |

| RESPIRATORY AND ALLERGY (AGES 2 MONTHS - 16 YEAR | S) |
|---|--|
| G1. CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 12 YEARS (G6) 2 12+ YEARS |
| G2. Does usually cough on most days for <u>3 consecutive months or more</u> during the year? | 1 Y 2 N (G4) |
| G3. For how many years has had this cough? | 00 LESS THAN 1 YEAR years number |
| G4. Does bring up phlegm on most days for <u>3 consecutive months or more</u> during the year? | 1 Y 2 N (G8) |
| G5. For how many years has had trouble with phlegm? | 00 LESS THAN 1 YEAR years (G8) number |
| G6. Has had problems with coughing in the past 12 months? | 1 Y 2 N (G8) |
| G7. How many episodes of cough has had in the past 12 months? | 000 CONTINUOUS episodes number |
| G8. Has had wheezing or whistling in's chest at any time in the past 12 months? | 1 N (G12) |
| G9. How many episodes of wheezing or whistling has – had in the past 12 months? | 000 CONTINUOUS episodes number |
| G10. How many times in the <u>past 12 months</u> was – hospitalized overnight or longer for these episodes of wheezing or whistling? | 000 NONE times |
| G11. During the <u>past 12 months</u> , how many times has gone to a hospital emergency room or doctor's office for one of these episodes of wheezing or whistling? | 000 NONE times number |
| G12. Apart from when has a cold, does's chest ever sound wheezy or whistling? | 1 Y 2 N |
| G13. During the past 12 months, has had any episodes of a. stuffy, itchy, or runny nose? | 1 Y 2 N |
| b. watery, itchy eyes? | 1 N 2 N |
| IF NO IN <u>BOTH</u> G13 a and b, CODE NONE. | 000 NONE |
| G14. During the <u>past 12 months</u> , how many episodes of stuffy, itchy, or runny nose, or watery, itchy eyes, has had? | 666 CONSTANTLY/CONTINUOUSLY episodes number |

| G15. CHECK ITEM. REFER TO G8, G12 AND G13. | 1 "YES" IN <u>AT LEAST ONE</u> OF G8, G12, OR G13 a-b (G16) | |
|---|--|--|
| | 2 "NO" IN <u>ALL</u> OF G8, G12, G13 a-b (G18) | |
| G16. Are any of the symptoms we have just talked about brought on by | | |
| IF NECESSARY STATE SYMPTOMS: "Wheezing, whistling, stuffy, itchy, or runny nose, watery, itchy eyes." | | |
| a. exercise or cold air? | 1 Y 2 N 9 DK | |
| b. animals? | 1 | |
| c. house dust? | 1 🗍 Y 2 🗍 N 9 🗍 DK | |
| d. pollen? | 1 | |
| G17. During which months of the year does pollen make's symptoms worse? | 00 ALL MONTHS | |
| CIRCLE ALL THAT APPLY. | J F M A M J J A S O N D | |
| G18. Within an hour after eating something, has - ever had a severe reaction, such as itching all over, trouble breathing, flushing, hives, or swelling of the face or hands or feet? | 1 Y 2 N | |
| G19. Within an hour after receiving allergy shots or allergy tests, has ever | 3 NEVER RECEIVED ALLERGY SHOTS OR TESTS | |
| had a severe reaction, such as itching all over, trouble breathing, flushing, hives, or swelling of the face or hands or feet? | 1 Y 2 N 9 DK | |
| G20. Has ever given up or had to avoid a pet because of allergies? | 1 Y 2 N | |
| G21. During the past 12 months, has - had any of the following conditions? | G22. How many episodes of did have in the past 12 months? | |
| IF "YES," ASK G22 BEFORE GOING TO NEXT CONDITION. | | |
| a. Colds or flu? 1 🔲 Y (G22) 2 🦳 N (b) | episodes 00 CONTINUOUS number | |
| b. Sinusitis or 1 T Y (G22) 2 N (c) sinus problems? | episodes 00 CONTINUOUS | |
| c. Pneumonia? 1 Y (G22) 2 N (H1) | episodes 00 CONTINUOUS | |

| VISION AND HEARING (AGES 2 MONTHS - 16 YEARS) | | | |
|---|---|--|--|
| H1. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 3 YEARS (H5) 2 3+ YEARS | |
| H2. | Does have trouble seeing with one or both eyes even when wearing glasses or contact lenses? | 1 N 2 N | |
| Н3. | Does use eyeglasses or contact lenses? Include eyeglasses that just magnify. | 1 Y 2 N | |
| H4. | When was the <u>last</u> time had vision tested? | 0 NEVER 1 6 months ago or less 2 over 6 months to 12 months 3 over 12 months to 2 years 4 over 2 years to 5 years 5 more than 5 years 9 DK | |
| H5. | Did ever have an ear infection or an earache? | 1 Y 2 N (H10) 9 DK (H10) | |
| H6. | How many times has had an ear infection or an earache? | 1 | |
| H7. | How old was – when had the <u>first</u> ear infection or earache? | 1 less than 1 year old months age 2 1 year old or older years age | |
| H8. | Was ever treated by a doctor for (any of) ear infection(s) or earache(s)? | 1 N (H10) 9 DK (H10) | |
| H9. | Did a doctor ever treat an ear infection or earache - had by placing tubes in -'s ear? | 1 Y 2 N 9 DK | |
| H10 | Has ever had trouble hearing with one or both ears? Do not include any problems which lasted just a short period of time such as during a cold. | 1 Y 2 N (H12) 9 DK (H12) | |
| H11 | . Does still have trouble hearing with one or both ears? | 1 Y 2 N 9 DK | |
| H12 | . Does use a hearing aid? | 1 N 2 N 9 DK | |

| H13. How long ago did - last have - hearing tested? | 0 NEVER |
|---|------------------------------|
| | 1 6 months ago or less |
| | 2 over 6 months to 12 months |
| | 3 over 12 months to 2 years |
| | 4 over 2 years to 5 years |
| | 5 more than 5 years ago |
| | 9 DK |

| SCHOOL ATTENDANCE AND LANGUAGE USE (AGES 2 MONTHS - 16 YEARS) | | | |
|---|---|---|--|
| | REFER TO AGE OF SP. IF OVER 4 YEARS USE WORDING IN PARENTHESES. | | |
| J1. | (Before the age of 4) did ever attend a day care center or nursery school where there were <u>6 or more</u> children? | 1 Y 2 N (J4) | |
| J2. | Did ever attend this kind of center or school for 10 or more hours per week? | 1 Y 2 N (J4) | |
| J 3. | (Before the age of 4) for how many months or years did attend this kind of center or school? | number } 1 | |
| J4. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 5 YEARS (J28) | |
| | | 2 T 5+ YEARS | |
| J5. | Has – <u>ever</u> attended school? | 1 Y (J7) 2 N | |
| J6. | Why has never attended school? MARK ALL THAT APPLY. | 1 TOO YOUNG - NO SCHOOLS AROUND FOR CHILDREN THAT AGE (J21) | |
| | WARK ALL THAT APPLY. | 2 HEALTH PROBLEM (J21) | |
| | | 3 FAMILY NEEDS CHILD AT HOME (J21) | |
| | | 4 OTHER 5 (J21) | |
| J7. | Is now either going to school or on vacation from school? | 1 going to school | |
| | | 2 on vacation from school (between grades) | |
| | | 3 NEITHER (J13) | |
| J8. | What grade (is in now/will be in)? | 00 nursery school (J21) | |
| | | 66 kindergarten | |
| | | number grade | |
| J9. | Does the school attends serve a <u>complete breakfast</u> costing the same fixed price everyday? | 1 N (J11) | |
| J10. | About how many times a week does usually eat a complete breakfast at school? | 0 NEVER | |
| | <u>STOURINGS</u> OF SOLIDOT | times number | |
| J11. | Does the school attends serve school lunches? These are complete lunches costing the same fixed price every day. | 1 Y 2 N (J14) | |
| J12. | About how many times a week does usually eat a complete school lunch? | 0 NEVER (J14) times number | |
| | | | |

| J13. | Why did – stop going to school? | 1 HEALTH PROBLEM | | |
|----------|--|--------------------------------------|--|--|
| | | 2 FAMILY NEEDS CHILD AT HOME | | |
| | | 3 DROPPED OUT | | |
| | | 4 OTHER 5SPECIFY | | |
| | | SPECIFY | | |
| J14. | During the <u>past 12 months</u> , about how many <u>whole</u> days was - absent from school because of illness, skipping or cutting, or for other | 000 NONE | | |
| | reasons? | number | | |
| J15. | Has ever skipped any grades for any reason? | 1 🗌 Y 2 🗍 N | | |
| | - | 3 CHILD ATTENDING KINDERGARTEN (J23) | | |
| J16. | Has repeated any grades for any reason? | 1 Y 2 N (J19) | | |
| J17. | What grade did repeat? | | | |
| | Any others? | K 1 2 3 4 5 6 7 8 9 10 11 12 | | |
| | MARK ALL THAT APPLY. | | | |
| J18. | Why did repeat the (NUMBERS IN J17) grade(s)? | 1 ACADEMIC FAILURE | | |
| | MARK ALL THAT APPLY. | 2 MMATURE/ACTED TOO YOUNG | | |
| | | 3 TREQUENTLY ABSENT | | |
| | | 4 MOVED INTO A MORE DIFFICULT SCHOOL | | |
|] | | 5 OTHER 6 SPECIFY | | |
| <u> </u> | | SPECIFT | | |
| J19. | Has ever been suspended, excluded or expelled from school? | 1 Y 2 N (J21) | | |
| J20. | How many times has been suspended, excluded or expelled from school? | times number | | |
| J21. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 12 YEARS (J23) | | |
| | | 2 | | |
| J22. | On the average during the school year, how many hours per week | 0 NONE | | |
| | does work in a paid <u>or</u> unpaid job? | 1 5 or fewer hours | | |
| | | 2 | | |
| | | 3 | | |
| | | 4 15-19 hours | | |
| | | 5 | | |
| | | 6 25 or more hours | | |

| J23. | About how many hours did watch TV yesterday? | 0 NONE |
|------|--|--|
| | | 1 half hour or less |
| | | 2 about 1 hour |
| | | 3 about 2 hours |
| | | 4 about 3 hours |
| | | 5 about 4 hours |
| | | 6 5 hours or more |
| J24. | Now I will ask about's friends. | 0 NONE |
| | About how many good friends does - have? | 1 🔲 1-2 |
| | | 2 🔲 3-5 |
| | | 3 🗍 6+ |
| J25. | How many of's close friends do you know by sight and by first and | 0 NONE |
| | last name? Would you say all, most, or only a few? | 1 🔲 ali |
| | | 2 most |
| | | 3 a few |
| J26. | When it comes to meeting new (children/teenagers) and making | 1 shy |
| | friends, is somewhat shy and slow to make a new friend, or does have about average willingness, or is very outgoing, making new friends quickly? | 2 average |
| | | 3 outgoing |
| J27. | How well would you say - gets along with other (children/teenagers)? | 1 no difficulty |
| | Does have no difficulty getting along, have some difficulty, but not much, getting along, or does have a lot of difficulty getting along | 2 some difficulty |
| | with other (children/teenagers)? | 3 a lot of difficulty |
| J28. | What language does mainly speak at home now? | 01 DOESN'T TALK YET (J30) |
| | | 02 English |
| | | 03 Spanish |
| | | 04 Doth English and Spanish equally |
| | | 05 other 06 specify |
| | | |
| J29 | . What language (does/did) mainly speak at school in classes? | 01 DOES NOT ATTEND SCHOOL |
| | | 02 English |
| | | 03 Spanish 04 both English and Spanish equally |
| | | |
| | | 05 depends on subject matter |
| | | 06 other 07 specify |
| L | | |

| J30. What language do ('s parents/you) mainly speak at home now? | 01 English |
|--|-------------------------------------|
| | 02 Spanish |
| | 03 Doth English and Spanish equally |
| | 04 other 05 specify |

| DIABETES REVIEW | | |
|-----------------|--|--|
| N1. | Has - ever been told by a doctor that - has diabetes or sugar diabetes? | 1 Y 2 N (N3) 9 DK (N3) |
| N2. | Is now taking a. insulin | 1 Y (N4) 2 N |
| | b. diabetes pills, sometimes called oral agents or oral hypoglycemic agents? | 1 N (N4) 2 N (N3) |
| N3. | GIVE SP CORRECT APPOINTMENT SLIP. | 1 |
| N4. | GIVE SP CORRECT APPOINTMENT SLIP. | 1 SP ON INSULIN. (GIVE APPT. SLIP FOR DIABETICS ON INSULIN.) 2 SP ON DIABETES PILLS. (GIVE APPT. SLIP FOR DIABETES PILLS OR ORAL AGENTS.) |

| VITAMIN, MINERAL AND MEDICINE USAGE (AGES 2 MONTHS - 16 YEARS) | | |
|--|---|---|
| | The following questions concern's use of vitamins, minerals, and medicines in the past month. | |
| K1. | Has taken any vitamins or minerals in the <u>past month</u>? Please include those that are prescribed by a doctor or dentist and those that are not prescribed. DO NOT INCLUDE TOPICAL VITAMINS. | 1 Y 2 N 9 DK |
| | | |
| | b. Has – taken or used any medicines for which a doctor's or dentist's <u>prescription</u> is needed, in the <u>past month?</u> This includes any products which cannot be obtained without a doctor's or dentist's prescription. Include those medicines you may have already mentioned. | 1 Y 2 N 9 DK |
| | DO NOT INCLUDE PRESCRIPTION VITAMINS WHICH SHOULD BE RECORDED AT K1a. | |
| K2. | CHECK ITEM. REFER TO RESPONSES IN K1a-1b. | "Y" IN <u>ANY</u> OF K12-b. ENTER NUMBER OF EACH BELOW. |
| | IF <u>ANY</u> YES: May I see the containers for <u>all</u> of the (vitamins and minerals/prescription medicines) took in the <u>past month</u> ? | a VITAMINS/MINERALS |
| | | b PRESCRIPTION MEDICINES |
| | | COMPLETE APPROPRIATE PRODUCT TABLE(S). VERIFY THAT THE TOTAL NUMBER OF PRODUCTS ENTERED AGREES WITH THE NUMBER OF PRODUCT COLUMNS COMPLETED IN THE SUBSEQUENT PAGES. |
| | | "N" OR "DK" IN ALL OF K1a-b (L1) |

| VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK K6 - K8. | | | |
|--|--|--|--|
| | PRODUCT ≱1 | PRODUCT #2 | |
| K3. ENTER <u>COMPLETE NAME</u> OF VITAMIN/ MINERAL FROM LABEL OR PROBE RESPONDENT. | NAME: | NAME: | |
| K4. CHECK ITEM. | 1 CONTAINER SEEN (K5) 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT (K6) 3 PRODUCT NAME NOT ON CONTAINER (K6) | 1 CONTAINER SEEN (K5) 2 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED BY RESPONDENT (K6) 3 PRODUCT NAME NOT ON CONTAINER (K6) | |
| K5. ENTER MANUFACTURER'S OR DISTRIBU- TOR'S NAME AND ADDRESS (CITY AND STATE). | name | name | |
| K6. How often did - take (PRODUCT) in the past month? | city state 1 | city state | |
| K7. How much (PRODUCT) did – take each time – took it? | number 01 | 01 | |
| K8. For how long have – been taking this type of product? | number 1 less than one month 2 months 3 years 999 DK | number 1 less than one month 2 months 3 years 999 DK | |

VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK K6 - K8. PRODUCT #3 PRODUCT #4 ENTER COMPLETE NAME OF VITAMIN/ MINERAL FROM LABEL OR PROBE K3. NAME: NAME: RESPONDENT. CHECK ITEM. **CONTAINER SEEN (K5) CONTAINER SEEN (K5)** CONTAINER NOT SEEN. PRODUCT NAME FURNISHED CONTAINER NOT SEEN. PRODUCT NAME FURNISHED 2 2 BY RESPONDENT (K6) BY RESPONDENT (K6) PRODUCT NAME NOT ON 3 PRODUCT NAME NOT ON CONTAINER (K6) CONTAINER (K6) ENTER MANUFACTURER'S OR DISTRIBU-K5. TOR'S NAME AND ADDRESS (CITY AND STATE). name name city state state city K6. How often did - take (PRODUCT) in the day day past month? 2 week week times times 3 month per 3 month per number number other 5 4 other 5 specify specify 999 DK 999 DK How much (PRODUCT) did - take each capsules, capsules, K7. 01 🔲 01 time - took it? tablets/pills tablets/pills 02 teaspoons 02 teaspoons 03 tablespoons 03 tablespoons fluid ounces/ fluid ounces/ ounces ounces 05 drops/droppers 05 drops/droppers number number packets/packs/ 06 packets/packs/ 06 paks/packages paks/packages ml. 07 ml. 08 wafers 08 wafers 09 other 10 09 other 10 specify specify 666 variable amounts 666 variable amounts 999 🗌 999 DK less than one less than one For how long have -- been taking this type of product? month month months 2 months 2 number number 3 3 years 999 DK 999 DK

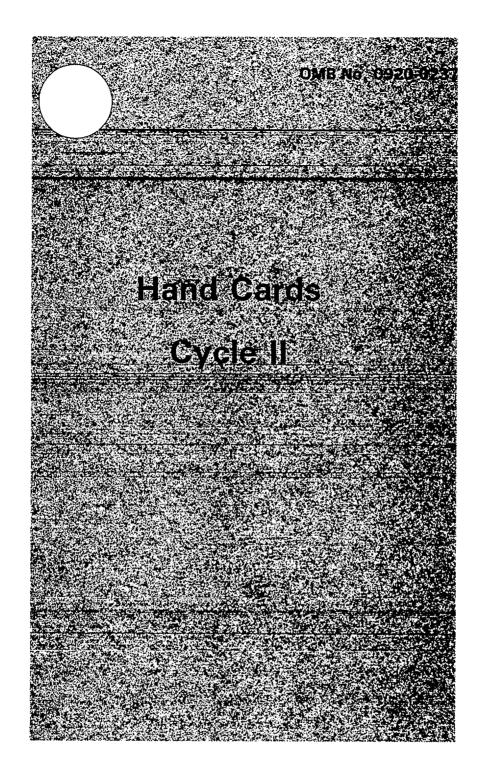
VITAMINS AND MINERALS: RECORD LABEL INFORMATION AND ASK K6 - K8. PRODUCT #7 PRODUCT #5 PRODUCT #6 NAME: NAME: NAME: **CONTAINER SEEN (K5) CONTAINER SEEN (K5)** CONTAINER SEEN (K5) 1 CONTAINER NOT SEEN. PRODUCT NAME FURNISHED CONTAINER NOT SEEN. 2 CONTAINER NOT SEEN. 2 2 PRODUCT NAME FURNISHED BY RESPONDENT (K6) PRODUCT NAME FURNISHED BY RESPONDENT (K6) BY RESPONDENT (K6) PRODUCT NAME NOT ON PRODUCT NAME NOT ON PRODUCT NAME NOT ON 3 3 🔲 CONTAINER (K6) CONTAINER (K6) CONTAINER (K6) name name name city state city state city state K6. day day day week week week times times times 3 🔲 3 month 3 [month per month per number number number 4 other 5 other 5 4 other 5 specify specify specify 999 🗌 DK DK ☐ DK 999 999 K7. 01 capsules, capsules, capsules, tablets/pills tablets/pills tablets/pills teaspoons 02 teaspoons 02 teaspoons 02 03 [tablespoons 03 tablespoons 03 tablespoons fluid ounces/ 04 fluid ounces/ 04 i fluid ounces/ 04 ounces ounces aunces 05 drops/droppers 05 🗍 drops/droppers 05 🗍 drops/droppers number number number packets/packs/ packets/packs/ packets/packs/ 06 🔲 06 paks/packages paks/packages paks/packages 07 ml. 07 mi. 07 ml. 08 wafers 08 wafers 08 wafers 09 other 10 other 10 09 🗔 other 10 09 specify specify specify variable amounts variable amounts 666 666 666 variable amounts 999 🗔 DK 999 DK 999 DK less than one less than one less than one K8. month month month 2 2 months months months number number number 3 3 years years DK DK 999 999 DK 999

PRESCRIPTION MEDICINES: RECORD LABEL INFORMATION AND ASK K11-K12 FOR EACH MEDICATION. MEDICATION #1 MEDICATION #2 MEDICATION #3 K9. NAME: K9. NAME: K9. NAME: K10. CHECK ITEM. K10. CHECK ITEM. K10. CHECK ITEM. 1 CONTAINER SEEN. CONTAINER SEEN. 1 CONTAINER SEEN. CONTAINER NOT SEEN -**CONTAINER NOT SEEN -**2 CONTAINER NOT SEEN -MEDICATION INFORMATION MEDICATION INFORMATION MEDICATION INFORMATION FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT. What is the health problem - had for K11. K11. What is the health problem - had for K11. What is the health problem - had for which - took or used which - took or used which - took or used the (MEDICINE)? (MEDICINE)? (MEDICINE)? PROBE FOR SYMPTOM OR PROBE FOR SYMPTOM OR PROBE FOR SYMPTOM OR CONDITION. CONDITION. CONDITION. For how long have - been taking or using (MEDICINE)? K12. For how long have - been taking or For how long have - been taking or using (MEDIČINE)? using (MEDICINE)? days days days weeks weeks number number number months months 3 months years years years 999 DK 999 DK 999 DK

PRESCRIPTION MEDICINES: RECORD LABEL INFORMATION AND ASK K11-K12 FOR EACH MEDICATION. MEDICATION #4 MEDICATION #5 MEDICATION #6 NAME: K9. K9. NAME: K9. NAME: K10. CHECK ITEM. K10. CHECK ITEM. K10. CHECK ITEM. CONTAINER SEEN. CONTAINER SEEN. CONTAINER SEEN. 1 **CONTAINER NOT SEEN -CONTAINER NOT SEEN -CONTAINER NOT SEEN -**2 MEDICATION INFORMATION MEDICATION INFORMATION MEDICATION INFORMATION FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT. FURNISHED BY RESPONDENT K11. K11. What is the health problem - had for What is the health problem - had for K11. What is the health problem - had for which - took or used which - took or used the which - took or used the (MEDICINE)? (MEDICINE)? (MEDICINE)? PROBE FOR SYMPTOM OR PROBE FOR SYMPTOM OR PROBE FOR SYMPTOM OR CONDITION. CONDITION. CONDITION. For how long have - been taking or using (MEDICINE)? For how long have - been taking ousing (MEDICINE)? K12. K12. K12. For how long have - been taking or using (MEDICINE)? days days days weeks weeks weeks number months number months number months years 4 years 999 DK 999 DK 999 🔲 DK

| again | ould like to know how people's health practices and conditions relate to st the vital statistics records maintained by the National Center for Healt for statistical purposes and no individual identification will be shown in any | h Statistics of the U.S. Public Health Service. The re | esults will only be | | |
|-------|---|--|---------------------|--|--|
| L1. | What is -'s full name, including middle name? | | | | |
| | PRINT AND VERIFY SPELLING. | first | | | |
| | | | | | |
| | | middle | | | |
| | | last | | | |
| L2. | What is's father's last name? | | | | |
| | PRINT AND VERIFY SPELLING. DO NOT WRITE "SAME." | father's last name | | | |
| L3. | What is's date of birth? | / / | | | |
| | | month day | year | | |
| L4. | We would like to have -'s Social Security Number. This will have no | 1 REFUSED | | | |
| | effect on —'s benefits. This information is voluntary and is collected under the authority of the U.S. Public Health Service Act (42 U.S.C. 242K Section 306). | 2 DOES NOT HAVE SOCIAL SECURITY NUMBER | | | |
| | What is's Social Security Number? | Social Security Number | | | |
| RES | SPONDENT (AGES 2 MONTHS - 16 YEARS) | | | | |
| M1. | CHECK ITEM. MARK ONE BOX. | 1 MOTHER |) | | |
| | INDICATE MAIN RESPONDENT'S RELATIONSHIP TO SP AND | 2 FATHER | | | |
| | SPECIFY FAMILY NO. AND LINE NO. OF RESPONDENT. | 3 SISTER OR BROTHER | FĀMĪLÝ NO | | |
| | | 4 GRANDPARENT | LINE NO. | | |
| | | 5 OTHERSPECIFY | -] | | |
| M2. | WAS SP PRESENT DURING ANY PART OF THE INTERVIEW? | 1 N 2 N | | | |
| М3. | QUALITY OF INTERVIEW. | 1 RELIABLE | | | |
| | | 2 UNRELIABLE | | | |
| M4. | COMMENTS 1 | | | | |
| | | | | | |

RECORD TIME ON COVER



CARD A

AGE VERIFICATION CHART FOR 1993

INSTRUCTIONS

In using this chart, determine age as follows: Locate the birth year of the person on the chart. If the person has not had a birthday as of the day of interview in 1993, the correct age will be shown in the "No" column. If the person has had a birthday, the correct age will be in the "Yes" column.

| | Birthday in 1993? | |] | Vegz of high | Birth | Birthday in 1993? | | |
|--|----------------------------------|----------------------------------|---|--|-----------------------------------|-------------------|----------------------------------|--|
| Year of birth | No | AGE Yes | | Year of birth | No | AGE | Yes | |
| 1902 1903 1904 1905 1906 | 90 89 88 87 86 | 91 90 89 88 87 | | 1948 1949 1950 1951 1952 | 44 43 42 41 40 | | 45 44 43 42 41 | |
| 1907 1908 1909 1910 1911 | 85 84 83 82 81 | 86 85 84 83 82 | | 1953 1954 1955 1956 1957 | 39 38 37 36 35 | | 40 39 38 37 36 | |
| 1912 1913 1914 1915 1916 | 80 79 78 77 76 | 81 80 79 78 77 | | 1958 1959 1960 1961 1962 | 34 33 32 31 30 | | 35 34 33 32 31 | |
| 1917 1918 1919 1920 1921 | 75 74 73 72 71 | 76 75 74 73 72 | | 1963 1964 1965 1966 1967 | 29 28 27 26 25 | | 30 29 28 27 26 | |
| 1922 1923 1924 1925 1926 | 70 69 68 67 66 | 71 70 69 68 67 | | 1968 1969 1970 1971 1972 | 24 23 22 21 20 | | 25 24 23 22 21 | |
| 1927 1928 1929 1930 1931 | 65 64 63 62 61 | 66 65 64 63 62 | | 1973 1974 1975 1976 1977 | 19 18 17 16 15 | | 20 19 18 17 16 | |
| 1932 1933 1934 1935 1936 | 60 59 58 57 56 | 61 60 59 58 57 | | 1978 1979 1980 1981 1982 | 14 13 12 11 10 | | 15 14 13 12 11 | |
| 1937 1938 1939 1940 1941 | 55 54 53 52 51 | 56 55 54 53 52 | | 1983 1984 1985 1986 1987 | 9 8 7 6 5 | | 10 9 8 7 6 | |
| 1942 1943 1944 1945 1946 1947 | 50 49 48 47 46 45 | 51 50 49 48 47 46 | | 1988 1989 1990 1991 1992 1993 | 4 3 2 1 under 1 NA | | 5 4 3 2 1 under 1 | |

HIS-501 (1993) (10-9-92)

Page 3

S-1

NATIONAL ORIGIN OR ANCESTRY

- 1. Mexican/Mexican-American
- 2. Other Latin American or Other Spanish please specify

NATIONAL ORIGIN OR ANCESTRY

- 1. Mexican/Mexican-American
- 2. Other Latin American or Other Spanish please specify

F-2

RACE

- 1. Aleut, Eskimo, or American Indian
- 2. Asian or Pacific Islander
- 3. Black
- 4. White

MEDICARE CARD



NAME OF BENEFICIARY

MEDICARE CLAIM NUMBER SEX

SENTILED TO

EFFECTIVE DATE

SAMPLE

Card F-4

REASON FOR NO HEALTH INSURANCE

- 2. Refused insurance for health reasons.
- 3. Not employed can't afford insurance premiums.
- 4. Not employed -- lost job, did not continue insurance.
- 5. Employed but employer does not offer insurance.
- 6. Employed and employer offers insurance, but is not eligible for insurance (for example, because of working only part-time).
- 7. Employed, employer offers insurance, and _____ is eligible, but can't afford employee part of premium.
- 9. Don't believe in, don't think can get, or haven't needed health Insurance.
- 10. Some other reason please specify.

INCOME

```
Less than $1,000 (including loss)
Α
В
        $1,000 -
                   $1,999
   ....
C
   ••••
        $2,000 -
                  $2,999
                 $3,999
        $3,000 -
D
   ••••
        $4,000 -
                  $4,999
E
F
        $5,000 - $5,999
   .... $6,000 - $6,999
G
   .... $7,000 - $7,999
H
   .... $8,000 - $8,999
1
J
   .... $9,000 -
                   $9,999
   .... $10,000 - $10,999
K
L
   .... $11,000 - $11,999
   .... $12,000 - $12,999
M
   .... $13,000 - $13,999
N
   .... $14,000 - $14,999
0
    .... $15,000 - $15,999
P
   .... $16,000 - $16,999
Q
   .... $17,000 - $17,999
R
S
    .... $18,000 - $18,999
T
    .... $19,000 - $19,999
```

INCOME

| U | ••• | \$20,000 | - \$24,999 |
|----|-----|------------|------------|
| V | ••• | \$25,000 | - \$29,999 |
| W | ••• | \$30,000 | - \$34,999 |
| X | ••• | \$35,000 | - \$39,999 |
| Υ | ••• | \$40,000 | - \$44,999 |
| Z | ••• | \$45,000 | - \$49,999 |
| ZZ | ••• | \$50,000 | - \$59,999 |
| AA | ••• | \$60,000 | - \$69,999 |
| BB | ••• | \$70,000 | - \$79,999 |
| CC | ••• | \$80,000 a | and over |

MONTHLY INCOME

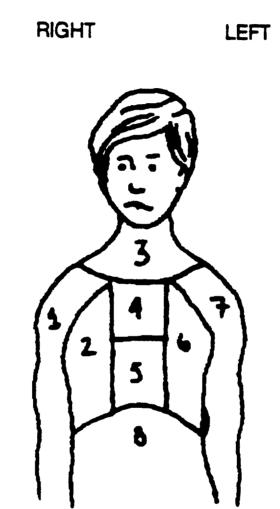
| Α | Less than \$100 | | | | |
|---|-----------------|-----|---------|--|--|
| В | \$100 | • | \$199 | | |
| C | \$200 | - | \$299 | | |
| D | \$300 | - | \$399 | | |
| E | \$400 | - | \$499 | | |
| F | \$500 | - | \$599 | | |
| G | \$600 | - | \$699 | | |
| Н | \$700 | - | \$799 | | |
| 1 | \$800 | - | \$899 | | |
| J | \$900 | - | \$999 | | |
| K | \$1,000 | - | \$1,099 | | |
| L | \$1,100 | - | \$1,199 | | |
| M | \$1,200 | - | \$1,299 | | |
| N | \$1,300 | - | \$1,399 | | |
| 0 | \$1,400 | - | \$1,499 | | |
| P | \$1,500 | - | \$1,799 | | |
| Q | \$1,800 | - | \$2,199 | | |
| R | \$2,200 | - | \$2,999 | | |
| S | \$3,000 | - | \$3,999 | | |
| T | \$4,000 | - | \$4,999 | | |
| U | \$5,000 | • | \$5,999 | | |
| ٧ | \$6,000 | - | \$6,999 | | |
| W | \$7,000 | and | d over | | |

CANCER TYPES

- 1. Bladder
- 2. Breast
- 3. Cervix (female only)
- 4. Colon rectum (large intestine)
- 5. Prostate (males only)
- 6. Uterus (females only)
- 7. Bone
- 8. Brain, nervous system
- 9. Esophagus
- 10. Gallbladder
- 11. Hodgkin's Disease
- 12. Kidney
- 13. Leukemia
- 14. Liver
- 15. Lung
- 16. Lymphoma, non-Hodgkin's
- 17. Mouth, pharynx
- 18. Ovary (females only)
- 19. Pancreas
- 20. Stomach
- 21. Testicles (males only)
- 22. Other type or other organ, please specify

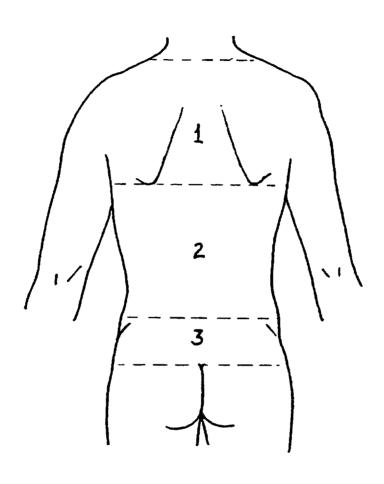
HAQ-1A

CHEST

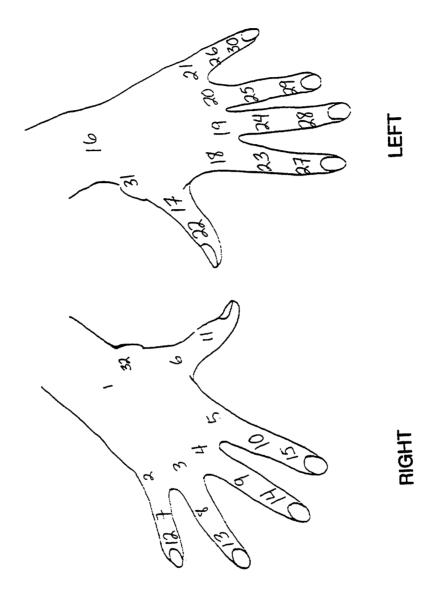


HAQ-2

BACK



HANDS

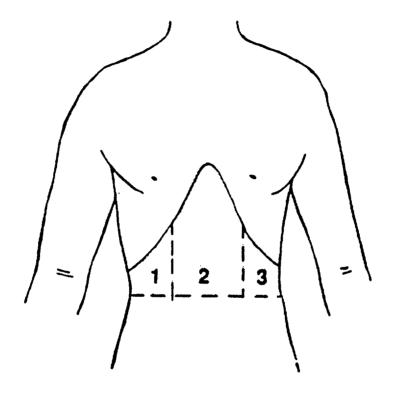


DIFFICULTY WITH ACTIVITIES

- 1. No difficulty
- 2. Some difficulty
- 3. Much difficulty
- 4. Unable to do

UPPER ABDOMEN





FOOD FREQUENCY

1. MILK AND MILK PRODUCTS

HOW OFTEN DID YOU EAT OR DRINK:

Chocolate milk and hot cocoa?

Milk? What type?

Yogurt and frozen yogurt?

Ice cream, ice milk, and milkshakes?

Cheese, all types including American, Swiss, cheddar, and cottage cheese?

Pizza, calzone, and lasagna?

Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadillas?

HOW OFTEN IN THE PAST MONTH?

2. MAIN DISHES, MEAT, FISH, CHICKEN, AND EGGS

HOW OFTEN DID YOU EAT:

Stew or soup containing vegetables such as minestrone, tomato, and split pea?

Spaghetti and pasta with tomato sauce?

Bacon, sausage and luncheon meats such as hot dogs, salami and bologna?

Liver and other organ meats such as heart, kidney, tongue, and tripe?

Beef, including hamburger, steaks, roast beef, and meatloaf?

Pork and ham, including roast pork, pork chops, and spare ribs?

Shrimp, clams, oysters, crab, and lobster?

Fish including fillets, fish sticks, fish sandwiches, and tuna fish?

Chicken, all types, including baked, fried, chicken nuggets, and chicken salad? Include turkey.

Eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad?

HOW OFTEN IN THE PAST MONTH?

3. FRUIT AND FRUIT JUICES

HOW OFTEN DID YOU EAT OR DRINK:

Orange juice, grapefruit juice and tangerine juice?

Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectars?

Citrus fruits including oranges, grapefruits, and tangerines?

Melons including cantaloupe, honeydew, and watermelon?

Peaches, nectarines, apricots, guava, mango, and papaya?

Any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries?

HOW OFTEN IN THE PAST MONTH?

Number of times a day Number of times a week Number of times a month or

Never in the past month

4. VEGETABLES

HOW OFTEN DID YOU EAT:

Carrots and vegetable mixtures containing carrots?

Broccoli?

Brussels sprouts and cauliflower?

White potatoes, including baked, mashed, boiled, french-fries, and potato salad?

Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin?

Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa?

Spinach, greens, collards, and kale?

Tossed salad?

Cabbage, cole slaw, and sauerkraut?

Hot red chili peppers?

Peppers including green, red, and yellow peppers?

Any other vegetables, such as green beans, corn, peas, mushrooms, and zucchini?

HOW OFTEN IN THE PAST MONTH?

5. BEANS, NUTS, CEREALS, AND GRAIN PRODUCTS

HOW OFTEN DID YOU EAT:

Beans, lentils, and chickpeas? Include kidney, pinto, refried, and baked beans.

Peanuts, peanut butter, other types of nuts, and seeds?

All-Bran, 100% Bran, and Fiber One?

Total, Product 19, Most, and Just Right?

All other cold cereals like corn flakes, Cheerios, and Rice Krispies, and presweetened cereals?

Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits?

White bread, rolls, bagels, English muffins, biscuits, and crackers?

Dark breads and rolls including whole wheat, rye, and pumpernickel?

Corn bread, corn muffins, and corn tortillas?

Flour tortillas?

Rice?

Salted snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn?

HOW OFTEN IN THE PAST MONTH?

6. DESSERTS, SWEETS, AND BEVERAGES

HOW OFTEN DID YOU EAT OR DRINK:

Cakes, cookies, brownies, pies, doughnuts, and pastries?

Chocolate candy and fudge?

Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with added vitamin C?

Diet colas, diet sodas, and diet drinks such as Crystal Light?

Regular colas and sodas, not diet?

Regular coffee with caffeine?

Regular tea with caffeine?

Beer and lite beer?

Wine, wine coolers, sangria, and champagne?

Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed?

HOW OFTEN IN THE PAST MONTH?

7. FATS

HOW OFTEN WERE THESE ITEMS ADDED TO FOODS:

Margarine?

Butter?

Oil and vinegar, mayonnaise and salad dressings such as Italian and Thousand Island, including those added to salads and sandwiches? HOW OFTEN IN THE PAST MONTH?

Number of times a day
Number of times a week
Number of times a month
or
Never in the past month

ANY OTHER FOODS OR BEVERAGES AT LEAST ONCE PER WEEK?

PAST MILK INTAKE

How often did you drink milk when you were a ____?

Time period (Age)

Child (5-12 years)

Teenager (13-17 years)

Young adult (18-35 years)

Middle-aged adult (36-65 years)

Older adult (over 65 years)

HOW OFTEN?

- 1. more than once per day
- 2. once per day
- 3. less than once per day, but more than once per week
- 4. once per week
- 5. less than once per week
- 6. never

DENTAL CARE NEEDS

- 1. Teeth filled or replaced (for example, fillings, crowns, and/or bridges)
- 2. Teeth pulled
- 3. Gum treatment
- 4. Denture work
- 5. Relief of pain
- 6. Work to improve appearance (for example, braces or bonding)
- 7. Other Please specify

HAQ-7A

NATIONAL ORIGIN OR ANCESTRY

- 1. Mexican/Mexican-American
- 2. Other Latin American or Other Spanish please specify

HAQ-7B

RACE

- 1. Aleut, Eskimo, or American Indian
- 2. Asian or Pacific Islander
- 3. Black
- 4. White

NATIONAL ORIGIN OR ANCESTRY

- 1. Mexican/Mexican-American
- 2. Other Latin American or Other Spanish please specify

RACE

- 1. Aleut, Eskimo, or American Indian
- 2. Asian or Pacific Islander
- 3. Black
- 4. White

HYQ-1

DENTAL CARE NEEDS

- 1. Teeth filled or replaced (for example, fillings, crowns, and/or bridges)
- 2. Teeth pulled
- 3. Gum treatment
- 4. Denture work
- 5. Relief of pain
- 6. Work to improve appearance (for example, braces or bonding)
- 7. Other please specify

CHECK LIST FOR PULSE AND BLOOD PRESSURE

Pulse and Blood Pressure

1.

Position the subject: bas been resting for 5 min.

feet flat not slumped

loose sleeve rolled up.

no smoking, coffee, or alcohol for 30 min.

- 2. Locate radial and brachial pulse.
- 3. Select and place the cuff:
 - Check that the index line is within range lines,
 - 1° above elbow crease,
 - over brachial artery, and
 - wrap the cuff, two thumbs under cuff, pull gently.
- 4. Obtain resting pulse and record for 30 seconds.
- Obtain MIL by inflating cuff to 80 mm, then continue in increments of 10 mm for measurement, then
 deflate rapidly, disconnect the manometer tubing and record on the Blood Pressure Measurement Form.
- 6. Wait 1 minute.
- 7. Place stethoscope in ears, ear pieces turned forward, and diaphragm piece over brachial pulse point.
- 8. Inflate rapidly to MIL.
- Deflate 2 mm per second, eyes level with midpoint of the manometer column. Read the point on the manometer when the first sound is heard (systolic), and when the sound disappears (diastolic).
- 10. Continue deflation to 20 mm below diastolic reading.
- 11. Deflate rapidly to zero.
- 12. Remove stethoscope from ears.
- 13. Disconnect manometer tubing.
- 14. Record systolic and diastolic blood pressure readings on the Blood Pressure Measurement Form.
- 15. Wait 1 minute.
- 16. Repeat Steps 7-14 for two more readings. Wait 1 minute between measurements.

This checklist includes all steps you will be tested on during the third day of training.

ADULT BLOOD PRESSURE VALUE BOX

| Systolic | Diastolic | | | | | | | |
|-----------------|-----------|---------|---------|-----------|-----------|------|--|--|
| | ≤ 84 | 85 - 89 | 90 - 99 | 100 - 109 | 110 - 119 | ≥120 | | |
| ≤ 129 | 1 | 2 | 3 | 4 | 5 | 6 | | |
| 130 - 139 | 2 | 2 | 3 | 4 | 5 | 6 | | |
| 140 - 159 | 3 | 3 | 3 | 4 | 5 | 6 | | |
| 160 - 179 | 4 | 4 | 4 | 4 | 5 | 6 | | |
| 180 - 209 | 5 | 5 | 5 | 5 | 5 | 6 | | |
| <u>></u> 210 | 6 | 6 | 6 | 6 | 6 | 6 | | |

- (1) Your blood pressure today is within the <u>acceptable range*</u>. We suggest you see your doctor within the next two years to have your blood pressure rechecked. Present this form to your doctor.
- (2) Your blood pressure today is acceptable, but at the <u>high end of the acceptable range*</u>. We suggest you see your doctor within the next year to have your bloc pressure rechecked. Present this form to your doctor.
- (3) Your blood pressure today is <u>above the acceptable range*</u>. We suggest you see your doctor within the next two months to have your blood pressure rechecked. Present this form to your doctor.
- (4) Your blood pressure is <u>moderately high*</u>. If you are not being treated, we suggest you see your doctor within the next month to have your blood pressure rechecked. Present this form to your doctor.
- (5) Your blood pressure today is high*. YOU SHOULD SEE YOUR DOCTOR WITHIN THE NEXT WEEK TO HAVE YOUR BLOOD PRESSURE RECHECKED. Present this form to your doctor.
- (6) Your blood pressure today is quite high*. YOU SHOULD SEE YOUR DOCTOR OR CLINIC TODAY, OR GO TO A HOSPITAL EMERGENCY ROOM TO HAVE YOUR BLOOD PRESSURE RECHECKED. Present this form to your doctor.

NHANES III MEC EXAM COMPONENTS BY AGE GROUP

| EXAM COMPONENT | | | NGES | | | |
|----------------------------|------------|----------------|--------|-------|-------|-----|
| | 2 months-5 | 6-19 | 20-39 | 40-59 | 80-74 | 75+ |
| Physician's Exam | x | x | × | × | х | x |
| Blood Test | x4 | x | x | х | x | × |
| Body Measurements | x | x | x | X | x | x |
| Dietary Interview | × | × | × | x | x | X |
| Fundus Photograph | • | • | - | х | × | × |
| ECG | • | • | • | x | x | × |
| Bioelectrical Impedance | • | x ¹ | x | x | x | х |
| Spirometry | - | x² | х | × | x | х |
| Dental | x4 | × | × | x | x | × |
| Bone Density | • | • | x | × | x | × |
| Hand, Knee X-ray | • | • | • | • | × | × |
| Gallbiadder Littrasound | - | • | x | x | x | - |
| Allergy | • | x | X(1/2) | X(%) | | - |
| Audiometry/Tympenometry | - | x | • | • | • | - |
| Physical Function-Measures | - | • | • | - | х | х |
| Health Interview | x | х | × | x | x | x |
| Neurological Tests | - | • | X(%) | X(%) | - | - |
| Cognitive Test | • | x3 | - | | x | × |
| TOTAL COMPONENTS | 6 | 11 | 11 | 13 | 15 | 1. |

¹Ages 12+ ²Ages 8+

³Ages 6-16

⁴Ages 1+

^(%) Denotes that procedure is for helf-sample only.

HOME EXAM COMPONENTS BY AGE GROUP

| EXAM COMPONENT | | AGES | |
|----------------------------|-------------|-------|-----|
| | 2-11 months | 20-59 | 60+ |
| Body Measurements | x | х | × |
| Dietary Interview | x | • | |
| Blood Tests | - | х | x |
| Spłrometry | • | x | x |
| Health Interview | - | X | X |
| Cognitive Function | • | • | x |
| Physical Function Measures | • | • | x |
| TOTAL COMPONENTS | 2 | 4 | 6 |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

HOME EXAMINATION (AGES 2 MOS.-11 MOS. AND 20+ YRS.)

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

| inioinidadir di | | | |
|-----------------|-----------------------------|--|------------------------------------|
| CASE NO: | Stand No. Segment No. Seria | il No. | - |
| FAMILY NO: | | NAME (First, Middle, Last) | |
| SP NO: | | AGE 1 □ Mos. 2 □ Yrs. | SEX 1 |
| SAMPLE NO: | | 2 115. | 2 Penale |
| DECK | 658 | TIME BEGAN 1 | DATE OF EXAMINATION / / MO DAY YR |
| NO: | 658 | TIME ENDED 1 | |
| | TECHNICIAN NO: | LANGUAGE OF INTERVIEW 1 English 2 Spanish | |
| | TECHNICIAN NO: | 3 Other 4 SPECIFY | |

CDC 64.28 REV. 09/90

HOME EXAMINATION

AGES 2 MONTHS - 11 MONTHS AND 20 + YEARS

| | TOPIC | PAGE |
|----|--|------|
| Α. | BODY MEASUREMENTS | 1 |
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| BODY MEASUREMENTS | |
|---|--|
| First, I would like to take your weight and height, a skinfold measurement, and the circumference of your arm. | |
| A1. Weight (kilograms) (All SPs) | 00000 respondent unable to step onto scale |
| A2. Standing height (cm) (ages 20 years and over) | 0000 ☐ respondent cannot stand |
| A3, Recumbent length (cm) (ages 11 months and under) | |
| A4. Head circumference (cm) (ages 11 months and under) | |
| A5. Triceps skinfold (mm) (All SPs) | Right Side |
| | Comments: |
| | |
| A6, Mid-arm circumference (cm) (All SPs) | Right Side |
| | Comments: |
| | |
| *Item Comment Codes: | |
| SP refused to have measurement taken SP was crying/fighting/upset/uncooperative Not done because of a rash or other skin irritation/dermatosis "Tight skin" (i.e., could not separate subcutaneous fat from underlying muscle) Exam interrupted (e.g., to draw blood) reschedule SP visibly edematous Skinfold too large for calipers | Too many folds or fat — unable to reliably identify site Cast at site — describe Equipment malfunction (e.g., camera jammed) Tech did not finish — had to leave room SP unable to stand/sit straight (due to Dowager's hump, scoliosis, etc.) Exam aborted — (e.g., SP too tired and hungry; SP had to leave exam center, etc.) |

| certai past r 32. In the foods | I would like to ask whether or not has eaten in foods or drunk certain beverages during the month. e past month, did eat or drink any of these s or beverages? Include baby foods as well as ned and regular table foods. cereal fruit yellow and orange vegetables green vegetables meat | 2 under 1 y 1 Y 1 Y 1 Y | 2 | |
|---|---|----------------------------|------------|---|
| foods strain a. b. c. d. e. f. | s or beverages? Include baby foods as well as ned and regular table foods. cereal fruit yellow and orange vegetables green vegetables meat | 1 🗆 Y 1 🗆 Y | 2 🗆 N | |
| b. c. d. e. f. g. | fruit yellow and orange vegetables green vegetables meat | 1 🗆 Y 1 🗆 Y | 2 🗆 N | , |
| c. d. e. f. g. | yellow and orange vegetables green vegetables meat | 1 🗆 Y | | |
| d. e. f. g. h. | green vegetables meat | | 2 🗆 N | |
| e. f. g. h. | meat | 1 🗆 Y | | |
| f. g. h. | | | 2 🗆 N | |
| g. h. | and walk or ages | 1 □ Y | 2 🗆 N | |
| h. | egg yolk or eggs | 1 🗆 Y | 2 □ N | |
| | combination meat/vegetable dinners | 1 🗆 Y | 2 🗆 N | |
| i. | yogurt, cottage cheese, and other cheeses | 1 🗆 Y | 2 □ N | |
| | bread, rolls, crackers and biscuits | 1 🗆 Y | 2 □ N | |
| j. | desserts | 1 □ Y | 2 🗆 N | |
| k. | breastmilk | 1 □ Y | 2 🗆 N | |
| l. | formula | 1 □ Y | 2 🗆 N | |
| m. | cow's milk/regular milk | 1 🗆 Y | 2 🗆 N | |
| n. | fruit juices such as apple juice and orange juice | 1 □ Y | 2 🗆 N | |
| ο. | drinks such as Kool-aid, fruit punch and Hi-C | 1 □ Y (L1) | 2 🔲 N (L1) | |

| P | HYSICAL FUNCTION EXAMINATION (Ages 60 +) | |
|-----|---|--|
| C1, | CHECK ITEM. REFER TO AGE OF SP. | 1 □ 20-59 years (E1) 2 □ 60 + years |
| | Next, I would like to ask you to perform some exercises which are designed to measure particular aspects of musculoskeletal strength and flexibility. | |
| | Health Status Screener | |
| C2. | Do you have any problems from recent surgery, injury, or other health conditions that might prevent you from standing up from a chair or walking? | 1 no apparent restriction 2 presently in wheelchair 3 recent surgery 4 injury 5 bedridden 6 other health condition 7 |
| | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| | Activity | Right Left |
| C3. | Shoulder - External Rotation | 1 Fully 3 Unable 1 Fully 3 Unable 2 Partially 4 Refused 2 Partially 4 Refused |
| C4. | Shoulder - Internal Rotation | 1 Fully 3 Unable 1 Fully 3 Unable 2 Partially 4 Refused 2 Partially 4 Refused |
| C5. | Timed Maneuver | |
| | a. Ability to pick up key | 1 ☐ Yes 2 ☐ No (C6) 4 ☐ Refused (C6) |
| | b. Ability to hold key | 1 ☐ Yes 2 ☐ No (C6) 3 ☐ Not done (C6) 4 ☐ Refused (C6) |
| | c. Time in seconds to unlock lock | seconds 000 Not done 777 Refused |
| C6. | CHECK ITEM - BEDBOUND | 1 Yes (C12) 2 No |

| C7. Single Chair Stand a. If in wheelchair or confined to chair - ASK: Can you get up from your chair (wheelchair) by yourself? b. Use of arms to scoot forward 1 Yes 2 No 3 unable to move c. Ability to stand 1 Yes - without arms, no assistance 2 Yes - with arms for pushing off (C9) 3 Unable (C11) | |
|--|----------|
| Can you get up from your chair (wheelchair) by yourself? b. Use of arms to scoot forward 1 Yes 2 No 3 unable to move c. Ability to stand 1 Yes - without arms, no assistance 2 Yes - with arms for pushing off (C9) | |
| c. Ability to stand 1 ☐ Yes - without arms, no assistance 2 ☐ Yes - with arms for pushing off (C9) | |
| 2 Tes - with arms for pushing off (C9) | |
| 4 ☐ Refused (C9) | |
| C8. Repeated Chair Stands: | |
| a. Time to complete 5 stands seconds seconds seconds seconds seconds | (C9) |
| b. Chair height (floor to seat)inches | |
| Right Left 1 | ☐ Unable |
| C10. Tandem Stand | |
| a. Are you able to stand by yourself and 1 ☐ Yes balance without holding on to anything? 2 ☐ No (C11) | |
| b. Number of seconds tandem stand heldseconds 777 🗆 Ref | used |
| -C11. Measured Walk | |
| a. Has SP been observed to walk without help 1 ☐ Yes (c) of another person? 2 ☐ No (b) | |
| b. Are you able to walk alone without 1 ☐ yes (c) holding on to another person? You may 2 ☐ no (C12) use a cane or walker. | |
| Trial A Trial B | |
| | nds |
| c. Number of seconds to complete 8 foot walk 777 Refused (C12) 777 Refused | d (C12) |

| C11, Measured Walk (continued) | Trial A | | Trial B |
|--------------------------------------|---|-------------------|---------|
| d. Total number of steps | steps | | steps |
| e. Pain reported on walking? | 1 | | |
| f. Type of floor surface | 1 ☐ linoleum/tile/ 2 ☐ low-pile carpe 3 ☐ thick-pile carp | et set | |
| g. Type of device used | 1 | specify | |
| C12. Limb abnormality by observation | Right | Left | |
| a. Paralysis | | | |
| (1) arm | 1 | 1 | |
| (2) leg | 1 ☐ Yes 2 ☐ No | 1 | |
| b. Cast | Right | Left | |
| (1) arm | 1 | 1 | |
| (2) leg | 1 □ Yes 2 □ No | 1 | |
| c. Amputee | Right | Left | |
| (1) arm | 1 | 1 | |
| (2) leg | 1 | 1 ☐ Yes 2 ☐ No | |
| | | | |

| C | OGNITIVE FUNCTION TEST - PART A (60 + yrs.) | | | |
|-----|---|---|----------------|------------|
| D1, | CHECK ITEM. REFER TO AGE OF SP. | 1 ☐ less than 60 yrs. (E 2 ☐ 60 + yrs. | 1) | |
| | | IDEAS | PRESENT IN ANS | WER |
| D2. | I'm going to read you a short story and when I'm through I'm going to wait a few seconds and then ask | THREE CHILDREN | 1 🔲 present | 2 □ absent |
| | you to tell me as much as you can remember. | HOUSE ON FIRE | 1 🔲 present | 2 🔲 absent |
| | The story is: SLOWLY Three children were alone at home and the house caught on fire. A brave fireman managed to climb in a | FIREMAN CLIMBED IN | 1 🔲 present | 2 🔲 absent |
| | back window and carry them to safety. Aside from minor cuts and bruises, all were well. | CHILDREN RESCUED | 1 🔲 present | 2 🔲 absent |
| | minor cuts and bruises, an were wen. | MINOR INJURIES | 1 🗌 present | 2 🔲 absent |
| | | EVERYONE WELL | 1 🗌 present | 2 🔲 absent |
| E1. | SELECTED CONDITIONS/MEDICINE, VITAMIN, AND MINERAL USAGE (Ages 20 +) Now I would like to ask you a few questions about selected health problems and your recent use of medicines, vitamins, and minerals. Are you now or in the past 3 months have you been on | 1 □ Y 2 □ N | 9 □ DK | |
| | treatment for anemia? (Include diet, iron pills, iron shots, transfusions as treatment.) | | | |
| £2. | How many infections such as colds, flu, diarrhea, vomiting, pneumonia, and ear infections have you had in the past 4 weeks? | 00 none infections | | |
| E3. | How many times have you donated blood in the <u>past</u> 12 months? | 00 ☐ none (E5)timesno. | | |
| E4. | How long ago was your last blood donation? | 00 less than one m months ago no. | onth ago | |
| E5. | Are you <u>currently</u> trying to lose weight? | 1 T 2 T | N | |

| E6. | Have you taken or used any antihistamine medicines in the past 2 days? (Antihistamines are medicines taken for symptoms like sneezing and a runny or itchy nose.) | 1 □ Y 2 □ N |
|-------------|--|---|
| E7, | Prescription medicines are medicines that cannot be obtained without a doctor's or dentist's prescription. Have you taken any prescription medicines during the past 24 hours? | 1 🛮 Y 2 🗖 N |
| E8. | Have you taken any vitamins or minerals during the past 24 hours? | 1 Y 2 N |
| | COGNITIVE FUNCTION - PART B (60 + YRS.) | |
| F1. | CHECK ITEM. REFER TO AGE OF SP. | 1 |
| F2. | Please recall that story I read you a few moments ago | IDEAS PRESENT IN ANSWER |
| 12. | and tell me as much as you can remember of the story now. | THREE CHILDREN 1 present 2 absent |
| | now, | HOUSE ON FIRE 1 ☐ present 2 ☐ absent |
| | | FIREMAN CLIMBED IN 1 present 2 absent |
| | | CHILDREN RESCUED 1 present 2 absent |
| | | MINOR INJURIES 1 ☐ present 2 ☐ absent |
| | | EVERYONE WELL 1 present 2 absent |
| | TOBACCO | |
| | Now I would like to ask you a few questions about tobacco use, | 000 ☐ none |
| G1, | How many cigarettes have you smoked in the past 5 days? | cigarettes number |
| G2. | How many pipes and how many cigars have you smoked in the past 5 days? | 000 none pipes and cigars number number |
| G 3. | How many containers of chewing tobacco or snuff have you used in the past 5 days? | 000 none 666 less than 1 container/package containers/pkgsno. |
| G4. | How many pieces of nicotine gum have you chewed in the past 5 days? (Nicotine gum is a sugar-free flavored chewing gum prescribed by a doctor to help people stop smoking or chewing tobacco.) | 000 □ none pieces no. |

| | REPRODUCTIVE HEALTH (Ages 20 + years) | |
|-----|---|---|
| H1. | CHECK ITEM. REFER TO SEX OF SP. | 1 |
| | The next questions ask about your periods or menstrual cycle and about pregnancy. | |
| Н2. | How old were you when your periods or menstrual cycles started? | 00 ☐ haven't started yet (J1) (H4) age 99 ☐ DK (H3) |
| Н3. | Were you younger than 10, 10 to 12, 13 to 15, or 16 or older? | 1 younger than 10 2 10-12 3 13-15 4 16 + 9 DK |
| H4. | Have you had a period in the past 12 months? | 1 ☐ Y 2 ☐ N (H7) 9 ☐ DK (H7) |
| Н5. | About how long ago was your last period? | 1 having it now (H11) 2 less than 2 months ago (H11) 3 2-3 months 4 4-6 months 5 7-9 months 6 10-12 months |
| Н6, | ASK SP TO LOOK AT CHART AND ASK: | SHOW CARD 1 |
| | What is the reason you have not had a period in the past (ANSWER IN H5)? | 1 pregnant now (H11) 2 breastfeeding (H11) 3 menopausal (H9) 4 on chemotherapy or radiation (H9) 5 other (H9) 9 DK (H9) |
| Н7. | About how old were you when you had your last period? | (H9) age 99 |
| Н8. | Were you younger than 20, 20 to 29, 30 to 39, 40 to 44, 45 to 49, 50 to 54, or 55 or older? | 1 younger than 20 2 20-29 3 30-39 4 40-44 5 45-49 6 50-54 7 55 + 9 DK |

| Н9. | Have you had a hysterectomy? DEFINE IF NECESSARY: Has your uterus been removed? | 1 ☐ Y 2 ☐ N (H11) 9 ☐ DK (H11) |
|------|--|---|
| H10. | How old were you when you had your (hysterectomy/uterus removed)? | age |
| H11. | Have you had one or both of your ovaries removed (either when you had your uterus removed or at another time)? | 1 □ Y 2 □ N (H14) 9 □ DK (H14) |
| H12. | Were both ovaries removed or only one? | 1 one 2 both 9 DK |
| H13. | How old were you when you had your (ovary/ovaries) removed? IF EACH OVARY REMOVED AT DIFFERENT AGE, RECORD AGE SECOND OVARY REMOVED. | age 99 |
| | I'm going to ask you about your past and current use of le hormones, including birth control pills and estrogen. | |
| H14. | Have you <u>ever</u> taken birth control pills for any reason? | 1 □ Y 2 □ N (H18) |
| H15, | How old were you when you began taking birth control pills? | |
| H16. | How long ago did you stop taking birth control pills or are you still taking them? | 000 still taking now 1 days 2 weeks 3 months 4 years |
| H17. | Not counting any times when you stopped taking them, for how long <u>altogether</u> (have you taken/did you take) birth control pills? | 000 less than one month 1 months number 2 years 999 DK |

| | CHECK ITEM. REFER TO H5 AND H6. MARK FIRST APPLICABLE BOX. | 1 period now or within last 2 months in H5 (J1) 2 pregnant now or breastfeeding in H6 (J1) 3 other (H19) |
|---|---|--|
| r | Have you <u>ever</u> taken or used estrogen or female normones in any form? Include pills, vaginal cream, suppositories, injections, or skin patches. | 1 □ Y 2 □ N (J1) 9 □ DK (J1) |
| | How old were you when you first took or used the estre jen or female hormones? | age 99 □ DK |
| e | How long ago did you stop taking or using the estrogen or female hormones, or are you still taking or using them? | 000 still taking/using now 666 less than 1 month ago 1 months number 2 years |
| | Not counting any time when you stopped, for how many years <u>altogether</u> did you take or use female hormones? | 00 less than one year number 99 DK |
| | | |
| | | |

| SPIROMETRY (ages 20 + years) | |
|---|---|
| PHYSICAL CAPACITY | |
| J1. In the past three weeks have you had any surgery on your d | hest or abdomen? 1 🗍 yes 2 🗍 no |
| J2. Have you been hospitalized for a heart problem (i.e., heart attac congestive heart failure) within the past six weeks? | ck, angina or chest pain, 1 ☐ yes 2 ☐ no |
| EXCLUDE FROM SPIROMETRY ANY PERSON WHO HAS HOR A RECENT HEART ATTACK ("YES" IN J1 OR J2). | HAD RECENT CHEST OR ABDOMINAL SURGERY |
| J3. Have you smoked a cigarette, eaten a heavy meal, or used a your breathing in the past hour? | any medications to help 1 ☐ yes 2 ☐ no |
| J4. Have you had a cough, cold, or other acute illness in the pa | sst few days? 1 🗍 yes 2 🗍 no |
| J5. In the past three weeks have you had any respiratory infect bronchitis, or a severe cold? | tions, such as flu, pneumonia, 1 ☐ yes 2 ☐ no |
| J6. a. RESULTS OF EXAMINATION: | 1 Satisfactory Test (3 valid tests) |
| | 1 ☐ Standing 2 ☐ Sitting } (K1 or comment below) |
| | 2 Test Incomplete or Unsatisfactory (b) 3 Test not done (b) |
| b. REASONS TEST INCOMPLETE, UNSATISFACTORY OR NOT DONE: | 01 |
| | 04 Acute illness (VRI, flu, pneumonia) 05 Physically unable |
| | O6 |
| | due to language barrier 08 |
| | due to other reasons 09 |
| | 10 |
| | safety 12 Comments: 13 |
| | 12 Gomments. 13 |
| | |
| | |
| | · · · · · · · · · · · · · · · · · · · |
| | |
| | |

| | VENIPUNCTURE (Ages 20 | + years) | | | |
|------|---|---|----------------------------|-----------------------------|---|
| K1. | Do you have hemophilia? This is, a hereditary blood-clotting disorder. | | 1 🗆 Yes (L1) | 2 🗆 No | |
| K2, | Within the past four weeks have you received any cancer chemotherapy treatment? | | 1 🗌 Yes (L1) | 2 🗌 No (K3) | |
| K3. | CURRENT TIME | | | 1 | |
| K4. | Including your last meal and any snacks, at what time did you last have anything at all to eat? | | : | 1 AM 2 PM 3 Noon 4 Midnight | 1 Yesterday 2 Today 3 Before yesterday |
| K5. | Have you had anything to drink, other than water after (time in Item K4 above)? | | 1 □ Yes | 2 🗌 No (K7) | |
| K6. | At what time did you last water? | have anything at all to drink, besides | | 1 AM 2 PM 3 Noon 4 Midnight | 1 Yesterday 2 Today 3 Before yesterday |
| K7. | RESULTS OF VENIPUNCTU | RE | ☐ Complete | : Time | 1 AM 2 PM 3 Ngoo |
| | | | □Incomplet | eco | de |
| K8. | Test Specimen for HIV An | tibody | 1 🗌 Yes | 2 🗆 No | |
| CODE | CATEGORY | INSTRUCTIONS | | | |
| 01 | SP refusal | SP or guardian of SP refuses venipuncture. | | | |
| 02 | SP ill/faints | SP becomes ill or faint in reaction to the proce | dures. | | |
| 03 | SP in prone position | SP reclining during venipuncture. | | | |
| 04 | Multistick required | Two attempts; venipuncture procedure unsucc | essful (<u>no</u> blood). | | |
| 05 | SP uncontrollable | Unable to control SP; venipuncture procedure unsuccessful (no blood). | | | |
| 06 | Veins not palpable | Unable to palpate veins; venipuncture procedure unsuccessful (no blood). | | | |
| 07 | Condition of veins | Venipucture unsuccessful (some or no blood) due to condition of SP's veins, e.g., too small, fragile, too deep, rolling, etc. | | | |
| 80 | Medical exclusion | Home examiner excluded SP from venipuncture for medical reasons. | | | |
| 09 | Glove deterrent | Venipuncture unsuccessful (some or no blood available, |) because appropria | te gloves are not | |
| 10 | Problems with needle | Venipuncture incomplete (some or no blood) of improper selection – wrong size or type; improvein or needle slipped out of vein; malfunction | per handling - pust | ned needle through | |
| 11 | Problems with vacutainer | Venipuncture incomplete (some or no blood) due to problems with the vacutainer, e.g., no vacuum, or cracked. | | | |
| 12 | Other reasons | Limit use of this code only to reasons that can categories. | not be coded with o | ne of the above | |

| CONDITIONS OF EXAM (COMPLETE FOR ALL SPs) | | | |
|---|---------------|--|--|
| L1. Was anyone else present during the exam? | 1 □ Yes | 2 🗖 No | |
| L2. COMMENTS: | | | |
| | | | |
| | | | |
| M1. RESULTS OF THE EXAMINATION: 1 | | | |
| M2. REASONS FOR INCOMPLETE EXAMINATION: 1 | | | |
| Examinee unable to understand instructions due to lang Examinee unable to understand exam instructions due to Insufficient time available or room in household not ava COMMENTS: 8 | other reasons | And the second s | |
| | | | |
| | | | |
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HOME EXAM EXIT QUESTIONS (Do Not Ask These Questions Of Replicate Home Examinees.) We have some final questions to ask you about your participation in this survey. N1. Do you have any comments about the interviewer who came to your house or the questions that were asked? No Yes--specify____ N2. Did you find any part of the examination unpleasant? No Yes--specify_____



National Center for Health Statistics 6525 Belcrest Road Hyattsville, MD 20782

Dear Friend,

When our interviewer knocks on your door, you and your family may have the chance to take part in a *very important health survey*. The interviewer will be representing the *U.S. Public Health Service*. We are studying the health and nutrition of people living in different communities across the United States.

Our interviewer will show you an official identification card and ask some short, easy questions about you and your other family members. From this short set of questions, a few households will be chosen to take part in the survey. Being chosen for our survey means you are part of a scientifically selected group. You represent thousands of other people and *your voluntary participation is very important*.

This survey is authorized by the Public Health Service Act. All of your answers will be kept in strict confidence. The information will be used only for research and statistical purposes. By law, the data you provide us cannot be used for any other purpose without your consent.

This survey will cover 40,000 people in 88 communities across the United States. The information you provide will contribute greatly to our knowledge about the health and nutrition of the people of the United States. Thank you in advance for your cooperation.

Sincerely yours,

Manning Feinleib, M.D., Dr.P.H.

Ma Feml 1-

Director



National Health and Nutrition Examination Survey

From the CENTERS FOR DISEASE CONTROL AND PREVENTION National Center for Health Statistics

now in your area



This pamphlet answers some of the questions that people often ask us about this survey. We hope that after reading it you will want to participate in this most important program.



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Public Health Service Centers for Disease Control and Prevention National Center for Health Statistics



• What is the National Health and Nutrition Examination Survey?

The National Health and Nutrition Examination Survey is conducted by the National Center for Health Statistics, a part of the U.S. Public Health Service. For 30 years, short interviews have been conducted around the country in households like yours. From these short interviews, some households are chosen to take part in the survey. The survey involves more complete interviews and physical examinations for some people in the households.

From the National Health and Nutrition Examination Survey we learn about the health of the people in the United States. We find out about dental health, vision and hearing levels, and the quality of nutrition; take body measurements such as height and weight; and look for the presence of certain diseases and conditions in the population.

• How will I recognize the survey interviewer?

The interviewer who calls on you will have an official identification card from the U.S. Public Health Service with his or her photograph on it.

• How was I chosen for the interview?

Since we cannot talk to everyone in the country, we choose certain households to represent many other households. To do this scientifically, we begin by selecting certain counties or cities. Then in these areas, we choose smaller areas such as blocks or tracts of land. Finally we select certain households within the smaller areas.

Your household has been chosen to take part in a short interview that will be used to determine which households will take part in the Health and Nutrition Examination Survey.

We do not know who lives in the households before we get to the door. But the people who live in these households make up a "sample" of the people in the counties and cities chosen.

• How do I know my answers will be kept confidential?

We respect your privacy. The confidentiality of all the information you give us is protected by public law.

Your answers will be used only by researchers who work on the survey. All have signed a legal document requiring them to keep confidential all information provided by respondents. Personal information such as names, addresses, and local communities that might be used to identify a participant is removed before the information from the survey is given to anyone else for future research use.

The answers you give will be combined with those from thousands of other households and the results will be reported in percentages and totals in such a way that no one's answers can be identified.

We appreciate your cooperation. By taking part in this survey, you will help add to our knowledge about the health status of the people living in the United States.

The information we collect is used to solve health problems, to develop health programs, and to improve the quality of medical care.



National Health and Nutrition

Examination Survey III



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • Public Health Service • Centers for Disease Control • National Center for Health Statistics

Let's Improve Our Health

More than 70,000 persons have participated in the National Health and Nutrition Examination Survey (NHANES).

It is the willingness of the people that makes this survey work. Since the early 1960's, NHANES has identified many health problems that affect all of us. Through continued research, health promotion and disease prevention, such health problems as heart disease have declined.

The third National Health and Nutrition Examination Survey (NHANES III) will be used to track the progress of combating disease in this country. Tracking our progress helps to prevent future disease. As a result, NHANES information that has been very valuable to our health in the recent past promises to be even more so in the future.



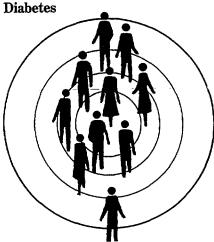
"The important information collected during the third National Health and Nutrition Examination Survey will be used to assess the health needs of all Americans as we prepare to enter the 21st century. If you are selected for NHANES III, I urge you to participate

Dr. Louis W. Sullivan Secretary of Health and Human Services

How Healthy Are We?

Americans suffer from many diseases which are preventable. We need to know the health needs of all people in order to help. We realize the need especially to learn about the health of aging Americans who are the most rapidly growing segment of the population. But, we also need to learn more about other parts of our population, including, Blacks, Hispanics, and all persons—healthy and unhealthy.

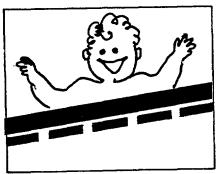
The Surveys Have Made a Difference



More than 10 million adults have diabetes... and half of them do not know it.

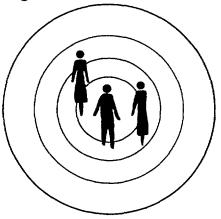
■ If it weren't for past surveys, we would not know the numbers of people with hidden health conditions such as diabetes, early developmental problems, and high blood cholesterol levels.

Growth Chart



Physicians use these charts to identify health and developmental problems among children. The charts also are used to show how the growth of a child compares with the growth of all children in the United States.

High Blood Cholesterol



One out of every three adults may need treatment for high blood cholesterol.

We Need Your Help

"'The National Health and Nutrition Examination Survey is the cornerstone of the Public Health Service's effort to evaluate our actions to promote good health and prevent disease. I want to stress the importance of participating in NHANES III.''

Dr. James O. Mason Assistant Secretary for Health

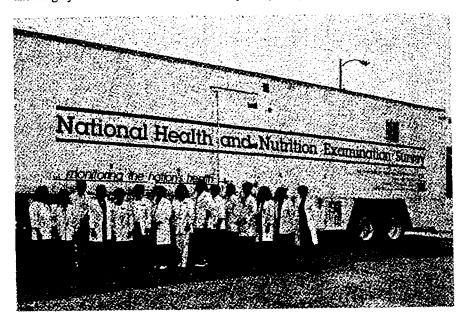
You were especially selected to be a part of NHANES III. You will represent hundreds of persons like yourself.

To show our appreciation for your participation, we provide:

- free transportation convenient appointments examination results to you
- · a cash payment.

NHANES III Is Different From Other Surveys

■ NHANES III is different because it is the only national survey in which physical examinations are performed to measure a person's health. We are studying how current health habits and practices relate to future health. After several years, we will check back with you to note any changes in your health. A small sample of your blood will be kept in long-term storage for future testing. The examinations are conducted by a medical doctor and a highly trained medical staff in modern specially designed mobile units.



The mobile examination center has a reception area and other private and uniquely designed areas such as the Body Measurements Room and the Dietary Interview Room.

Health Examinations

■ The data are collected through physical measurements, laboratory testing, and health interviews. There are no internal examinations given in this survey. Depending on your age you may be in the Examination Center for up to 3-1/2 hours. You will have the opportunity to learn about your health along with contributing to knowledge of the health needs of other Americans.

Your Examinations May Include:

Health Measurements

- · Blood pressure
- Height, weight, and body fat
- Allergy test
- · Lung capacity test
- Electrocardiogram
- Arthritis test (x rays of knees and hands)
- Bone density measurement (x rays of the hip)
- Ultrasound test for gallstones
- Dental check up

Laboratory Tests:

Blood

Urine

- Cholesterol
- Drug use
- Anemia
- Kidney
- Kidney
- Liver
- Diabetes
- Lead
- Acquired immunodeficiency Syndrome (AIDS)
- Thyroid

Private Health Interviews

- Nutrition
- · Reproductive health
- Sexual experience
- Physical activity
- Mental health
- · Health habits





Questions You May Have About The NHANES III Survey

Q

What are the benefits for me?

A

- The opportunity to make an important contribution to the health of the nation.
- Valuable health tests
- Cash payment for participating in the survey.

Will I receive the results of my AIDS test?

No. The AIDS testing is being done in the NHANES III survey so we can determine how many people in the United States are infected with the AIDS virus. In order to make extra sure that the results are kept private, no information that would allow us to identify you will be attached to the blood specimens tested for AIDS virus. Therefore, your test results will be anonymous. If you would like to have an AIDS test and receive the results in a confidential manner, our staff can give you the name of a clinic in your area where you can go.

How will I receive the results of my examination?

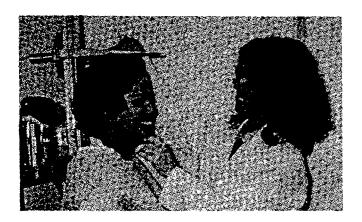
The results of your examination will be sent to you in about 12–16 weeks. Of course, if we should find something important to your health before that time, you will be notified.

Are the tests that I may be asked to take safe?

We care about your safety. The tests and measurements we conduct have been selected because they are safe. We would like to point out that as in any similar examination, there may be some slight discomfort or soreness resulting from the collection of a blood specimen, the administration of the allergy skin test, or from the dental examination. If you are an adult and are chosen to receive x rays of your hands and knees, this will add a small amount of radiation to your total lifetime exposure.







What will happen to the results of my drug use test?

The test for NHANES III is being done so that we can determine how many people in the United States are currently using marijuana, cocaine, opiates, amphetamines, or phencyclidine for medical or other reasons. To protect your privacy, no information to identify you will be attached to the urine specimens tested for drug use. Therefore, your results will be anonymous.

Why is it important for older Americans to participate in this health survey?

There is little information on the health of older Americans. We need to know more about such important things as how many people have high blood pressure or arthritis. In fact, one of the special features about NHANES III is that persons age 75 or older will be participating for the first time. We are hoping to be able to learn more about the health needs of older Americans.

How will participation in this survey help older Americans?

Lawmakers, other public officials, and physicians need this information in order to design better health care programs for older persons. Organizations representing older Amercians need this information to improve the quality of life for the elderly and to help them live better independently.

Who can I call if I have questions?

Our staff will provide you with a phone number in your community that you can call for further information. You also may make a collect call to Dr. Marsha Davenport at the U.S. Public Health Service headquarters, phone (301) 436-8267.

Do I have to participate in the examination?

Participation in all parts of the study is completely voluntary. There is no penalty for refusing to participate. Of course, we hope everyone will participate, because without your participation our information on the health of Americans may not be accurate. The results of your examination will be used to add to the results of all others participating in this important study and will contribute to a better understanding of the health of all persons living in the United States.

"How Will My Participation Help?"



National Health and Nutrition Examination Survey

Health information collected in the NHANES III is kept in strictest confidence. Without your approval our staff is not allowed to discuss your participation in this study with anyone under penalty of Federal law: Section 308(d) of the Public Health Service Act (42 USC 242m) and the Privacy Act of 1974 (5 USC 552A). However, in the case of children we will refer clear evidence of physical abuse to the responsible state agency for possible follow-up.*

| Campia Dana | on to Voors and Olds | | | | | |
|---|-----------------------|--------------------|--|--------|--|--|
| Sample Person 12 Years and Older: | | | | | | |
| | | | ure and purpose of the NHANE ne to be released only as descri | | | |
| Signature of sample person if 12 years or older | | | | | | |
| Parent or Gua | ardian of Sample Pers | son Under 18 Years | s of Age: | : | | |
| | mission for my child | | ture and purpose of the NHAN for information regarding my o | | | |
| Signature of parent or guardian | | | | Date | | |
| | | | | | | |
| Signature of s | staff member | Date | Witness (if required) | Date | | |
| Print name | | | | | | |
| of sample person | | | | | | |
| • | First | Middle | Last | | | |
| | | | Sample | Number | | |

NOTE: If you have further questions, please call Dr. Marsha Davenport, collect - (301) 436-8267 8:00 AM to 4:00 PM EST.

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Room 721-B, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

^{*}Additional information is available if required.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service Centers for Disease Control National Center for Health Statistics April 1992

| SAMPLE NO | | |
|-----------|--|--|
| | | |

| NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY III HOME EXAMINATION RELEASE FORM |
|--|
| ESTUDIO NACIONAL DE SALUD Y NUTRICION III. FORMULARIO DE PERMISO PARA EL EXAMEN DEL HOGAR |
| Date/Fecha |
| This is to certify that against the advice of the NHANES III home health technician I choose not to contact an emergency medical service to seek immediate medical attention for: |
| Por este medio certifico que contrario al consejo del técnico de salud del hogar de NHANES III, he elegido no ponerme en contacto con un servicio de emergencia médica para obtener atención médica inmediatamente para: |
| (Check one - Marque una) |
| Myself/Mi mismo |
| (Name of Sample Person/Nombre de Persona Nuestra) |
| By so doing, I assume all responsibility for my act. Tomando esta decisión, asumo toda responsabilidad por mi acción. |
| Signed/Firmado |
| Relationship/Parentesco |
| Witness/Testigo |

CDC 64.08 REV. 7/91

National Health and Nutrition

Examination Survey III



Here's why we need your help

- To learn about the health of older Americans
- To learn how to prevent disabilities and conditions such as heart disease and arthritis that affect older persons
- To learn how older people can remain healthy and live independently

THIS SURVEY IS CONDUCTED BY THE NATIONAL CENTER FOR HEALTH STATISTICS • SUPPORTED BY THE NATIONAL INSTITUTE ON AGING

Special benefits you'll gain when you participate

- Your results will be sent directly to you
- Making an important contribution to improved health for older persons
- Cash payment and free transportation
- Free health tests (no internal examinations)

AARP supports this survey

 The American Association of Retired Persons urges older Americans to participate in NHANES III





NATIONAL CENTER FOR HEALTH STATISTICS



National Health and Nutrition

Examination Survey III



A few reasons why it's important for older women to participate

To learn more about arthritis in order to help older women live independently

To learn more about osteoporosis ("brittle bones") in order to prevent hip fractures

To learn more about heart disease in women

THIS SURVEY IS CONDUCTED BY THE NATIONAL CENTER FOR HEALTH STATISTICS • SUPPORTED BY THE NATIONAL INSTITUTE ON AGING

Special benefits you'll gain when you participate

Your results will be sent directly to you

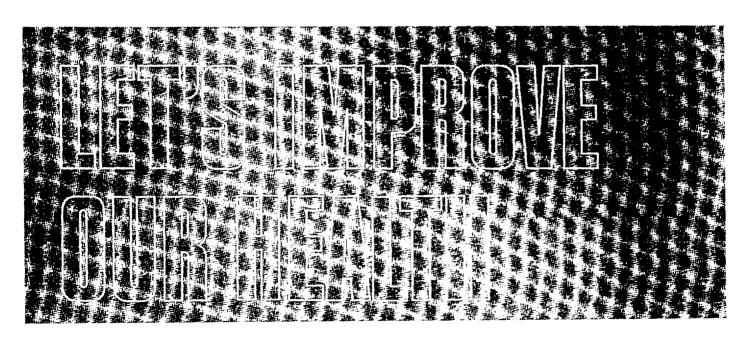
Making an important contribution to improved health for older persons

Cash payment and free transportation

Free health tests (no internal examinations)

AARP supports this survey

The American Association of Retired Persons urges older Americans to participate in NHANES III



What You Should Know About AIDS

Facts about the disease
How to protect yourself and your family
What to tell others







AMERICA
RESPONDS
TO AIDS

An Important Message from the U.S. Public Health Service Centers for Disease Control





"One of the misconceptions about AIDS is that it only affects gay men. That's not true. AIDS affects everyone—men, women and children."

- Suki Ports Minority AIDS Project New York, NY



"Each of us must realize that we have the responsibility for keeping AIDS out of our lives. We must learn about AIDS. We must share what we know with our families."

- Eric Engstrom AIDS Project Director Minneapolis, MN



"My son died of AIDS. He was 21 years old. We must be totally open, honest and sincere in discussing AIDS with our children. It could save their lives."

Elena TretoAtlanta, GA

Will You Get AIDS From Kissing?

issing a person on the cheek doesn't put you at risk. No cases have been reported where the virus was transmitted by kissing on the mouth. However, small amounts of the virus are sometimes found in saliva. To be safe, experts advise against deep, prolonged "French" kissing with someone who may be infected with the AIDS virus.

Teenagers Should Avoid Drugs And Sex

drugs. Avoiding both drugs and sex is the best, safest way to eliminate risk. Make it a family priority to know about AIDS and share the information in this leaflet with family members and friends.

What Is AIDS?

IDS stands for acquired immunodeficiency syndrome. Very simply, it is a disease caused by a virus that can damage the brain and destroy the body's ability to fight off illness. AIDS by itself doesn't kill. But it allows other infections (such as pneumonia, cancer and other illnesses) to invade the body, and these diseases can kill.

At the present time, there is no known cure for AIDS, and no vaccine that prevents the disease.

Fortunately, the AIDS virus is hard to catch and can be prevented. AIDS is a very serious disease, but you should know these facts:

1

AIDS is not spread by casual contact in schools, at parties, in swimming pools, stores or the workplace

2

You can't catch AIDS by hugging, shaking hands or simply being near a person who is infected with the virus. No person has ever been infected by an insect bite

3
You can't catch AIDS from a toilet seat



"People are afraid of AIDS, but they don't have to be. We must tell people about the risk of AIDS. We must stop the spread of the disease. The best weapon in the world is information. That's why every American should read this booklet."

- Jamie Henderson AIDS Volunteer Los Angeles, CA

How Do People Get AIDS?

ot everyone is at risk for AIDS. And people who are at risk can protect themselves if they take reasonable precautions. Being safe from AIDS is up to you. It's your responsibility to protect yourself—and those you love. It starts with knowing how people get AIDS.

Three main ways the AIDS virus is spread:

Having sex with an infected person

Sharing drug needles and syringes with users of heroin, cocaine and other illegal drugs

Babies can be born with the virus if the mother has been infected

What about blood transfusions?

It is true that some people got AIDS from infected blood transfusions. But that's extremely rare. Today, all donated blood is tested for the AIDS virus.

What about giving blood?

There is no risk from donating blood. New equipment is used for each donor, each time blood is given.



"One sexual encounter with an infecte person can be all it takes to spread the AIDS virus from one person to another We must know how to protect ourselves and our families."

- Jolene Connor Nurse Counselor Harlem, NY

How To Protect Yourself And Your Family

he safest way to avoid being infected by the AIDS virus is to avoid promiscuous sex and illegal drugs. Couples who are not infected, do not use drugs, and have mutually faithful, single-partner sexual relationships are protected from AIDS.

You can get AIDS from one sexual experience. And your risk of becoming infected increases dramatically if you have more than one sexual partner. If you or your partner have more than one sexual partner, you should reduce your risk by using condoms.



"AIDS is a fatal disease, but everyone needs to understand that it can be prevented. If we know how to protect ourselves and our children, we can stop this disease in its tracks."

 Dr. Samuel Perry A researcher working on identifying the symptoms of AIDS

Can You Tell If People Have AIDS?

ost people who are infected look and feel fine. They don't suspect they are carrying the virus. They don't realize they are spreading it to others. You can be infected by having sex with anyone who has the virus, even though they don't show the symptoms of the disease.

If you and your sexual partner are concerned, you should use a condom and talk to your doctor about the AIDS antibody test.



1. Know the facts about AIDS

2. Know how to protect yourself and your family

3. Tell others

If you are a parent:

Learn the facts about AIDS. Talk to your children. Encourage them to share your family's moral and religious values. Make certain they know how to avoid AIDS. Protect yourself and your partner by maintaining a mutually faithful, single-partner relationship.

If you are a grand-parent:

Learn the facts about AIDS. Talk openly to your children and grandchildren about your concern for their safety and well-being. Tell them how to avoid getting infected with the AIDS virus.

If you are a young person:

Discuss and understand and live by your family's values. Say "no" to drugs. And say "no" to sex until you are ready to enter into a mutually faithful, single-partner relationship with an uninfected person.

If you are sexually active:

Enter into a mutually faithful, single-partner relationship with an uninfected person, or at least be sure to reduce your risk by using condoms.

If you think you may be infected with the AIDS virus:

Talk to your doctor or local health clinic about having the AIDS antibody test. Don't put other people at risk by having sex with them or by sharing drug needles or syringes.

For more information, call the AIDS Information line, 24 hours a day, 7 days a week: 1-800-342-AIDS

An Important Message For All Americans

o doubt you have read or heard much recently about AIDS. You may believe AIDS doesn't affect you personally, but it does. AIDS affects us all, directly or indirectly – male or female, married or single, young or old, rich or poor.

All of us need to know the facts about AIDS, and we need to join with our fellow Americans in making a commitment to do all we can to protect ourselves, protect those we love, and stop the spread of the disease.

For some, this means influencing family members or friends to eliminate behavior that puts them at a high risk for getting the disease. For others, it means spending time to explain the disease. For all of us, it means not having unnecessary fears about AIDS.

Families, especially, have an important role to play. The family setting is the best place for our young people to learn about AIDS and how to avoid it.

I strongly agree with President Reagan who has stated: "We mustn't allow those with the AIDS virus to suffer discrimination....We must firmly oppose discrimination against those who have AIDS. We must prevent the persecution, through ignorance or malice, of our fellow citizens."

Today, with the leadership of the U.S. Public Health Service under Assistant Secretary Robert E. Windom, M.D., Americans from all walks of life – professionals and volunteers alike – have dedicated themselves to stopping the spread of AIDS and finding a cure.

I urge you to study this leaflet, follow its advice, and share this information with others. It could save your life or the life of someone you love. You may also want to read the report on AIDS by Surgeon General C. Everett Koop, M.D., available free from P.O. Box 23961, Washington, D.C. 20026-3961.

The American response to AIDS has been inspiring. Together, we must continue to do all we can to protect ourselves and those we love.

Otis R. Bowen, M.D. Secretary, U.S. Department of Health and Human Services

Otro Bowen M.D.

-AMERICA RESPONDS TO AIDS —

How Can You Tell If You Have The AIDS Virus?

he only way to tell if you have the AIDS virus is by having a blood test. The test looks for changes in your blood caused by the presence of the virus. If you test positive, it means that you have been infected.

You can have the virus without having the disease itself, or without even appearing or feeling ill. And you can transmit the virus to others.

Once infected, you will remain infected for life. It could take ten years or longer for the actual disease to develop, or it may never develop.

If you are worried that you may have been infected, find out about the test. Often it is available free or at a low cost.

Can You Touch Someone Who Has AIDS?

es, you can touch someone who has AIDS. There is no evidence that the virus is spread through casual contact (including shaking hands, social kissing, coughing, sneezing, sharing swimming pools, bed linen, eating utensils, cups, office equipment, chairs). There is no reason to avoid an infected person in ordinary social contact.

What about doctors, nurses, dentists and other health care workers?

Routine safety measures, such as wearing gloves, protect both patients and health care professionals. Special precautions are taken when handling blood from infected patients, or when giving injections.

- AMERICA RESPONDS TO AIDS-



National Health and Nutrition Examination Survey

MORNING, AFTERNOON, OR EVENING EXAMS (PERSONS 2 MONTHS-11 YEARS AND DIABETICS ON INSULIN)

SINCE FASTING IS NOT REQUIRED FOR YOUR EXAM, PLEASE EAT AS YOU WOULD ON ANY NORMAL DAY.

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for | | | |
|---------------------|---------------------------|--|--|
| Cita para | (NAME/NOMBRE) | | |
| | (SAMPLE NO./№ DE MUESTRA) | | |
| Day of week | | | |
| Día de la semana | | | |
| Date/Fecha | Time/Hora | | |
| Taxi will call at | | | |
| El taxi llamará a | (TIME/HORA) | | |
| El taxi liairiaia a | (TIVE) (OTA) | | |
| | | | |

EXAMENES DE MAÑANA, TARDE, O NOCHE/ATARDECER (PERSONAS 2 MESES-11 AÑOS Y DIABETICOS TOMANDO INSULINA)

YA QUE AYUNAR NO ES REQUERIDO PARA SU EXAMEN, POR FAVOR COMA COMO LO HARIA EN CUALQUIER DIA NORMAL.

See instructions on back. Vea instrucciones al otro lado.

PHS-6137 (12/88)



National Health and Nutrition Examination Survey

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for | | | |
|-------------------|---------------------------|--|--|
| Cita para | (NAME/NOMBRE) | | |
| | | | |
| | (SAMPLE NO./№ DE MUESTRA) | | |
| Day of week | | | |
| Día de la semana | | | |
| Date/Fecha | Time/Hora | | |
| Taxi will call at | | | |
| El taxi llamará a | (TIME/HORA) | | |
| | | | |
| · | | | |

See instructions on back for adults. Infants do not fast. Vea instructions al otro lado para adultos. Los bebés no ayunan. PHS-6137 (12/88)

MORNING EXAMS

(PERSONS 20 + YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- EAT AS YOU WOULD ON ANY NORMAL DAY UP TO 8:30 PM.
- TAKE YOUR NORMAL MEDICATIONS.

DON'T:

 EAT OR DRINK ANYTHING, EXCEPT WATER, AFTER 8:30 PM. THIS MEANS NC COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES OF ANY KIND.

ON YOUR APPOINTMENT DAY

DO:

- · DRINK A GLASS OR TWO OF WATER.
- TAKE YOUR NORMAL MEDICATIONS WITH WATER ONLY.

DON'T:

 EAT OR DRINK ANYTHING EXCEPT WATER. NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES.

EXAMENES DE LA MAÑANA (PERSONAS 20 + AÑOS)

EN EL DIA ANTERIOR A SU CITA

HAGA:

- COMA COMO LO HARIA EN CUALQUIER DIA NORMAL HASTA LAS 8:30 PM.
- TOME SUS MEDICACIONES USUALES.

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, DESPUES DE LAS 8:30 PM. ESTO SE LLAMA AYUNO DE UNA NOCHE. ESTO SIGNIFICA NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS Y NINGUNAS BEBIDAS DE CUALQUIER CLASE.

EN EL DIA DE SU CITA

HAGA:

- TOME UN VASO O DOS DE AGUA.
- TOME SUS MEDICACIONES USUALES CON AGUA SOLAMENTE.

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, ESTO SIGNIFICA, NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS, Y NINGUNAS BEBIDAS.



National Health and Nutrition Examination Survey

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for | | | |
|-------------------|---------------------------|--|--|
| Cita para | (NAME/NOMBRE) | | |
| | | | |
| | (SAMPLE NO./№ DE MUESTRA) | | |
| Day of week | | | |
| Día de la semana | | | |
| Date/Fecha | Time/Hora | | |
| Taxi will call at | | | |
| El taxi llamará a | (TIME/HORA) | | |
| | | | |
| | | | |

EVENING EXAMS (PERSONS 12 + YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- EAT AS YOU WOULD ON ANY NORMAL DAY.
- TAKE YOUR NORMAL MEDICATIONS.

ON YOUR APPOINTMENT DAY

DO:

- . DRINK A GLASS OR TWO OF WATER.
- TAKE YOUR NORMAL MEDICATIONS WITH WATER ONLY.
- EAT SOMETHING FOR LUNCH BEFORE 11:30 A.M. (IN THE MORNING).

DON'T:

 EAT OR DRINK ANYTHING EXCEPT WATER AFTER 11:30 A.M. (IN THE MORNING). NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES.

EXAMENES DE LA NOCHE/ATARDECER (PERSONAS 12 + AÑOS)

EN EL DIA ANTERIOR A SU CITA

HAGA:

- COMA COMO LO HARIA EN CUALQUIER DIA NORMAL.
- TOME SUS MEDICACIONES USUALES.

EN EL DIA DE SU CITA

HAGA:

- TOME UN VASO O DOS DE AGUA.
- TOME SUS MEDICACIONES USUALES CON AGUA SOLAMENTE.
- COMA ALGO ANTES DE LAS 11:30 A.M. (EN LA MAÑANA).

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, DESPUES DE LAS 11:30 A.M. (EN LA MAÑANA), ESTO SIGNIFICA, NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS, Y NINGUNAS BEBIDAS.

See instructions on back for adults. Infants do not fast. Vea instructions al otro lado para adultos. Los bebés no ayunan. PHS-6137 (12/88)



National Health and Nutrition Examination Survey

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for Cita para | (NAME/NOMBRE) | <u> </u> |
|---------------------------------|---------------------------|----------|
| | (SAMPLE NO./№ DE MUESTRA) | |
| Day of week Día de la semana | | |
| Date/Fecha | Time/Hora | |
| | (TIME TO LOOK A) | |
| El taxi llamará a | (TIME/HORA) | |
| | | |

See instructions on back. Vea instrucciones al otro lado.

PHS-6137 (12/88)

AFTERNOON EXAMS (PERSONS 12 + YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- · EAT AS YOU WOULD ON ANY NORMAL DAY.
- . TAKE YOUR NORMAL MEDICATIONS.

ON YOUR APPOINTMENT DAY

DO:

- · DRINK A GLASS OR TWO OF WATER.
- TAKE YOUR NORMAL MEDICATIONS WITH WATER ONLY.
- EAT SOMETHING FOR BREAKFAST BEFORE 7:30 AM.

DON'T:

 EAT OR DRINK ANYTHING EXCEPT WATER AFTER 7:30 AM. NO COFFEE, TEA FOOD, GUM, SNACKS, OR BEVERAGES.

EXAMENES DE LA TARDE (PERSONAS 12+ AÑOS)

EN EL DIA ANTERIOR A SU CITA

HAGA:

- COMA COMO LO HARIA EN CUALQUIER DIA NORMAL.
- . TOME SUS MEDICACIONES USUALES.

EN EL DIA DE SU CITA

HAGA:

- TOME UN VASO O DOS DE AGUA.
- TOME SUS MEDICACIONES USUALES CON AGUA SOLAMENTE.
- COMA ALGO PARA EL DESAYUNO ANTES DE LAS 7:30 AM.

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, DESPUES DE LAS 7:30 AM. ESTO SIGNIFICA, NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS, Y NINGUNAS BEBIDAS.



National Health and Nutrition Examination Survey

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for Cita para | (NAME/NOMBRE) | |
|---------------------------|---------------------------|--|
| | | |
| | (SAMPLE NO./№ DE MUESTRA) | |
| Day of week | | |
| Día de la semana | | |
| Date/Fecha | Time/Hora | |
| Taxi will call at | | |
| El taxi llamará a | (TIME/HORA) | |
| | | |
| | | |

See instructions on back for adults. Infants do not fast. Vea instructions al otro lado para adultos. Los bebés no ayunan. PHS-6137 (12/88)

MORNING EXAMS (PERSONS 12-19 YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- EAT AS YOU WOULD ON ANY NORMAL DAY UP TO MIDNIGHT.
- TAKE YOUR NORMAL MEDICATIONS.

DON'T:

 EAT OR DRINK ANYTHING, EXCEPT WATER, AFTER MIDNIGHT. THIS MEANS NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES OF ANY KIND.

ON YOUR APPOINTMENT DAY

DO:

- DRINK A GLASS OR TWO OF WATER.
- TAKE YOUR NORMAL MEDICATIONS WITH WATER ONLY.

DON'T:

 EAT OR DRINK ANYTHING EXCEPT WATER. NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES.

EXAMENES DE LA MAÑANA (PERSONAS 12-19 AÑOS)

EN EL DIA ANTERIOR A SU CITA

HAGA:

- COMA COMO LO HARIA EN CUALQUIER DIA NORMAL HASTA LAMEDIA NOCHE.
- TOME SUS MEDICACIONES USUALES.

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, DESPUES DE LA MEDIA NOCHE. ESTO SE LLAMA AYUNO DE UNA NOCHE. ESTO SIGNIFICA NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS Y NINGUNAS BEBIDAS DE CUALQUIER CLASE.

EN EL DIA DE SU CITA

HAGA:

- TOME UN VASO O DOS DE AGUA.
- TOME SUS MEDICACIONES USUALES CON AGUA SOLAMENTE.

NO:

 COMA NI BEBA NADA, EXCEPTO AGUA, ESTO SIGNIFICA, NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS, Y NINGUNAS BEBIDAS.



National Health and Nutrition Examination Survey

APPOINTMENT FOR EXAMINATION CITA PARA EXAMÉN MEDICO

| Appointment for Cita para | (NAME/NOMBRE) | | |
|---------------------------------|---------------------------|-------------|--|
| | (SAMPLE NO./№ DE MUESTRA) | | |
| Day of week Día de la semana | | | |
| Date/Fecha | Time/Hora | | |
| Taxi will call at | | | |
| El taxi llamará a | (TIME/HORA) | | |
| | | | |

See instructions on back for adults. Infants do not fast. Vea instructions al otro lado para adultos. Los bebés no ayunan. PHS-6137 (12/88)

HOME EXAMS

(PERSONS 20 + YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- EAT AS YOU WOULD ON ANY NORMAL DAY.
- TAKE YOUR NORMAL MEDICATIONS.

ON YOUR APPOINTMENT DAY

DO:

- · DRINK A GLASS OR TWO OF WATER.
- TAKE YOUR NORMAL MEDICATIONS WITH WATER ONLY.

DON'T:

• EAT OR DRINK ANYTHING EXCEPT WATER AFTER ______. NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES.

EXAMENES EN LA CASA

(PERSONAS 20+ AÑOS)

EN EL DIA ANTERIOR A SU CITA

HAGA:

- COMA COMO LO HARIA EN CUALQUIER DIA NORMAL.
- TOME SUS MEDICACIONES USUALES.

EN EL DIA DE SU CITA

HAGA:

- TOME UN VASO O DOS DE AGUA.
- TOME SUS MEDICACIONES USUALES CON AGUA SOLAMENTE.

NO:

COMA NI BEBA NADA, EXCEPTO AGUA, DESPUES DE LAS ______
ESTO SIGNIFICA, NINGUN CAFE, NINGUN TE, NINGUNA COMIDA, NINGUN CHICLE, NINGUNAS MERIENDAS, Y NINGUNAS BEBIDAS.

MORNING EXAMS FOR PERSONS TAKING PILLS FOR DIABETES

(PERSONS 12+ YEARS)

ON THE DAY BEFORE YOUR APPOINTMENT

DO:

- EAT AS YOU WOULD ON ANY NORMAL DAY UP TO 8:30 PM.
- TAKE YOUR NORMAL MEDICATIONS.

DON'T:

EAT OR DRINK ANYTHING, EXCEPT WATER, AFTER 8:30 PM. THIS MEANS NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES OF ANY KIND.

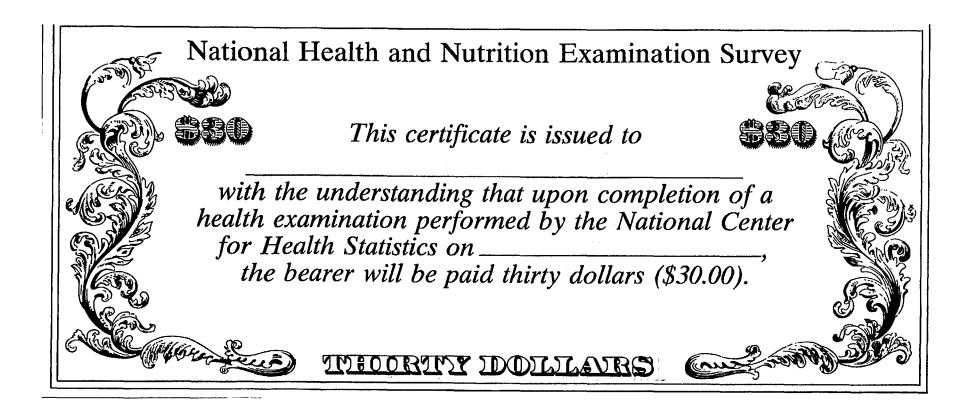
ON YOUR APPOINTMENT DAY

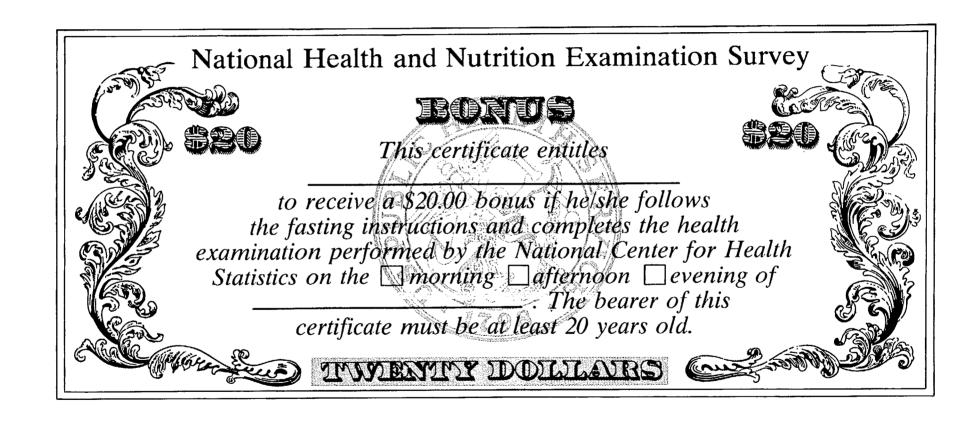
DO:

- DRINK A GLASS OR TWO OF WATER.
- TAKE ALL MEDICATIONS EXCEPT YOUR PILLS FOR DIABETES IN THE MORNING WITH WATER ONLY.
- BRING YOUR PILLS FOR DIABETES WITH YOU TO THE MEC.

DON'T:

EAT OR DRINK ANYTHING EXCEPT WATER. NO COFFEE, TEA, FOOD, GUM, SNACKS, OR BEVERAGES.





United States Public Health Service

Certificate of Appreciation Presented to

We would like to commend you for taking part in the third National Health and Nutrition Examination Survey. Your contribution to this important study will help improve the health of all people living in the United States.

Thank you for participating.

Robert E. Windom, M.D. Assistant Secretary for Health

C. Everett Koop, M.D.
Surgeon General of the United States

NHANES III HOME HEALTH EXAMINATION

Information on the health of all persons is required for NHANES III. We have chosen important parts of the examination that can be done in homes. This information will help us complete our picture of the health of people living in the United States. We ask that you read our Sample Person Brochure and ask our interviewer any questions you may have about the survey.

A trained medical technician from our examination center will come to your home to conduct the examination. The home health examination will take about one hour of your time and can be performed while you are dressed. You will have the opportunity to learn about your health along with helping to contribute knowledge about the health needs of other Americans.

Your Home Examination May Include:

- Height and weight measurement
- Lung capacity test
- Muscle function
- Collection of a blood specimen
- Short health interview

All information about you will be kept confidential. You will receive \$15.00 for your time and participation. Please volunteer to help us.

HOME EXAMINATION CONTROL RECORD

| a. | Sample Number: | | | | | | | | |
|--------------|---------------------------|----------|-------------|---------------------------------|---------------------------------------|----------------|----------|-------------|--|
| | | | | | C 1 1 | 1-177 | | | |
| b. | Exam: | | | 1 🗆 | | iled Hom | | | |
| | | | i e | 2 🔲 | _ | ate Home | | | |
| | | | | 3 🔲 | Cold C | all Home | . | | |
| C. | Age: | | | | | 1 🔲 🦠 | /R | | |
| | | | | | | 2 🔲 N | MO | | |
| d. | Sex | | Ma | le | | 1 🗍 | | | |
| ٠ | | | | nale | | 2 🔲 | | | |
| | Examination Date: | | | | i | | | | |
| c. | Examination Date: | | MC | $\overline{D}^{I}\overline{DA}$ | YR | | | | |
| f. | 7° D | | | | | 1 🗍 | am | | |
| I. | Time Began: | | _ | —:- | | 2 🗆 | | | |
| | | | | | | 3 🗆 | noon | | |
| | | <u>-</u> | | | | | | | |
| g. | Time Ended: | | _ | :- | | 1 🔲 | am | | |
| | | | | | | 2 🔲 | рm | | |
| | | | | | | 3 🔲 | noon | | |
| | | | | , | | | | | |
| | | | | | | | | | |
| h. | Procedure | Age Gro | up | | | pletion C | | | |
| | | | | ļ | Comp | | 1 2 | | |
| | | | | | | npiete Done | 3 | | |
| | | <u> </u> | | <u> </u> | | | | | |
| | Body Measurements | All | | | 1 🖂 | 2 🖂 | 3 🔲 | | |
| | Infant Food Frequency | <1 yr | | | 1 🗍 | 2 🗆 | 3 🗆 | | |
| | Physical Function Exam | 60+ | | | 1 🗆 | 2 🗆 | 3 🔲 | | |
| 1 | Cognitive Function Test A | 60+ | | | 1 🗆 | 2 🗆 | 3 🗍 | | |
| | Selected Conditions | 20+ | | | 1 🗇 | 2 🗆 | 3 🔲 | | |
| | Cognitive Function Test B | 60+ | | | 1 🗆 | 2 🗆 | 3 🗆 | | |
| | Tobacco | 20+ | | | 1 🗆 | 2 🗆 | 3 🔲 | | |
| | Reproductive Health | 20+F | | | 1 🗆 | 2 🗆 | 3 🔲 | | |
| | Spirometry | 20+ | | | 1 🗆 | 2 🔲 | 3 🔲 | | |
| | Venipuncture | 20+ | | | 1 🗆 | 2 🔲 | 3 🔲 | | |
| | | | | | | | | | |
| , | Comments | | | | | | | | |
| i. | Comments | | | | | | | | |
| _ | | | - | | | | | | |
| | | | | | | | | | |
| - | | | | | · · · · · · · · · · · · · · · · · · · | | | | |
| | | | | | | | | | |
| | To the North | | | | | | | | |
| j. | Examiner Number | | | | | _ | | | |

Version 4/23/92

INSTRUCTIONS FOR COMPLETING THE HOME EXAMINATION CONTROL RECORD

| a. | Sample Number: | Record the SP's 7-digit sample ID number n the space provided. |
|----|----------------------------|--|
| b. | Exam: | Check the appropriate box to indicate whether the exam is a scheduled home exam, a replicate home exam or a cold call home exam. |
| c. | Age: | Record the SP's age. Check the appropriate box to indicate years or months. |
| d. | <u>Sex</u> : | Check the appropriate box to indicate the sex, male or female, of the SP. |
| e. | Examination Date: | Record two digits each for the month, day and year of the home exam. |
| f. | Time Began: | Record the time the exam was begun, that is the time you entered the household. |
| g. | Time Ended: | The record the time the exam was ended, that is the time you exited the household. |
| h. | Procedure Completion Code: | For each home examination procedure check the appropriate box to indicate the status of the procedure. Check box "1" if the procedure was completed. Check box "2" if the procedure was only partially completed. Check box "3" if the procedure was not done. |
| i. | Comments: | Record any problems, or unusual situations in the space provided. |
| j. | Examiner Number: | Record your 4-digit tech ID. |

Appendix IV Mobile examination center data collection forms

PHS 6300

Rev. 3/89

TIME IN: ___

OM8 NO. 0920-0237 **CONTROL RECORD** NOTICE - information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m). Sample No ☐ Mos ☐ Yrs ☐ Male Coordinator **Examination Date** Month Year Day ☐ Female ☐ YES - NO BONE SCAN PREGNANT: Date of Birth Temperature GTT priority DK-NO BONE SCAN Day Year Month FINO Name (First, Middle, Last) Procedure Age Group Time Staff Out Physician's Exam All All **Body Measurements MEC Interview** All All 24-hour Recall Venipuncture 1 and older Dentist's Exam 1 and older **Urine Specimen** 6 and older 20-59 Even Allergy Test 6-19 All Audiometry/Tympanometry 6-19 WISC and WRAT 6-16 8 and older Spirometry 12 and older **Exit Interview** Food Frequency 12-16 **Bone Densitometry** 20 and older Galibladder Ultrasound 20-74 **CNS** 20-59 Odd **ECG** 40 and older 40 and older **Fundus Photography** 40-74 **Glucose Challenge** Venipuncture 2 40-74 60 and older Joint Radiographs Performance Test 60 and older

TIME OUT:

PHYSICIAN'S EXAM (ALL AGES) NAME _____ DATE OF EXAM ___/__/__ AGE _____ SEX ____ TIME OF EXAM ____:___ SAMPLE NO. ___ __ __ _____ SESSION NO. STAFF NO.___ ___ 1. LOCOMOTION 1. No 1. No Findings a. Gait (Ages 3 and Older) 2. Yes 8. Data Not Collected Limp/Shuffle 8. Data Not Collected Other Abnormalities 2. EYES 1. None, No Findings 2. Right (Ages 2 months-18 years) 3. Left Globe Missing or Blind 4. Both 8. Data Not Collected 1. Yes (Ages 2 months - 4 years) 2. No a. Tracks light 8. Data Not Collected 1. No Findings (Ages 5-18 years) 2. Observation b. Strabismus 3. Cover/Uncover Test 8. Data Not Collected

| 3. OBSERVATION (ALL AGES) | | | |
|---|--|--|--|
| a. Limb abnormality by observation | 1. None, No Findings | | |
| (1) Paralysis/paresis Arm Leg | 2. Right3. Left4. Both8. Data Not Collected | | |
| (2) Confined to Wheelchair or Stretcher | 1. No 2. Yes | | |
| b. Amputee/Cast1. No Findings | | | |
| (1) Arm 8. Data Not Collected | 1. None, No Findings | | |
| Right Left (a) Shoulder (b) Elbow | 2. Yes 8. Data Not Collected | | |
| (c) Wrist | | | |
| 1 2 3 4 5 5 4 3 2 1 | | | |
| (2) Leg | None, No Findings Yes Data Not Collected | | |

| 4. UPPER EXTREMIT and Older) | IES (Ages 60 | |
|------------------------------|-----------------------|----------------------|
| | 1. No Findings | 1. None, No Findings |
| HAND JOINT | 8. Data Not Collected | 2. Right |
| MANIFESTATIONS | 3. Left | |
| a. Wrist | A Rosh | |
| Tender on Palpation | 4. Both | |
| | 8. Data Not Collected | |
| Swelling | | |
| Pain on Passive Motion | | |

| 4. UPPER EXTREM | /ITIES (Cont'd) | |
|--|--------------------------------------|--|
| b. MCP | 1. No Findings 8. Data Not Collected | None, No Findings Findings Some Data Not Collected |
| | Right Left | |
| Tenderness Swelling Pain on Passive Motion | 12345 54321 | |
| . am on radoro motion | | |
| c. PIP | Right Left 2 3 4 5 5 4 3 2 | |
| Tenderness | | |
| Swelling Pain on Passive Motion | | |
| d. DIP | Right Left | |
| Tenderness Swelling Pain on Passive Motion | 1 2 3 4 5 5 4 3 2 1 | |

| 4. UPPER EXTREMITIES (Cont'd) | |
|---|--|
| a. Deformities (Ages 60 and Older) Heberden's Nodes (DIP) Bouchard's Nodes (PIP) Swan Neck Boutonniere Joints Ulnar Deviation or Subluxation at MCP or Wrist Subcutaneous Nodules on Shaft of Forearm | None, No Findings Right Left Both Data Not Collected |
| | |

| 5. CENTRAL PULSE RATE (2 Months – 4 Years) | |
|--|----------------------|
| Central Pulse Rate (30 Seconds) | 888 = Cannot Obtain |
| 6. BLOOD PRESSURE (Ages 5 and Older) | |
| a. Cuff Width | 1. Infant |
| | 2. Child |
| | 3. Adult |
| | 4. Large |
| | 5. Thigh |
| b. Arm | 1. Right |
| | 2. Left |
| c. Have you had any alcohol, coffee or | 1. No. |
| cigarettes in the past 30 minutes? (Ha fumado cigarillos o tomado algun | 2. Yes |
| alcolol o cafe en los ultimos 30 minutos?) | 8. No Data Collected |
| d Pulso Pato (15 Seconds) | |
| d. Pulse Rate (15 Seconds) | 888 = Cannot Obtain |

| 6. BLOOD PRESSURE (Cont'd) | |
|-----------------------------|---------------------------|
| e. Irregular Pulse | 1. No. 2. Yes |
| | 8. No Data Collected |
| f MIL. | |
| g. First Blood Pressure | |
| Ages 5-19 K1, K4, and K5 | |
| K1 K4 K5 | |
| Refused | 888 in K1 = Cannot Obtain |
| Ages 20 and Over, K1 and K5 | |
| K1 K5 | |
| | |
| Refused | |

| 6. BLOOD PRESSURE (Cont'd) | |
|---------------------------------------|---------------------------|
| h. Second Blood Pressure | |
| Ages 5-19 K1, K4, and K5 | |
| K1 K4 K5 | 888 in K1 = Cannot Obtain |
| Ages 20 and Over K1 and K5 | |
| K1 K5 | |
| Refused | |
| i. Third Blood Pressure | |
| Ages 5-19 K1, K4, and K5 | |
| K1 K4 K5 | 888 in K1 = Cannot Obtain |
| Ages 20 and Over K1 and K5 | |
| K1 K5 | |
| Refused | |
| j. Average of Second & Third Readings | |
| Ages 5-19 K1, K4, and K5 | |
| K1 K4 K5 | 888 in K1 = Cannot Obtain |
| Ages 20 and Over K1 and K5 | |
| K1 K5 | |
| k. Statement to Examinee: | Number 1–4 |

| 7. CHEST (All Ages) | | |
|----------------------------------|--------------------------------------|--|
| | 1. No Findings 8. Data Not Collected | None, No Findings Yes, Findings |
| (Auscultate Posterior Portion of | Each Lung): | 8. Data Not Collected |
| a. Breath Sounds-Intensity | | |
| R L Decreased | Breath Sounds | |
| R L Adventitiou (Rales, Wh | s Sounds eezes, Rhonchi) | |
| 8. HEART (All Ages) | | 0 = None |
| a. Systolic Murmur | | 1-6 = Grade |
| b. Diastolic Murmur | | 8 = Data Not Collected |
| 9. DERMATITIS (Ages | 5-59 Years) | |
| a. Hand Dermatitis | 1. No Findings | None, No Findings Redness/Inflammation |
| Palms | | |
| Palmar Fingers | 8. Data Not Collected | 3. Vesicles |
| Dorsal | | 4. Both Inflammation and and Vesicles |
| Dorsal Fingers | 8. Data Not Collected | |
| b. Lichenified Dermatitis | 1. None, No Findings | |
| Wrists, Elbows, Knees | 2. Yes, Findings | |
| | | 8. Data Not Collected |
| i | | 1 |

| 10. JOINT EXAMINATION (Ages 60 and Older) | |
|--|--|
| a. Great Toe Pain on Tender on Swelling Passive Palpation Motion R L R L R L DIP | None, No Findings Findings Data Not Collected |
| | None, No Findings Right Left Both Data Not Collected |
| Maximum Limitation on Passive Motion Right Left | Range 0 to 4 8. Data Not Collected |
| c. Foot Deformities Bunions 1. No Findings 8. Data Not Collected | None, No Findings Right Left Both Data Not Collected |

| 11. TANNER STAGING AND BREAST SIZE | |
|--|--------------------|
| Ages 2 Months - 4 Years: | 88 = Cannot Obtain |
| a. Breast Size (Largest Diameter) | |
| Right Left | |
| mm mm. | |
| Ages 8 – 18 Years: Chaperon Name | |
| b. Tanner Stage | |
| Pubic Hair (Male and Female) | Stage 1-5 |
| Genitalia (Male) | 0 = Refused |
| Breast (Female) - Grade least developed breast | |
| 12. BIOELECTRIC IMPEDANCE MEASURES (Ages 12 and Older) | |
| (BIA should not be done on pregnant women or anyone with a pacemaker.) | |
| a. BIA Resistance (ohms) | |
| Cannot Obtain | |
| b. BIA Reactance (ohms) | |
| Cannot Obtain | |

| 13. PHYSICIAN'S IMPRESSION a. Health Status (All Ages): | Excellent Very Good Good Fair Poor Data Not Collected |
|--|--|
| b. Evidence of disabling cognitive impairment preventing subject from complying with examination. (All Ages) | 1. No 2. Yes 8. Data Not Collected |
| c. Possible Active Infection (All Ages) | No Yes Data Not Collected |
| d. Speech (Ages 3 and Up) Able to communicate appropriately for age | Yes No Data Not Collected |

13. PHYSICIAN'S IMPRESSION (Cont'd) e. Estimate of Functional Abilities (Ages 5 and Older): Activity Estimated Level If Difficulty, Prognosis of Difficulty Over 1 Year 1. Walking 1/4 Mile 1. No Difficulty 1. Full Recovery 2. Some Difficulty 2. Partial Recovery 3. Moderate Difficulty 3. No Change 4. Could Not Be Done 4. More Deterioration 8. Data Not Collected 8. Data Not Collected 2. Running 100 Yards 1. No Difficulty 1. Full Recovery 2. Some Difficulty 2. Partial Recovery 3. Moderate Difficulty 3. No Change 4. Could Not Be Done 4. More Deterioration 8. Data Not Collected 8. Data Not Collected 3. Stooping, Crouching or Kneeling 1. No Difficulty 1. Full Recovery 2. Some Difficulty 2. Partial Recovery 3. Moderate Difficulty 3. No Change 4. Could Not Be Done 4. More Deterioration 8. Data Not Collected 8. Data Not Collected 4. Small motor movements in hand like opening a jar, opening a door, or 1. No Difficulty 1. Full Recovery picking up a pencil 2. Some Difficulty 2. Partial Recovery 3. Moderate Difficulty 3. No Change 4. Could Not Be Done 4. More Deterioration 8. Data Not Collected 8. Data Not Collected 5. Doing heavy housework, gardening, exercise or play 1. No Difficulty 1. Full Recovery 2. Some Difficulty 2. Partial Recovery 3. Moderate Difficulty 3. No Change 4. Could Not Be Done 4. More Deterioration 8. Data Not Collected 8. Data Not Collected

| 13. PHYSICIAN'S IMPRESSION (Cont'd) | | | | | | |
|--|---|---|--|--|--|--|
| f. Estimate of Functional Abilities (Ages 2 Months to 4 Years Only): | | | | | | |
| Activity | Estimated Level of Difficulty | If Difficulty, Prognosis Over 1 Year | | | | |
| | | | | | | |
| 1. Play | 1. No Difficulty 2. Some Difficulty 3. Moderate Difficulty 4. Could Not Be Done 8. Data Not Collected | 1. Full Recovery 2. Partial Recovery 3. No Change 4. More Deterioration 8. Data Not Collected | | | | |
| 14. RESULTS OF EXAM | MINATION | Exam Complete | | | | |
| | | BIA Not Done | | | | |
| | | Refused/Uncooperative | | | | |
| | | Out of Time | | | | |
| | | Physically Unable to Cooperate | | | | |
| | | SP Unable to Understand Instructions | | | | |
| | | Equipment Problem | | | | |
| | | Other Reason | | | | |
| | | Done at Prior Session | | | | |
| COMMENTS: | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

REFERRAL NAME _____ DATE OF EXAM ___/__/__ AGE _____ SEX ____ TIME OF EXAM ____:___ SAMPLE NO. ___ __ __ __ ___ SESSION NO. ____ Referral Level: ____ (Number 1-3) Letter Sent: Phoned: X-RAY 1. Reviewed: OK BLOOD PRESSURE 2. Reviewed: Referral HEMATOLOGY 3. Not in Protocol EKG 8. Didn't See MEDICAL EMERGENCY/ACCIDENT OTHER _____ Statement of what SP was told: SP's Response: Was consent form signed with designated provider listed? 1. Yes 2. No Did SP refuse to designate provider or sign release? 1. Yes 2. No 3. Com Witness: 4. N/A Was the incident form filled out? 1. Yes 2. No Comments: 3. N/A Is referral complete? 1. Yes 2. No

BODY MEASUREMENTS ALL AGES

| STAFF NO SAMPLE NO | | | | | | |
|----------------------------------|-------------|-------|----------|-------|---------|-----|
| How tall are you without shoes? | | ft in | | (| cm) | |
| How much do you weigh without sh | noes? 12-16 | yrs. | Ib | | (| kg) |
| MEASUREMENT NAME | AGE | MEA | SUREMENT | CODE* | COMMENT | |
| 1. Weight | 2 mo + | | kg | | | |
| 2. Standing Height | 2 yr + | | cm | | | |
| 3. Sitting Height | 2 yr + | | cm | | | |
| 4. Recumbent Length | 2 mo-3yr | | cm | | | |
| 5. Head Circumference | 2 mo-7 yr | | cm | | | |
| 6. Upper Leg Length | 2 yr + | | cm | | | |
| 7. Knee Height | 60 yr + | | cm | | | |
| 8. Biacromial Breadth | 3 yr + | | cm | | · | |
| 9. Biiliac Breadth | 2 yr + | | cm | | | |
| 10. Upper Arm Length | 2 mo+ | | cm | | | |
| 11. Arm Circumference | 2 mo + | | cm | | | |
| 12. Waist Circumference | 2 yr + | | cm | | | |
| 13. Buttocks Circumference | 2 yr + | | cm | | | |
| 14 Thigh Circumference | 2 yr + | | cm | | | |
| 15. Thigh Skinfold | 2 yr+ | | | | | |
| 16. Triceps Skinfold | 2 mo + | | mm | | | |
| 17. Subscapular Skinfold | 2 mo + | | mm | | | |
| 18. Suprailiac Skinfold | 2 yr + | | mm | | | |
| 19. Elbow Breadth | 2 yr + | | cm | | | |
| 20. Wrist Breadth | 2 yr + | | cm | | | |

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| STAFF NO. | | REPEAT | MEASURES | BY SECOND EXAMINER: |
|---|---|--|--|--|
| MEASUREMENT NAME | AGE | MEASUREMENT | CODE* | COMMENT |
| 1. Triceps Skinfold | 2 mo + | mm | | |
| 2. Subscapular Skinfold | 2 mo + | mm | | |
| 3. Suprailiac Skinfold | 2 yr + | mm | | |
| 4. Mld-Thigh Skinfold | 2 yr + | mm | | |
| RESULTS OF EXAMINATION: 1 | | 1 | ware malfund dware malfund fficient time a ninee refused ninee unable uage barrier ninee unable r reasons ninee uncoop ninee pregnar ninee wheelch utee icial body par | ection or lack of supplies available or room not available to understand test instructions due to to understand test instructions due to erative at mair bound |
| *ITEM COMMENT CODES: 1 SP refused to have measu 2. SP was crying/fighting/up 3 Not done because of a ras 4. "Tight skin" (i.e., could not 5. Exam interrupted (e.g., to 6. SP visibly edematous 7. Skinfold too large for cali 8. Too many folds or fat — up 9. Cast at site — describe 10. Equipment malfunction (column) 11. Tech did not finish — had 12. SP unable to stand/sit stra 13. Exam aborted — (e.g., SP) | set/uncooperative theoretise of separate subcut of draw blood) re pers hable to reliably in e.g., camera jame to leave room ight (due to Dow | ritation/dermatosis staneous fat from underly eschedule dentify site med) rager's hump, scoliosis, et | c.) | |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

MEC ADULT QUESTIONNAIRE

(AGES 17 + YEARS)

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m).

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| Stand No. Segment No. Serial No. | |
|---|---|
| | |
| NAME (First, Middle, Last) | SEX |
| AGE | 1 Male 2 Female |
| # 7 2 0 * | TIME BEGAN 1 |
| INTERVIEWER NO: | TIME ENDED 1 |
| LANGUAGE OF INTERVIEW 1 English 2 Spanish 3 Other 4 SPECIFY | |
| | NAME (First, Middle, Last) AGE AGE INTERVIEWER NO: LANGUAGE OF INTERVIEW 1 |

CDC 64.47 Rev. 6/92

MEC ADULT QUESTIONNAIRE AGES 17+ YEARS

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READ INTRODUCTION TO ALL SPs:

This interview includes questions covering a number of health-related practices, behaviors, and experiences. All of your responses will be kept strictly confidential.

| TOBACCO (17+ YRS.) | | |
|--------------------|--|--|
| A 1. | First I would like to ask you a few questions about tobacco use. How many cigarettes have you smoked in the past 5 days? | none cigarettes |
| A2. | How many pipes and how many cigars have you smoked in the past 5 days? | none pipes and oigars number |
| A3 . | How many containers of chewing tobacco or snuff have you used in the past 5 days? (IF BOTH USED, ENTER TOTAL NUMBER.) | none less than 1 container/pkg. containers/pkgs. |
| . M , | How many pieces of nicotine gum have you chewed in the past 5 days? (Nicotine gum is a sugar-free flavored chewing gum prescribed by a doctor to help people stop smoking or chewing tobacco.) | none pieces |

| COGNITIVE FUNCTION - PART A (60+ YRS.) | | |
|---|---|-------------------------------------|
| B1. | CHECK ITEM. REFER TO AGE OF SP. | 1 LESS THAN 60 YRS. (C1) 2 60+ YRS. |
| B2. | Now I'm going to read you a short story and when I'm through I'm going to wait a few seconds and then ask you to tell me as much as you can remember. | IDEAS PRESENT IN ANSWER |
| | | THREE CHILDREN - PRESENT ABSENT |
| | The story is: SLOWLY | HOUSE ON FIRE- PRESENT ABSENT |
| Three children were alone at home and the house caught on fire. A brave fireman managed to climb in a back window and carry them to safety. Aside from minor cuts and bruises, all were well. | FIREMAN CLIMBED IN - PRESENT ABSENT | |
| | CHILDREN RESCUED - PRESENT ABSENT | |
| | PAUSE FOR A FEW SECONDS. | MINOR INJURIES - PRESENT ABSENT |
| | Please tell me the story. | EVERYONE WELL- PRESENT ABSENT |

| SELECTED CONDITIONS/MEDICINE, VITAMIN, AND MINERAL USAGE (17+ YRS.) | | |
|---|--|-------------------------|
| | Next are a few questions about selected health problems and your recent use of medicines, vitamins, and minerals. | |
| C1. | Are you <u>currently</u> trying to lose weight? | 1 🗌 Y 2 🗍 N |
| C2. | Are you <u>now</u> or in the <u>past 3 months</u> have you been on treatment for anemia, sometimes called "tired blood" or "low blood"? (Include diet, iron pills, iron shots, transfusions as treatment.) | 1 Y 2 N 9 DK |
| C3. | How many colds, flu, diarrhea, vomiting, pneumonia and ear | none |
| | infections have you had in the <u>past 4 weeks</u> ? | infections number |
| C4. | How many times have you donated blood in the past 12 months? | none (C6) |
| | | times number |
| C 5. | How long ago was your last blood donation? | less than one month ago |
| | | number months ago |
| C6. | Have you taken or used any antihistamine medicines in the past 2 days? (Antihistamines are medicines taken for symptoms like sneezing and a runny or itchy nose.) | 1 Y 2 N |
| C7. | Prescription medicines are medicines that cannot be obtained without a doctor's or dentist's prescription. Have you taken any prescription medicines during the past 24 hours? | 1 Y 2 N |
| C8. | Have you taken any vitamins or minerals during the past 24 hours? | 1 Y 2 N |

| cod | COGNITIVE FUNCTION - PART B (60+ YRS.) | | |
|-----|--|---|--|
| D1. | CHECK ITEM. REFER TO AGE OF SP. | 1 LESS THAN 60 YRS. (E1) 2 60+ YRS. | |
| D2. | Please recall the short story I read you a few moments ago and tell me as much as you can remember of the story now. | THREE CHILDREN - PRESENT ABSENT HOUSE ON FIRE - PRESENT ABSENT FIREMAN CLIMBED IN - PRESENT ABSENT CHILDREN RESCUED - PRESENT ABSENT MINOR INJURIES - PRESENT ABSENT EVERYONE WELL - PRESENT ABSENT | |

| ALCO | DHOL/DRUG USE (17+ YRS.) | |
|------|---|--|
| E1. | These next questions are about drinking alcoholic beverages. Alcoholic beverages include beer, ale, wine, wine coolers, liquor such as whiskey, gin, rum, or vodka, and cocktails and mixed drinks containing liquor. | |
| | In your entire life, have you had at least 12 drinks of any kind of alcoholic beverage? Do not count small tastes. | 1 Y 2 N (E8) |
| E2. | In the <u>past 12 months</u> did you have at least 12 drinks of <u>any</u> kind of alcoholic beverage? | 1 Y 2 N(E7) |
| E3. | In the <u>past 12 months</u> , on the average, how many days per week, month, or year did you drink <u>any</u> alcoholic beverages? | number days per |
| | | DK |
| E4. | On the average, on the days that you drank alcohol, how many drinks did you have a day? (By a drink, I mean a 12-oz beer, a 4-oz glass of wine, or an ounce of liquor.) | number DK |
| E5. | In the past 12 months, how many days per week, month, or year did you have 9 or more drinks on a single day? Include all types. | none week number days per month year |
| E6. | In the past 12 months, how many days per week, month, or year did you have 5 or more drinks on a single day? Include all types. (Include the (NUMBER IN E5) days you had 9 or more drinks.) | none week number days per week month year |
| | | |
| E7. | Was there ever a time or times in your life when you <u>drank 5 or</u> more <u>drinks</u> of any kind of alcoholic <u>beverage almost every day?</u> | 1 Y 2 N 9 DK |
| E8. | CHECK ITEM. REFER TO AGE OF SP. | 1 60+ YRS. (F1) |
| | | 2 LESS THAN 60 YRS. |
| | The next few questions are about your experience with drugs. | |
| E9. | Have you ever used marijuana? | 1 Y 2 N (E12) |
| E10. | About how many times in your lifetime have you used | 1 1 or 2 times |
| | marijuana? | 2 3 to 10 times |
| } | | 3 11 to 99 times |
| | | 4 100 or more times |
| E11. | During the past month, on how many days did you use | none in past month |
| | marijuana? | days number |

| E12. | Have you ever used crack or cocaine in any form? | 1 Y 2 N (F1) |
|------|---|--------------------------------|
| E13. | About how many times in your lifetime have you used crack or cocaine (in any form)? | 1 |
| E14. | During the past month, on how many days did you use crack or cocaine (in any form)? | none in past month days number |

| REPRODUCTIVE HEALTH (17+ YRS.) | | |
|--------------------------------|---|--|
| F1. | CHECK ITEM. REFER TO AGE AND SEX OF SP. | 1 MALE 50+ YRS. (H1) 2 MALE LESS THAN 60 YRS. (F50) 3 FEMALE |
| F2. | The next questions ask about your periods or menstrual cycle and about pregnancy history. | haven't started yet (F49) |
| | How old were you when your periods or menstrual cycles started? | (F4) DK (F3) |
| F3. | Were you younger than 10, 10 to 12, 13 to 15, or 16 or older?. | 1 |
| F4. | Have you <u>ever</u> been pregnant? Please include miscarriages, stillbirths, tubal pregnancies, abortions, live births, and current pregnancy. | 1 🗌 Y 2 📗 N (F21) |
| F5. | How many times have you been pregnant? Again, be sure to count all your pregnancies whether they ended in miscarriage, stillbirth, tubal pregnancy, abortion, or live birth. (Include current pregnancy.) | pregnancies number |
| F6. | What is the total number of live births (live-born children) you have had? | none (F11) one live birth (F8) live births |
| F7. | How old were you at the time of your <u>first</u> live birth? | age |
| F8. | How old were you at the time of your <u>last</u> live birth? | age |
| F9. | Did you breastfeed (your child/any of your children)? | 1 Y 2 N (F11) |
| F10. | (Did you breastfeed your child/how many of your children did you breastfeed) for <u>at least one month?</u> | no children one child children number |

| F11. | CHECK ITEM. REFER TO AGE OF SP. | 1 52+ YRS. (F21) |
|------|--|--|
| | | 2 50-51 YRS. (F14) |
| | | 3 LESS THAN 50 YRS. (F12) |
| F12. | (MARK BOX IF KNOWN) Are you <u>now</u> pregnant? | 1 Y 2 N (F14) 9 DK (F14) |
| F13. | Which month of pregnancy are you in? | number month |
| F14. | MARK IF KNOWN. OTHERWISE ASK: | 1 no, current pregnancy only (F16) |
| | (Besides this pregnancy) have you been pregnant in the past 2 years? | yes, has been pregnant in past 2 years, do not include current pregnancy (F15) |
| | | 3 no, has not been pregnant in past 2 years (F19) |
| F15. | How many months ago did your (last) pregnancy end? | 1 less than 4 months ago |
| | | 2 4 mosless than 7 mos. ago |
| | | 3 7 mosless than 10 mos. ago |
| | | 4 10-12 months ago |
| | | 5 13-24 months ago |
| F16. | Did you receive benefits from WIC, that is, the Women, Infants, and Children program, in the past 12 months? | 1 Y 2 N (F19) 9 DK (F19) |
| F17. | Are you now receiving benefits from the WIC program? | 1 Y 2 N 9 DK |
| F18. | How long (did you receive/have you been receiving) benefits from the WIC program? | number { |
| | | DK |
| F19. | CHECK ITEM. REFER TO F6. | 1 "NONE" IN F6 (F21) |
| | | 2 1 OR MORE LIVE BIRTHS IN F6 |
| F20. | Are you now breastfeeding a child? | 1 Y 2 N |
| F21. | Have you had a period in the past 12 months? | 1 Y 2 N (F23) 9 DK (F23) |
| F22. | About how long ago was your last period? | 1 having it now (F27) |
| | | 2 less than 2 months ago (F27) |
| | | 3 2-3 months |
| | | 4 4-6 months (F25) |
| | | 5 7-9 months |
| | | 6 10-12 months |
| | | |

| F23. | About how old were you when you had your last period? | (F25) |
|------|---|---------------------------|
| | | ☐ DK (F24) |
| F24. | Were you younger than 20, 20 to 29, 30 to 39, 40 to 44, 45 to 49, 50 to 54, or 55 or older? | 1 |
| | | 3 🗆 30-39 |
| | | 4 1 40-44 |
| | | 5 45-40 |
| | | 6 🔲 50-54 |
| | | 7 🔲 55+ |
| | | 9 DK |
| | IF SP IS CURRENTLY PREGNANT, GO TO F27. OTHERWISE ASK: | |
| F25. | Have you had a hysterectomy? DEFINE IF NECESSARY: Has your uterus/womb been removed? | 1 Y 2 N (F27) 9 DK (F27) |
| F26. | How old were you when you had your (hysterectomy/uterus/womb removed)? | age |
| F27. | Have you had one or both of your ovaries removed (either when you had your uterus removed or at another time)? | 1 Y 2 N (F30) 9 DK (F30) |
| F28. | Were both ovaries removed or only one? | 1 both |
| | | 2 one |
| | | 9 DK |
| F29. | How old were you when you had your (ovary/ovaries) removed? | |
| | IF BOTH OVARIES REMOVED, ASK IF REMOVED AT DIFFERENT AGES. RECORD AGE WHEN SECOND OVARY REMOVED. | age DK |
| | Now I'm going to ask you about your past and current use of female hormone pills, including birth control pills and estrogen pills. | |
| F30. | Have you ever taken birth control pills for any reason? | 1 Y 2 NK(F34a) |
| F31. | How old were you when you began taking birth control pills? | sge |
| F32. | How long ago did you stop taking birth control pills or are you | still taking now |
| | still taking them? | 1 🔲 days |
| | | number 2 weeks |
| | | 3 months 4 years |
| | | l |

| F33. | Not counting any time when you stopped taking them, for how long <u>altogether</u> (have you taken/did you take) birth control pills? | less than one month number { months years DK |
|-------|---|---|
| F34. | IF MORE THAN ONE YEAR AGO IN F32. GO TO(F342) OTHERWISE SHOW ORAL CONTRACEPTIVES CHART AND ASK: | number on chart |
| | Please look at this chart and show me the brand of pills you (use/used). | other |
| C A | HECK FIEM: REVIEW BOTH CONDITIONS EXFORE SKING F34e. | IF F32 = still taking now then go to F35. If F30 = "No" and SPs age = 50 or older then go to F35. |
| | Have you ever had an implant under your skin called NORPLANT to prevent pregnancy? | 1 |
| F346. | Do you now have NORPLANT 'implanted under your skin?' | 1 |
| F | 34C. How long ago was NORPLANT implanted? | number 1 months ago { 2 years ago |
| F35. | CHECK ITEM. REFER TO F12, F20, F22, AND F25. MARK FIRST APPLICABLE BCX. | CURRENTLY PREGNANT IN F12 (F49) CURRENTLY BREASTFEEDING IN F20 (F49) PERICO WITHIN LAST 2 MONTHS IN F22 (F49) HYSTERECTOMY IN F25 (F37) OTHER (F36) |
| F36. | Have your periods presently stopped due to radiation or onemotherapy? | 1 |
| F37. | Have your ever taken estrogen or female hormone pills by mountother than oral contraceptive pills? | 1 Y 2 N (F41) 9 CK (F41) |
| F38. | How old were you when you first took the estrogen or female hormone pills? | age OK |
| F39. | How long ago did you stop taking the estrogen or female hormone pills or are you still taking them? | still taking now less than 1 months ago months ago years ago |
| F40. | Not counting any time when you stopped taxing them, for now many years attocemer have you taxen estrogen or female normane bills? | less than it year years tumber |
| F4 · | Have you <u>ever</u> taken or used estrogen or female hormones in the form of vaginal cream, suppository, or injection? | 1 🛘 Y 2 🔲 N F451 3 🔲 CK (F45) |
| F | 42. How old were you when you <u>first used female normones in</u> the form of a vaginal cream, suppository, or injection? | 3ge |

| ==-· · | |
|--|--|
| F43. How long ago did you stop using the vaginal cream, suppository, or injection or are you still using them? | still using less than 1 month ago months ago number { months ago |
| F44. Not counting any time when you stopped using the vaginal cream, suppository, or injection, for how many years altogether have you used them? | less than 1 year years number DK |
| F45. Have you <u>ever</u> used female hormones in the form of patches that are placed on the skin? | 1 Y 2 N (F49) 9 DK (F49) |
| F46. How old were you when you <u>first</u> used the hormone patches? | □ px |
| F47. How long ago did you stop using the hormone patches or are you still using them? | still using less than 1 month ago mumber { months ago years ago DK |
| F48. Not counting any time when you stopped using the female hormone patches, for how many years altogether have you used them? | less than 1 year years number |
| F49. CHECK ITEM. REFER TO AGE OF SP. | 60+ YRS. (H1) LESS THAN 50 YRS. (F50) |
| In order to get a more complete picture of the health of the population, we are asking about sexual experience. Please remember that your answers are strictly confidential. | has not had intercourse (G1) |
| F50. At what age did you first have sexual intercourse? | |
| F51. With how many different partners have you ever had sexual intercourse? | partners number |
| F52. CHECK ITEM. REFER TO SEX OF SP AND TO F51. MARK FIRST APPLICABLE BOX. | 1 SP IS FEMALE (F56) 2 2+ PARTNERS IN F51 (F54) 3 1 PARTNER IN F51 (F53) |
| F53. Was this partner female or male? | 1 |

| F54. | How many partners have been female? IF NO. OF FEMALES EQUALS NO. OF PARTNERS REPORTED IN F51, MARK "ALL" | all (F56) none females |
|------|---|----------------------------|
| F55. | How many partners have been male? | number males |
| F56. | With how many (different) partners have you had sexual intercourse in the past year? | none in past year partners |
| F57. | Hee a doctor ever told you that you had genital herpes? | 1 Y 2 N 9 DK |

| DIS (17-39 YRS.) | | |
|------------------|---|-------------------------------------|
| G1. | CHECK ITEM. REFER TO AGE OF SP. Next I would like to ask you several questions about your feelings, thoughts, and moods. | 1 |
| G2. | In your lifetime, have you ever had two weeks or more during which you felt sad, blue, depressed, or when you lost all interest and pleasure in things that you usually cared about or enjoyed? | 1 Y 2 N |
| G3. | Have you had two years or more in your life when you felt depressed or sad almost all the time, even if you felt OK sometimes? | Y —> PROBE 2 [] 5 [] 1 [] Nor DK |
| G4. | CHECK ITEM. DID SP TELL MD ABOUT G3 SYMPTOM? | 1 🗌 Y 2 🗍 N |

| | | ISK G5 - G20. OMIT WORDS IN []. CODE IN COLUMN I. | | I EVER IN LIFETIME | II WORIST PERIOD |
|-----------|-------------|---|----------------------|--------------------------|------------------------|
| APPETITE | G5. | Has there ever been a period of two weeks or longer when you lost [Did you lose] your appetite? RESPONSE CAN BE POSITIVE EVEN IF FOOD INTAKE WAS NORMAL. MD: SELF: | Y> PROBE 1 N or DK | 3 4 5 | -Y -N |
| | G6 . | Have you ever lost [Did you lose] weight without trying to—as much as two pounds a week for several weeks [or as much as 10 pounds altogether]? MD: SELF: | Y> PROBE 1 N or DK | 3 4 5 | _ Y _ N |
| | G7. | Have you ever had a period when your eating increased so much [Did your eating increase so much] that you gained as much as two pounds a week for several weeks [or 10 pounds altogether]? MD: SELF: | Y> PROBE 1 N or DK | 3 4 5 | N |
| | | ************************************** | | | |
| SLEEP | G8. | Have you ever had a period of two weeks or more when you had [Did you have] trouble falling asteep, staying asleep, or with waking up too early? | Y —> PROBE 1 Nor DK | 3 4 5 5 | _Y _N |
| | G 9. | MD: SELF: Have you ever had a period of two weeks or longer when you were [Were you] sleeping too much? | Y> PROBE | 3 4 5 | N |
| | | MD: SELF: | 1 N or DK | | |
| | | | <u> </u> | | 1 |
| T I R E D | G10. | Has there ever been a period lasting two weeks or more when you felt [Did you feel] tired out all the time? MD: SELF: | Y —> PROBE 1 N or DK | 3 4 5 5 | |
| | <u> </u> | | <u> </u> | | |
| S S | G11. | Has there ever been a period of two weeks or more when you talked or moved [Did you talk or move] more slowly than is normal for you? MD: SELF: | Y —> PROBE 1 N or DK | 3 4 5 | Y N |
| AESTLES | G12. | Has there ever been a period of two weeks or more when you had [Did you have] to be moving all the time—that is, you couldn't sit still and paced up and down? | Y —> PROBE 1 N or DK | 3 4 5 5 | |
| S | | MD: SELF: | | | |

| | | | | | I EVER IN LIFETIME | | WOF PER | rst |
|---------------|------|--|----------------------|-----|--------------------------|------|------------|-----|
| LOST INTEREST | G13. | Was there ever a period of several weeks when your interest in sex was [Was your interest in sex] a lot less than usual? MD: | Y —> PROBE 2 | 4 🗆 | 5 🗍 | 6 [] | □ Y | □ĸ |
| SORTHLESS | G14. | Has there ever been a period of two weeks or more when you felt [Did you feel] worthless, sinful, or guilty? | Y> PROBE 1 Nor DK | | | 5 🗍 | Y | □N |
| 4 | | | | | | | | |
| TROUBLE I | G15. | Has there ever been a period of two weeks or more when you had [Did you have] a lot more trouble concentrating than is normal for you? MD: SELF: | Y> PROBE 1 N or DK | 3 🗌 | 4 🗆 | 5 🗌 | _Y | □N |
| ロスニスズニエー | G16. | Have you ever had a period of two weeks or more when your thoughts came [Did your thoughts come] much slower than usual or seemed mixed up? MD: SELF: | Y> PROBE 1 N or DK | 3 🗍 | 4 🗆 | 5 🗌 | □ Y | □N |
| | | | | | | | | |
| THOUG | G17. | Has there ever been a period of two weeks or more when you thought [Did you think] a lot about death—either your own, someone else's, or death in general? | Y> PROBE 1 Nor DK | | - | 5 🗌 | □ Y | □N |
| H T OF | G18. | Has there ever been a period of two weeks or more when you felt [Did you feel] like you wanted to die? | Y> PROBE 1 Nor DK | | | 5 🗌 | ۲ | □N |
| DEATH | G19. | Have you ever felt [Did you feel] so low you thought of committing suicide? | Y> PROBE 1 □ N or DK | | | 5 🔲 | ۲ | Пи |
| | G20. | Have you ever attempted [Did you attempt] suicide? | Y> PROBE 1 N or DK | | | 5 🗌 | ۲ | □N |

| G21. CHECK ITEM: REFER TO G2 AND G5-G20. | 1 "5'S" CODED IN 3 OR MORE BOXES IN G5-G20 AND "Y" IN G2 (G22) 2 "5'S" CODED IN 3 OR MORE BOXES IN G5-G20 AND "NO" IN G2 (G24) 3 OTHER (G41) |
|---|---|
| G22. You said you've had a period of feeling (depressed/sad/blue/OWN EQUIVALENT) and also said you've had some other problems like (LIST ALL "5"s IN G5-G20). Has there ever been a time when the feelings of depression and some of these other problems occurred together—that is, within the same month? | 1 Y (G26) 2 N |
| G23. So there's never been a period when you felt sad, blue, or depressed at the same time you were having some of these other problems? | 1 never been a period (G41) 2 has been a period (G25) |
| G24. You said you have had periods when (LIST ALL 5's IN G5-G20). Was there ever a time when several of these problems occurred together—that is, within the same month? | 1 Y 2 N (G41) |
| G25. When you were having some of these problems, at about the same time were you feeling okay, or were you feeling low, gloomy, blue, or uninterested in everything? | okay (G41) gloomy, low, etc. |
| G26. What's the longest spell you've ever had when you felt blue and had several of these other problems at the same time? | less than 2 weeks (G41) whole life |
| G27. Now I'd like to ask about spells when you felt both (depressed/OWN EQUIVALENT) and had some of these other problems like (LIST 2 OR 3 ITEMS CODED "5" IN G5-G20). In your lifetime, how many spells like that have you had that lasted two weeks or more? IF 96 SPELLS OR MORE, CODE 96. | apells number |
| G28. Did you tell a doctor about (that spell/any of those spells)? | 1 Y (G32) 2 N |
| G29. Did you tell any other professional about (it/any of them)? | 1 N Y (G32) 2 N |
| G30. Did you take medicine more than once because of (that spell/any of those spells)? | 1 Y (G32) 2 N |
| G31. Did (that spell/those spells) interfere with your life or activities a lot? | 1 🗌 Y 2 🗍 N |
| G32. How old were you the first time you had a spell for two weeks or more where you felt sad and had some of these other problems such as (LIST 2 OR 3 *5*s CODED IN G5-G20)? | |
| G33. Did (that spell/any of those spells) occur just after someone close to you died? IF VOLUNTEERS BEGAN MORE THAN 2 MONTHS AFTER DEATH MARK "N". | 1 Y 2 N (G35) |

| G34. | Have you had any spell of (depression/OWN EQUIVALENT) along with these other problems such as (LIST 2 OR 3 ITEMS CODED "5" IN G5-G20) at times when it wasn't due to a death? | 1 only due to death 2 other times or not due to death |
|------|--|--|
| G35. | Are you in one of these spells of feeling low or disinterested and having some of these other problems now? | 1 Y (G38) 2 N |
| G36. | When did your last spell like that end? CODE MOST RECENT TIME POSSIBLE. | 1 within last 2 weeks 2 within last month 3 within last 6 months (G36) 4 within last year 5 more than 1 year ago (G37) |
| | IF MORE THAN ONE YEAR AGO: | |
| G37. | How old were you then? | age . |
| G38. | CHECK ITEM. REFER TO G26 AND G27. | 1 MORE THAN ONE SPELL IN G27 (G39) 2 ONE SPELL IN G27, 52 OR MORE WEEKS IN G26 (G39) 3 ONE SPELL IN G27, LESS THAN 52 WEEKS IN G26 (G40) |
| G39. | Now I'd like to know about the time when you were feeling (depressed/OWN EQUIVALENT) for at least 2 weeks and had the largest number of these other problems at the same time. How old were you at that time? (IF CAN'T CHOOSE: Then pick one bad spell.) | age |
| G40. | During that spell of (depression/OWN EQUIVALENT) which of these other problems did you have? For instance, during that spell (when you were (AGE IN G39) years old) (BEGINNING WITH WORDS IN [], READ EACH QUESTION CODED "5" IN G5-G20). IF OCCURRED DURING THIS SPELL OF DEPRESSION MARK "Y" IN COL. II. IF DID NOT OCCUR MARK "N" IN COL. II. | |

| | | | | I ER IN ETIME | II WORS PERIC | |
|------|---|------------------------|-----|---------------------|---------------------|-----|
| G41. | Has there ever been a period of one week or more when you were so happy or excited or high that you got into trouble, or your family or friends worried about it, or a doctor said you were manic? | Y> PROBE 1 Nor DK | 3 🗌 | 5 🗍 | | |
| G42. | ASK G42-G49. OMIT WORDS IN []. CODE IN COLUMN I. Has there ever been a period of a week or more when you were [Were you] so much more active than usual that you or your family or friends were concerned about it? | Y> PROBE 1 NorDK | 3 🗍 | 5 🗍 | _ Y | Пи |
| G43. | Has there ever been a period of a week or more when you went [Did you go] on spending sprees—spending so much money that it caused you or your family some financial trouble? | Y —> PROBE 1 Nor DK | 3 🔲 | 5 🗌 | ۲۵ | □n |
| G44. | Have you ever had a period of a week or more when your interest in sex was [At that time was your interest in sex] so much stronger than is typical for you that you wanted to have sex a lot more frequently than is normal for you or with people you normally wouldn't be interested in? | Y> PROBE 1 Nor DK | 3 🗍 | 5 🗋 | - | □ N |
| G45. | Has there ever been a period of a week or more when you talked [Did you talk] so fast that people said they couldn't understand you? | Y> PROBE 1 | 3 🗌 | 5 🗍 | Y | □ N |
| G46. | Have you ever had a period of a week or more when thoughts raced [Did thoughts race] through your head so fast that you couldn't keep track of them? | Y> PROBE 1 | 3 🗌 | 5 🗌 | ۲ | □N |

| | | | | | | I EVER IN IFETIME | WOI PER | . — . |
|------|--|---------------------------------|-------------------|-------------------|-----------------------------|--|------------|------------|
| G47. | Have you ever had a period of a week or more when you felt [Did you feet] that you had a special gift or special powers to do things others couldn't do or that you were a specially important person? ASK FOR EXAMPLE BEFORE PROBING: | Y 1 | | PROBE N or DK | 3 🗆 | 5 🗍 | Y | <u></u> |
| G48. | Has there ever been a period of a week or more when you hardly sleet [Did you hardly sleep] at all but still didn't feel tired or sleepy? | Y 1 | | PROBE N or DK | 3 🗆 | 5 🗌 | □ | □ N |
| G49. | Was there ever a period of a week or more when you were [Were you] easily distracted so that any little interruption could get you off the track? | 1 | / > | PROBE N or DK | 3 🗀 | 5 🗌 | ۲ | Пи |
| G50. | CHECK ITEM. REFER TO G41 AND G42-G49. MARK I APPLICABLE BOX. | FIRST | | 1 2 3 | 3 OR MORE ' IN G41 (G53) | '5'5" IN G42-G49, " '5'5" IN G42-G49, " 3 "5'5" IN G42-G49 | 1" OR "3" | 351) |
| G51. | You said you've had a period of feeling (very happy/exmanic/high/OWN EQUIVALENT/irritable) and also said y had some problems like (LIST "5's" IN G42-G49). Has there been a time when the feelings of being excited or manisome of these other feelings or experiences occurred togs that is, within the same month? | ou've e ever c <u>and</u> | | 1 🗆 | Y (G55) 2 | □ N | | |
| G52. | So there's never been a period when you felt very excit manic at the same time you were having any of these experiences? | ted or other | | 1 🗍 | never been a | . , , | - | |
| G53. | You said you had times when (LIST ALL 5's IN G42-G49). there ever a time when some of these feelings or experi occurred together—that is, within the same month? | | | 1 🗆 | Y 2 | ☐ N (H1) | | |
| G54. | When you were feeling that way, were you unusually knits likely to fight or argue? | able or | | 1 🗆 | Y 2 | ☐ N (H1) | | |

| G55. | What's the longest spell you've ever had when you felt (very happy/excited/manic/high/OWN EQUIVALENT/irritable) for at least a week and had several of these other experiences like (LIST 5's IN G42-G49)? | number { weeks months years |
|--------------|---|---|
| G56. | In your lifetime, how many spells like that have you had that lasted one week or more? IF 96 SPELLS OR MORE, ENTER 96. | number apells |
| G 57. | Did you tell a doctor about (that spell/any of those spells)? | 1 [Y (G61) 2 [N |
| G58. | Did you tell any other professional about (it/any of them)? | 1 |
| G59. | Did you take medicine more than once because of (that spell/any of those spells)? | 1 Y (G61) 2 N |
| G60. | Did (that spell/any of those spells) interfere with your life or activities a lot? | 1 Y 2 N |
| G 61. | How old were you the first time you had a spell for one week or more where you telt (very happy/excited/manic/high/OWN EQUIVALENT/irritable) and had some of these experiences like (UST 2 OR 3 ITEMS CODED "5" IN G42-G49)? | age |
| G62. | Are you in one of these spells of feeling (very happy/excited/manic/high/OWN EQUIVALENT/irritable) and having some of these experiences now? | 1 Y (G65) 2 N |
| G63. | How long ago did your last period like that end? CODE MOST RECENT TIME POSSIBLE. | 1 within last 2 weeks 2 within last month (G65) 3 within last 6 months 4 within last year 5 more than 1 year ago (G64) |
| | IF MORE THAN 1 YEAR AGO: | |
| G64. | How old were you then? | age |
| G6 5. | CHECK ITEM. REFER TO G56. | 1 ONE SPELL IN G56 (G67) 2 MORE THAN ONE SPELL IN G56 |
| G6 6. | Now I'd like to know about the time when you were feeling (very happy/excited/manic/high/OWN EQUIVALENT/irritable) and had the largest number of these other experiences at the same time. How old were you at that time? (IF CAN'T CHOOSE: Then pick one bad spell.) | age |

| G67. During that spell of being (very happy/excited/manic/high/OWN EQUIVALENT/irritable), which of these experiences did you have? For instance, during that spell (when you were AGE IN G66 years old) (BEGINNING WITH WORDS IN [], READ EACH Q. CODED 5 IN G42-G49). | |
|---|--|
| IF OCCURRED DURING THIS SPELL OF MANIA MARK "YES" IN COL. II. IF DID NOT OCCUR MARK "N" IN COL. II. | |

| RES | RESPONDENT (AGES 17+ YEARS) | | | |
|-----|---|---------------------------|--|--|
| Н1. | CHECK ITEM. MARK ONE BOX. MARK MAIN RESPONDENT. SPECIFY RELATIONSHIP OF RESPONDENT TO SP IF OTHER THAN SP. | 1 | | |
| H2. | IF OTHER THAN SP, EXPLAIN REASON FOR ACCEPTING PROXY RESPONDENT. | REASON | | |
| H3. | WAS SP PRESENT DURING ANY PART OF THE INTERVIEW? | 1 Y 2 N | | |
| H4. | QUALITY OF INTERVIEW. | 1 RELIABLE 2 UNRELIABLE | | |
| H5. | COMMENTS. | 1 | | |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

MEC YOUTH QUESTIONNAIRE

(AGES 8-16 YEARS)

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| CASE NO: | Stand No. Segment No. Serial No. | |
|---------------|----------------------------------|---------------------------------|
| FAMILY NO: | | |
| SP NO: | NAME (First, Middle, Last) AGE | SEX |
| SAMPLE NO: | AGE | 1 Male 2 Female |
| DECK NO: | 622 | TIME BEGAN 1 am 2 pm 3 noon |
| | INTERVIEWER NO: | TIME ENDED 1 |
| | DATE OF EXAMINATION Continue | |

MEC YOUTH QUESTIONNAIRE

AGE 8-16 YEARS

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|----|--|-------------|
| A. | ACTIVITY | 1 |
| В. | TOBACCO | 2 |
| C. | REPRODUCTIVE HEALTH | 5 |
| D. | SELECTED CONDITIONS/VITAMIN, MINERAL, AND MEDICINE USAGE | 8 |
| E. | DIET | 9 |
| F. | ALCOHOL/DRUG USE | 10 |
| G. | DIS | 11 |
| Н. | RESPONDENT | 20 |

READ INTRODUCTION TO ALL SPs:

During this interview, I would like to ask you a number of questions about your health. All of your answers will be kept strictly confidential.

| ACTI | ACTIVITY (8-16 YRS.) | | | | |
|------|--|---|--|--|--|
| A1. | First I'd like to ask you some questions about your activities. How many times per week do you play or exercise enough to make you sweat and breathe hard? | less than once per week one two three four six seven eight or more | | | |
| A2. | In the past year, how many <u>sport teams or organized exercise programs</u> have you been involved in? Do <u>not</u> include physical education or gym classes. | none one two three four five or more | | | |
| A3. | About how many hours did you watch TV yesterday? | NONE half hour or less about one hour about two hours about three hours about four hours five hours or more | | | |

| TOBA | TOBACCO (8-16 YRS.) | | |
|------|--|-------------------------------|--|
| | Now I'd like to ask you some questions about tobacco use. | | |
| B1. | Have you smoked at least 1 cigarette? | Y N (815) | |
| 82. | At what age did you smoke your first cigarette? | 200 | |
| | | age | |
| i | | ☐ DK | |
| 83. | Have you smoked at least 100 cigarettes during your entire life (approximately 5 packs)? | 1 Y 2 N (B11) | |
| B4. | How old were you when you <u>first</u> started smoking cigarettes fairly regularly? | age | |
| | | or | |
| | | never smoked regularly | |
| | | □ סא | |
| B5. | Do you smoke cigarettes <u>now</u> ? | 1 Y 2 N (B12) | |
| B6. | About how many cigarettes do you smoke per day? | less than 1 cig. per day | |
| | | cigarettes | |
| | | number | |
| | | number packs | |
| | | varies between and cigarettes | |
| 87. | For approximately how many years have you smoked this amount? | years | |
| B8. | Was there ever a period of a year or more when you smoked more than (NUMBER IN B6) cigarettes per day? | 1 Y 2 N (B10) | |
| B9. | During the period when you were smoking the most, about how many cigarettes per day did you usually smoke? | cigarettes | |
| | i | packs | |
| | ı | number varied | |
| | | Valieu Valieu | |
| 810. | Have you ever quit smoking for a period of one year or longer? | 1 | |
| B11. | How many cigarettes have you smoked in the past 5 days? | none (B15) | |
| | | cigarettes (B15) | |
| B12. | About how old were you when you <u>last</u> smoked cigarettes (fairly regularly)? | age | |
| | PROBE: How old were you when you quit smoking cigarettes? | □ DK | |

| B13. | About how many cigarettes per day did you <u>usually</u> smoke? | cigarettes number packs number varied |
|------|--|---|
| B14. | Did you quit smoking because you had a health problem that was caused or made worse by smoking? | 1 Y 2 N |
| B15. | Have you ever tried chewing tobacco or snuff? | 1 Y 2 N (B27) |
| 816. | At what age did you first try chewing tobacco or snuff? (IF USED BOTH, ENTER EARLIEST AGE) | age DK |
| 817. | Have you ever used 5 or more containers in your entire life? (IF USED BOTH, COUNT TOTAL NUMBER) | 1 Y 2 N (B27) |
| B18. | At what age did you first start using chewing tobacco or snuff fairly regularly? (IF USED BOTH, ENTER EARLIEST AGE) | age never used regularly DK |
| B19. | Do you use chewing tobacco or snuff now? | ☐ Y ☐ N (B24) |
| B20. | Which - chewing tobacco or snuff? | chewing tobacco snuff both |
| B21. | How many containers do you use per day or per week? RECORD FOR SNUFF OR CHEWING TOBACCO OR BOTH. | snuff |
| B22. | Where in your mouth do you usually place the (chewing tobacco/snuff?) (IF BOTH USED, INDICATE MOST COMMON SPOT WHERE TOBACCO WAS PLACED) a. in the right side, left side, or front of your mouth? b. in the top or bottom of your mouth? | 1 right 2 left 3 front 1 top 2 bottom 9 no special place other, specify |
| 823. | How many containers of chewing tobacco or snuff have you used in the past 5 days? (IF BOTH USED, ENTER TOTAL NUMBER) | none less than 1 container/pkg. (B27) containers/pkgs. |

| B24. | About how old were you when you <u>last</u> used chewing tobacco or snuff (fairly regularly)? (IF BOTH USED, RECORD OLDEST AGE) | age DK |
|------|--|---------------------------------------|
| B25. | Which did you use - chewing tobacco or snuff? | chewing tobacco snuff both |
| B26. | Did you quit using (chewing tobacco/snuff) because you had a health problem that was caused or made worse by using (it/them)? | 1 Y 2 N |
| B27. | How many pipes and how many cigars have you smoked in the past 5 days? | none pipes and cigars number number |
| B28. | CHECK ITEM. REFER TO AGE OF SP. | 1 UNDER 12 YRS. (C1) 2 12+ YRS. (B29) |
| B29. | How many pieces of nicotine gum have you chewed in the past 5 days? (Nicotine gum is a sugar-free flavored chewing gum prescribed by a doctor to help people stop smoking or chewing tobacco.) | none pieces number |

| REP | REPRODUCTIVE HEALTH (BOYS 12-16 YRS. AND GIRLS 10-16 YRS.) | | | |
|-----|---|--|--|--|
| C1. | CHECK ITEM. REFER TO AGE AND SEX OF SP. | FEMALE LESS THAN 10 YRS. (H1) FEMALE 10+ YRS. (C2) MALE LESS THAN 12 YRS. (H1) MALE 12-14 YRS. (D1) MALE 15-16 YRS. (C27) | | |
| C2. | Now I would like to ask you a few questions about your periods or menstrual cycle. How old were you when your periods or menstrual cycles started? | haven't started yet (C26) age DK | | |
| C3. | About how long ago was your last period? | 1 having it now 2 less than 2 months ago 3 2-3 months ago 4 4-6 months ago 5 7-9 months ago 6 10-12 months ago 7 more than 12 months ago | | |
| C4. | CHECK ITEM. REFER TO AGE OF SP. MARK FIRST APPLICABLE BOX. | 1 LESS THAN 12 YRS. (H1) 2 12+ YRS. (C5) | | |
| C5. | Next are questions about use of birth control pills and about pregnancy history. Your answers will be kept confidential. Have you ever taken birth control pills for any reason? | 1 Y 2 N (C10) | | |
| C6. | How old were you when you began taking birth control pills? | age age | | |
| C7. | How long ago did you stop taking birth control pills or are you still taking them? | still taking now days ago mumber days ago months ago years ago | | |
| C8. | Not counting any time when you stopped taking them, for how long altogether (have you taken/did you take) birth control pills? | less than one month number { | | |

| C9. | IF MORE THAN ONE YEAR AGO IN C7, GO TO C10. OTHERWISE SHOW ORAL CONTRACEPTIVES CHART AND ASK: Please look at this chart and show me the brand of pills you (are/were) using. | no. from card OR other specify | | |
|------|--|--|--|--|
| C10. | Have you <u>ever</u> been pregnant? Please include miscarriages, stillbirths, tubal pregnancies, abortions, live births, and current pregnancy. | 1 Y 2 N (C26) | | |
| C11. | How many times have you been pregnant? Again, be sure to count all your pregnancies, whether they ended in miscarriage, stillbirth, tubal pregnancy, abortion, or live birth. (Include current pregnancy.) | number pregnancies | | |
| C12. | What is the total number of live births (live-born children) you have had? | none (C17) none live birth (C14) live births | | |
| C13. | How old were you at the time of your <u>first</u> live birth? | age | | |
| C14. | How old were you at the time of your last live birth? | age | | |
| C15. | Did you breastfeed (your child/any of your children)? | 1 Y 2 N (C17) | | |
| C16. | (Did you breastfeed your child/how many of your children did you breastfeed) for at least one month? | no children one child children number | | |
| C17. | MARK BOX IF KNOWN. Are you now pregnant? | 1 Y 2 N (C19) 9 DK (C19) | | |
| C18. | Which month of pregnancy are you in? | month number | | |
| C19. | MARK IF KNOWN. OTHERWISE, ASK: (Besides this pregnancy) have you been pregnant in the past 2 years? | 1 no, current pregnancy only (C21) 2 yes, has been pregnant in past 2 years do not include current pregnancy (C20) 3 no, has not been pregnant in past 2 years (C24) | | |
| C20. | How many months ago did your (last) pregnancy end? | 1 | | |

| C21. | Did you receive benefits from WIC, that is, the Women, Infants, and Children program, in the past 12 months? | 1 Y 2 N (C24) 9 DK (C24) |
|------|--|---|
| C22. | Are you <u>now</u> receiving benefits from the WIC program? | 1 Y 2 N 9 DK |
| C23. | How long (did you receive/have you been receiving) benefits from the WIC program? | number { |
| C24. | CHECK ITEM. REFER TO C12. | 1 |
| C25. | Are you <u>now</u> breastfeeding a child? | 1 🗌 Y 2 🗍 N |
| C26. | CHECK ITEM. REFER TO AGE OF SP AND TO C10. | 1 LESS THAN 15 YRS. (D1) 2 15-16 YRS. AND "Y" IN C10 (C28) 3 15-16 YRS. AND "N" OR "OTHER" IN C10 (C27) |
| C27. | In order to get a more complete picture of the health of the population, we are asking about sexual experience. As I mentioned, your answers are completely confidential. Have you ever had sexual intercourse? | 1 Y 2 N (D1) |
| C28. | At what age did you <u>first</u> have sexual intercourse? | age |

| SELE | SELECTED CONDITIONS/MEDICINE, VITAMIN, AND MINERAL USAGE (12-16 YRS.) | | | |
|------|--|------------------------------|--|--|
| D1. | Now I would like to ask you a few questions about selected health problems and your recent use of medicines, vitamins, and minerals. Are you now or in the past 3 months have you been on treatment for anemia, sometimes called "tired blood" or "low blood"? (Include diet, Iron pills, Iron shots, transfusions as treatment.) | 1 Y 2 N 9 DK | | |
| D2. | How many colds, flu, diarrhea, vomiting, pneumonia, and ear infections have you had in the past 4 weeks? | none infections number | | |
| D3. | Have you taken or used any antihistamine medicines in the past two days? (Antihistamines are medicines taken for symptoms like sneezing, and a runny or itchy nose.) | 1 | | |
| D4. | Prescription medicines are medicines that cannot be obtained without a doctor's or dentist's prescription. Have you taken any prescription medicines during the past 24 hours? | 1 Y 2 N | | |
| D5. | Have you taken any vitamins or minerals during the past 24 hours? | 1 Y 2 N | | |

| DIET | DIET (12-16 YRS.) | | | |
|------|---|------------------------------------|--|--|
| | Next I'm going to ask you some questions about your eating habits. | | | |
| E1. | How often do you eat breakfast every day, on some days, rarely, never, or on weekends only? | 1 every day | | |
| | lately, never, or on weekenes only i | 2 some days | | |
| | | 3 🔲 rarely | | |
| | | 4 never | | |
| | | 5 weekends only | | |
| E2. | Do you consider yourself to be overweight, underweight, or | 1 overweight | | |
| | about the right weight? | 2 underweight | | |
| | | 3 about the right weight | | |
| E3. | Would you like to weigh more, less, or stay about the same? | 1 more | | |
| | | 2 less | | |
| | | 3 stay about the same | | |
| E4. | During the past 12 months have you tried to lose weight? | 1 Y 2 N (E6) | | |
| E5. | Are you <u>currently</u> trying to lose weight? | 1 N 2 N | | |
| E6. | During the <u>past 12 months</u> have you changed what you eat or drink for any medical reason or health condition? | 1 Y 2 N (F1) 9 DK (F1) | | |
| E7. | What was the medical reason or health condition? Any others? | 1 OVERWEIGHT/OBESITY | | |
| | MARK ALL THAT APPLY. | 2 HIGH BLOOD PRESSURE/HYPERTENSION | | |
| | | 3 HIGH BLOOD CHOLESTEROL | | |
| | | 4 HEART DISEASE | | |
| | | 5 DIABETES | | |
| | | 6 ALLERGIES | | |
| | | 7 ULCER | | |
| | | 8 CANCER | | |
| | | 9 PREGNANCY | | |
| | | 10 HEALTH IN GENERAL | | |
| | | 11 OTHERSPECIFY | | |
| | | 99 DK | | |

| ALCC | ALCOHOL/DRUG USE (12-16 YRS.) | | | |
|------|---|---------------------------------------|--|--|
| F1. | These next questions are about drinking alcoholic beverages. Alcoholic beverages include beer, ale, wine, wine coolers, liquor such as whiskey, gin, rum, or vodka, and cocktails and mixed drinks containing liquor. | | | |
| | in your entire life, have you had at least 12 drinks of any kind of alcoholic beverage? Do not count small tastes. | 1 Y 2 N (F7) | | |
| F2. | In the <u>past 12 months</u> did you have <u>at least 12 drinks</u> of <u>any</u> kind of alcoholic beverage? | 1 N (F7) | | |
| F3. | In the <u>past 12 months</u> , on the average, how many days per week, month, or year did you drink <u>any</u> alcoholic beverages? | number days per week month year | | |
| F4. | On the average, on the days that you drank alcohol, how many drinks did you have a day? (By a drink, I mean a 12-oz beer, a 4-oz glass of wine, or an ounce of liquor.) | drinks per day | | |
| F5. | In the past 12 months, how many days per week, month, or year did you have 9 or more drinks on a single day? Include all types. | none week days per | | |
| F6. | In the past 12 months, how many days per week, month, or year did you have 5 or more drinks on a single day? Include all types. (Include the (NUMBER IN F5) days you had 9 or more drinks.) | none week days per month DK | | |
| | Now I would like to ask you a few questions about your experience with drugs. | | | |
| F7. | Have you ever used marijuana? | 1 Y 2 N (F10) | | |
| F8. | About how many times in your lifetime have you used marijuana? | 1 | | |
| F9. | During the past month, on how many days did you use marijuana? | none in past month days number | | |
| F10. | Have you ever used crack or cocaine in any form? | 1 Y 2 N (G1) | | |

| F1i. | About how many times in your lifetime have you used crack or cocaine (in any form)? | 1 |
|------|---|--------------------------------|
| F12. | During the past month, on how many days did you use crack or cocaine (in any form)? | none in past month days number |

| DIS | DIS (15-16 YRS.) | | |
|-----|---|---------------------------------------|--|
| G1. | CHECK ITEM. REFER TO AGE OF SP. Next I would like to ask you several questions about your feelings, thoughts, and moods. | 1 LESS THAN 15 YRS. (H1) 2 15-16 YRS. | |
| G2. | In your lifetime, have you ever had two weeks or more during which you felt sad, blue, depressed, or when you lost all interest and pleasure in things that you usually cared about or enjoyed? | 1 | |
| G3. | Have you had two years or more in your life when you felt depressed or sad almost all the time, even if you felt OK sometimes? | Y> PROBE 2 | |
| G4. | CHECK ITEM. DID SP TELL MD ABOUT G3 SYMPTOM? | 1 🗌 Y 2 🗍 N | |

| | | ASK G5 - G20. OMIT WORDS IN []. CODE IN COLUMN I. | | I EVER IN LIFETIME | II WORST PERIOD |
|-----------|---------|--|----------------------|--------------------------|-----------------------|
| A P P E T | G5. | Has there ever been a period of two weeks or longer when you lost [Did you lose] your appetite? RESPONSE CAN BE POSITIVE EVEN IF FOOD | Y —> PROBE 1 N or DK | 3 4 5 | Y N |
| <u> </u> | | INTAKE WAS NORMAL. | | | |
| E | 05 | MD: SELF: | | | |
| | G6. | Have you ever lost [Did you lose] weight without trying to-as much as two pounds a week for several weeks [or as much as 10 pounds altogether]? | Y> PROBE 1 □ N or DK | 3 4 5 5 | YN |
| | | MD: SELF: | | | |
| | G7. | Have you ever had a period when your eating increased so much [Did your eating increase so much] that you gained as much as two pounds a week for several weeks [or 10 pounds altogether]? | Y —> PROBE 1 | 3 4 5 5 | YN |
| | | MD: SELF: | | | |
| 1 | | | | | |
| SLEE | G8. | Have you ever had a period of two weeks or more when you had [Did you have] trouble falling asleep, staying asleep, or with waking up too early? | Y·> PROBE | 3 4 5 | _Y _N |
| Ρ | | MD: SELF: | | | |
| i | G9. | Have you ever had a period of two weeks or longer when you were [Were you] sleeping too much? | Y> PROBE | 3 4 5 | YN |
| ; | | MD: SELF: | 1 N or DK | | |
| | r | | | | |
| T I R | G10. | Has there ever been a period lasting two weeks or more when you felt [Did you feel] tired out all the time? | Y —> PROBE | 3 4 5 | N N |
| D | | MD: SELF: | 1 Nor DK | | |
| | | | y | | . |
| SLOS | G11. | Has there ever been a period of two weeks or more when you talked or moved [Did you talk or move] more slowly than is normal for you? | Y —-> PROBE | 3 4 5 | ☐Y ☐N |
| | | MD: SELF: | , [] 1401.DK | | |
| RESTLES | G12. | Has there ever been a period of two weeks or more when you had [Did you have] to be moving all the time—that is, you couldn't sit still and paced up and down? | Y> PROBE 1 | 3 4 5 5 | □Y □N |
| E S | | MD: SELF: | | | |

| | | | | | I EVER IN LIFETIME | | II WOF PERI | RST |
|------------------|------|---|--------------------------------|-----|--------------------------|------|-------------------|-----|
| LOST INTEREST | G13. | Was there ever a period of several weeks when your interest in sex was [Was your interest in sex] a lot less than usual? MD: SELF: IF VOLUNTEERS NO INTEREST EVER: MARK BOX 6 | Y> PROBE 2 3 1 N or DK | 4 🗍 | 5 🗍 | 6 [] | □ Y | □N |
| SORLILESS | G14. | Has there ever been a period of two weeks or more when you felt [Did you feel] worthless, sinful, or guilty? | Y> PROBE 1 | | | 5 🗍 | Y | _ N |
| 1 | | | | , | | | | |
| TROUBLE | G15. | Has there ever been a period of two weeks or more when you had [Did you have] a lot more trouble concentrating than is normal for you? MD: SELF: | Y> PROBE 1 | 3 🗍 | 4 🗌 | 5 🔲 | ПΥ | Пи |
| " FH.RK.RG | G16. | Have you ever had a period of two weeks or more when your thoughts came [Did your thoughts come] much slower than usual or seemed mixed up? MD: SELF: | Y> PROBE 1 | 3 🗍 | 4 🔲 | 5 🗍 | □ Y | □ N |
| | | | <u></u> | | | | <u> </u> | |
| THOUG | G17. | Has there ever been a period of two weeks or more when you thought [Did you think] a lot about death-either your own, someone else's, or death in general? | Y> PROBE 1 N or DK | | | 5 🗌 | П | Пи |
| H T O F | G18. | Has there ever been a period of two weeks or more when you felt [Did you feel] like you wanted to die? | Y —> PROBE 1 | | | 5 🗌 | Y | Пи |
| DEATH | G19. | Have you ever felt [Did you feel] so low you thought of committing suicide? | Y> PROBE 1 N or DK | | | 5 🗌 | _ × | Пи |
| | G20. | Have you ever attempted [Did you attempt] suicide? | Y —> PROBE 1 | | | 5 🗌 | ☐ Y | Пи |

| G21. | CHECK ITEM: REFER TO G2 AND G5-G20. | 1 |
|------|--|--|
| G22. | You said you've had a period of feeling (depressed/sad/blue/OWN EQUIVALENT) and also said you've had some other problems like (LIST ALL "5"s IN G5-G20). Has there ever been a time when the feelings of depression and some of these other problems occurred together—that is, within the same month? | 1 |
| G23. | So there's never been a period when you felt sad, blue, or depressed at the same time you were having some of these other problems? | 1 never been a period (G41) 2 has been a period (G26) |
| G24. | You said you have had periods when (LIST ALL 5's IN G5-G20). Was there ever a time when several of these problems occurred together—that is, within the same month? | 1 Y 2 N (G41) |
| G25. | When you were having some of these problems, at about the same time were you feeling okay, or were you feeling low, gloomy, blue, or uninterested in everything? | 1 ckay (G41) 2 gloomy, low, etc. |
| G26. | What's the longest spell you've ever had when you felt blue and had several of these other problems at the same time? | less than 2 weeks (G41) whole life weeks months years |
| G27. | Now I'd like to ask about spells when you felt both (depressed/OWN EQUIVALENT) and had some of these other problems like (LIST 2 OR 3 ITEMS CODED "5" IN G5-G20). In your lifetime, how many spells like that have you had that lasted two weeks or more? IF 96 SPELLS OR MORE, CODE 96. | spells |
| G28. | Did you tell a doctor about (that spell/any of those spells)? | 1 |
| G29. | Did you tell any other professional about (it/any of them)? | 1 |
| G30. | Did you take medicine more than once because of (that spell/any of those spells)? | 1 |
| G31. | Did (that spell/those spells) interfere with your life or activities a lot? | 1 Y 2 N |
| G32. | How old were you the first time you had a spell for two weeks or more where you felt sad and had some of these other problems such as (LIST 2 OR 3 "5"s CODED IN G5-G20)? | age |
| G33. | Did (that spell/any of those spells) occur just after someone close to you died? IF VOLUNTEERS BEGAN MORE THAN 2 MONTHS AFTER DEATH MARK "N". | 1 Y 2 N (G35) |

| G34. | Have you had any spell of (depression/OWN EQUIVALENT) along with these other problems such as (LIST 2 OR 3 ITEMS CODED "5" IN G5-G20) at times when it wasn't due to a death? | 1 only due to death 2 other times or not due to death |
|------|---|--|
| G35. | Are you in one of these spells of feeling low or disinterested and having some of these other problems now? | 1 N (G38) 2 N |
| G36. | When did your last spell like that end? CODE MOST RECENT TIME POSSIBLE. | 1 within last 2 weeks 2 within last month 3 within last 6 months (G38) 4 within last year 5 more than 1 year ago (G37) |
| G37. | IF MORE THAN ONE YEAR AGO: How old were you then? | age |
| G38. | CHECK ITEM. REFER TO G26 AND G27. | 1 MORE THAN ONE SPELL IN G27 (G39) 2 ONE SPELL IN G27, 52 OR MORE WEEKS IN G26 (G39) 3 ONE SPELL IN G27, LESS THAN 52 WEEKS IN G26 (G40) |
| G39. | Now I'd like to know about the time when you were feeling (depressed/OWN EQUIVALENT) for at least 2 weeks and had the largest number of these other problems at the same time. How old were you at that time? (IF CAN'T CHOOSE: Then pick one bad spell.) | age |
| G40. | During that spell of (depression/OWN EQUIVALENT) which of these other problems did you have? For instance, during that spell (when you were (AGE IN G39) years old) (BEGINNING WITH WORDS IN [], READ EACH QUESTION CODED "5" IN G5-G20). IF OCCURRED DURING THIS SPELL OF DEPRESSION MARK "Y" IN COL. II. IF DID NOT OCCUR MARK "N" IN COL. II. | |

| | | | | I VER IN FETIME | II WOP PERI | |
|------|---|--------------------------|-----|-----------------------|-------------------|----|
| G41. | Has there ever been a period of one week or more when you were so happy or excited or high that you got into trouble, or your family or friends worried about it, or a doctor said you were manic? | Y —> PROBE 1 N or DK | 3 🗌 | 5 🗌 | | |
| G42. | ASK G42-G49. OMIT WORDS IN []. CODE IN COLUMN I. Has there ever been a period of a week or more when you were [Were you] so much more active than usual that you or your family or friends were concerned about it? | Y> PROBE 1 N or DK | 3 🔲 | 5 🗍 | □ Y | □N |
| G43. | Has there ever been a period of a week or more when you went [Did you go] on spending sprees-spending so much money that it caused you or your family some financial trouble? | Y> PROBE 1 N or DK | 3 🗍 | 5 🗌 | □ Y | Пи |
| G44. | Have you ever had a period of a week or more when your interest in sex was [At that time was your interest in sex] so much stronger than is typical for you that you wanted to have sex a lot more frequently than is normal for you or with people you normally wouldn't be interested in? | Y> PROBE 1 | 3 🗍 | 5 🗍 | □ Y | □N |
| G45. | Has there ever been a period of a week or more when you talked [Did you talk] so fast that people said they couldn't understand you? | Y —> PROBE | 3 🔲 | 5 🗌 | ΠY | Пи |
| G46. | Have you ever had a period of a week or more when thoughts raced [Did thoughts race] through your head so fast that you couldn't keep track of them? | Y> PROBE 1 | 3 🔲 | 5 🗌 | Π× | Пи |

| | | | | | | | I EVER IN LIFETIME | | II WOF PERI | IST |
|------|---|---------------------------------|-----------------|------|---|-----------|--|-------|-------------------|------|
| G47. | Have you ever had a period of a week or more when you felt [Did you feel] that you had a special gift or special powers to do things others couldn't do or that you were a specially important person? | Y 1 | > | PROE | _ | 3 🗌 | 5 🗍 | | Y | □ N |
| | ASK FOR EXAMPLE BEFORE PROBING: | | | | | | | | | |
| G48. | Has there ever been a period of a week or more when you hardly slept [Did you hardly sleep] at all but still didn't feel tired or sleepy? | Y 1 | ′ > | PROE | | 3 🗌 | 5 [|] | ☐ Y | Пи |
| G49. | Was there ever a period of a week or more when you were [Were you] easily distracted so that any little interruption could get you off the track? | \ 1 | ′ —> ' 🔲 · ' | PROP | _ | 3 🗍 | 5 [|] | ☐ Y | □ N |
| G50. | CHECK ITEM. REFER TO G41 AND G42-G49. MARK APPLICABLE BOX. | FIRST | | 1 2 | | | E "5'S" IN G42-G4 E "5'S" IN G42-G4 3) | | • | 351) |
| | | · · · · = · · · | | 3 | | LESS THAN | N 3 "5"S" IN G42-0 | G49 (| (H1) | |
| G51. | You said you've had a period of feeling (very happy/exmanic/high/OWN EQUIVALENT/irritable) and also said yhad some problems like (LIST "5's" IN G42-G49). Has ther been a time when the feelings of being excited or manisome of these other feelings or experiences occurred togethat is, within the same month? | ou've e ever c <u>and</u> | | 1 | | Y (G55) | 2 🗍 N | | | |
| G52. | So there's never been a period when you felt very excimanic at the same time you were having any of these experiences? | | | 1 2 | | | a period (H1) period (G55) | | | |
| G53. | You said you had times when (LIST ALL 5's IN G42-G49) there ever a time when some of these feelings or exper occurred together-that is, within the same month? | | | 1 | | Y | 2 N (H1) | | | |
| G54. | When you were feeling that way, were you unusually irritalikely to fight or argue? | able or | | 1 | | Y | 2 N (H1) | | | |

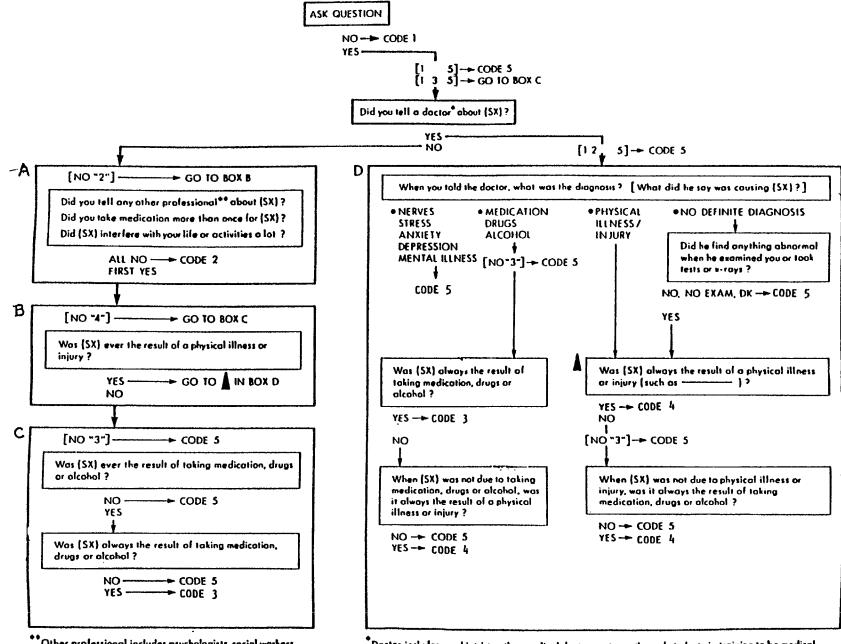
| G55. What's the longest spell you've ever had when you felt (ver happy/excited/manic/high/OWN EQUIVALENT/irritable) for a least a week and had several of these other experiences like (LIST 5's IN G42-G49)? | weeks |
|--|---|
| G56. In your lifetime, how many spells like that have you had tha lasted <u>one</u> week or more? IF 96 SPELLS OR MORE, ENTER 96. | spells number |
| G57. Did you tell a doctor about (that spell/any of those spells)? | 1 |
| G58. Did you tell any other professional about (it/any of them)? | 1 |
| G59. Did you take medicine more than once because of (the spell/any of those spells)? | t 1 [] Y (G61) 2 [] N |
| G60. Did (that spell/any of those spells) interfere with your life of activities a lot? | 1 |
| G61. How old were you the first time you had a spell for one week of more where you felt (very happy/excited/manic/high/OW EQUIVALENT/irritable) and had some of these experiences like (LIST 2 OR 3 ITEMS CODED "5" IN G42-G49)? | · |
| G62. Are you in one of these spells of feeling (ver happy/excited/manic/high/OWN EQUIVALENT/irritable) an having some of these experiences now? | |
| G63. How long ago did your last period like that end? CODE MOST RECENT TIME POSSIBLE. | 1 within last 2 weeks 2 within last month 3 within last 6 months 4 within last year 5 more than 1 year ago (G64) |
| IF MORE THAN 1 YEAR AGO: | |
| G64. How old were you then? | age |
| G65. CHECK ITEM. REFER TO G56. | 1 ONE SPELL IN G56 (G67) 2 MORE THAN ONE SPELL IN G56 |
| G66. Now I'd like to know about the time when you were feeling (ve happy/excited/manic/high/OWN EQUIVALENT/irritable) at had the largest number of these other experiences at the san time. How old were you at that time? (IF CAN'T CHOOS Then pick one bad spell.) | d age |

During that spell of being (very happy/excited/manic/high/ OWN EQUIVALENT/irritable), which of these experiences did you have? For instance, during that spell (when you were AGE IN G66 years old). (BEGINNING WITH WORDS IN [], READ EACH Q. CODED 5 IN G42-G49). G67.

IF OCCURRED DURING THIS SPELL OF MANIA MARK "YES" IN COL. II. IF DID NOT OCCUR MARK "N" IN COL. II.

| ŘESI | RESPONDENT (AGES 8 - 16 YEARS) | | | | |
|------|---|--|--|--|--|
| H1. | CHECK ITEM. MARK ONE BOX. MARK MAIN RESPONDENT. SPECIFY RELATIONSHIP OF RESPONDENT TO SP IF OTHER THAN SP. | 1 SAMPLE PERSON (H4) 2 MOTHER 3 FATHER 4 SISTER OR BROTHER 5 GRANDPARENT 6 OTHER (SPECIFY) 7 | | | |
| H2. | IF OTHER THAN SP, EXPLAIN REASON FOR ACCEPTING PROXY RESPONDENT. | REASON | | | |
| нз. | WAS SP PRESENT DURING ANY PART OF THE INTERVIEW? | 1 Y 2 N | | | |
| H4. | QUALITY OF INTERVIEW. | 1 RELIABLE 2 UNRELIABLE | | | |
| H5. | COMMENTS. | 1 | | | |

PROBE FLOW CHART 5/87 DIAGNOSTIC INTERVIEW SCHEDULE VERSION III-A



Other professional includes psychologists, social workers, counselors, nurses, clergy, dentists, chirapractors and podiatrists.

Doctor includes psychiatrists, other medical doctors, osteopaths and students in training to be medical doctors or osteopaths

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

MEC PROXY QUESTIONNAIRE (AGES 2 MONTHS - 11 YEARS)

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m)

Public reporting burden for complete participation in the NHANES III is astimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Roum 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs. Office of Management and Budget, Washington, DC 20503

| CASE NO: | Stand No. Segment No. Serial No. | |
|---------------|----------------------------------|---------------------------------|
| FAMILY NO: | NAME (First, Middle, Last) | |
| SP NO: | AGE 1 | SEX 1 |
| SAMPLE NO: | | 2 Female |
| DECK NO: | 621 621 | TIME BEGAN 1 am 2 pm: 3 noon |
| | INTERVIEWER NO: | 1 |
| | DATE OF EXAMINATION I | |

PHS 6212-3

MEC PROXY QUESTIONNAIRE

AGE 2 MOS-11 YRS

| TO | TOPIC | | |
|----|--------------------------------------|---|--|
| A. | MEDICINE, VITAMIN, AND MINERAL USAGE | 1 | |
| В. | SELECTED CONDITIONS | 2 | |
| C. | INFANT FOOD FREQUENCY | 3 | |
| D. | RESPONDENT | 4 | |

READ INTRODUCTION TO PARENT OR GUARDIAN:

We are interested in asking you some questions about the health of your child, (FILL IN NAME OF SP). All of your responses will be kept strictly confidential.

| MEC | MEDICINE, VITAMIN, AND MINERAL USAGE (AGES 1-11 YEARS) | | | | |
|-----|--|--|--|--|--|
| A1. | CHECK ITEM. REFER TO AGE OF SP. | 1 LESS THAN 1 YEAR (B1) 2 1-5 YEARS (A3) 3 6+ YEARS (A2) | | | |
| A2. | I would like to begin by asking you a few questions about your child's recent use of medicines, vitamins, and minerals. Has — taken or used any antihistamine medicines in the past 2 days? (Antihistamines are medicines taken for symptoms like sneezing, and a runny or itchy nose.) | 1 Y 2 N 9 DK | | | |
| A3. | Prescription medicines are medicines that cannot be obtained without a doctor's or dentist's prescription. Has — taken any prescription medicines during the past 24 hours? | 1 Y 2 N | | | |
| A4. | Has taken any vitamins or minerals during the past 24 hours? | 1 Y 2 N | | | |

| SELE | SELECTED CONDITIONS (AGES 2 MOS - 11 YRS.) | | | | |
|-------------|---|--------------------------------|--|--|--|
| | Now I would like to ask a few questions about's health. | | | | |
| 81. | Is - <u>now</u> or in the past <u>3 months</u> has - been on treatment for anemia, sometimes called "tired blood" or "low blood"? (Include diet, iron pills, iron shots, and transfusion as treatment.) | 1 | | | |
| B2. | How many infections such as colds, flu, diarrhea, vomiting, pneumonia, and ear infections has - had in the past four weeks? | 00 none infections | | | |
| | | number | | | |
| 83 . | CHECK ITEM. REFER TO AGE AND SEX OF SP. | 1 FEMALE AGE 8 OR 9 YEARS (B4) | | | |
| | | 2 LESS THAN 6 YEARS OLD (B5) | | | |
| | | 3 OTHER (D1) | | | |
| B4. | How old was - when her periods or menstrual cycles started, or haven't they started yet? | 00 haven't started yet | | | |
| | • | age (D1) | | | |
| | | 99 DK | | | |
| | Next are a few questions about the WIC program. | | | | |
| B5. | Did - receive benefits from WIC, that is, the Women, Infants, and Children Program, in the past 12 months? | 1 Y 2 N (C1) 9 DK (C1) | | | |
| B6. | Is - <u>now</u> receiving benefits from the WIC program? | 1 Y 2 N 9 DK | | | |
| B7. | How long (did receive/has been receiving) benefits from the WIC program? | number { 1 | | | |
| | | 99 DK | | | |

| INFANT FOOD FREQUENCY (AGES 2-11 MONTHS) | | | | | |
|--|---|---------------------------------------|--|--|--|
| C1. | CHECK ITEM. REFER TO AGE OF SP. | 1 1 YEAR OR OLDER (D1) 2 UNDER 1 YEAR | | | |
| C2. | In this last section, I would like to ask whether or not - has eaten certain foods or drunk certain beverages during the past month. In the <u>past month</u> , did - eat or drink any of these foods or beverages? Include baby food as well as strained and regular table foods. | | | | |
| | a. Cereal | 1 🗌 Y 2 🗍 N | | | |
| | b. Fruit | 1 🗌 Y 2 🗍 N | | | |
| | c. Yellow and orange vegetables | 1 🗌 Y 2 🗌 N | | | |
| | d. Green vegetables | 1 🗌 Y 2 🔲 N | | | |
| | e. Meat | 1 Y 2 N | | | |
| | f. Egg yolk or eggs | 1 🗌 Y 2 🗍 N | | | |
| | g. Combination meat/vegetable dinners | 1 Y 2 N | | | |
| | h. Yogurt, cottage cheese and other cheeses | 1 N 2 N | | | |
| | i. Bread, rolls, crackers, and biscuits | 1 N 2 N | | | |
| | j. Desserts | 1 Y 2 N | | | |
| | k. Breastmilk | 1 Y 2 N | | | |
| | I. Formula | 1 N 2 N | | | |
| | m. Cow's milk (regular milk) | 1 🗌 Y 2 🗍 N | | | |
| | n. Fruit juices such as apple juice and orange juice | 1 N 2 N | | | |
| | o. Drinks such as Koolaid, fruit punch and Hi-C | 1 Y 2 N | | | |

| RES | PONDENT (AGES 2 MONTHS - 11 YEARS) | |
|-----|---|--|
| D1. | CHECK ITEM. MARK ONE BOX. INDICATE MAIN RESPONDENT'S RELATIONSHIP TO SP. | 1 MOTHER 2 FATHER 3 SISTER OR BROTHER 4 GRANDPARENT 5 OTHER (SPECIFY) |
| D2. | QUALITY OF INTERVIEW. | 6 1 |
| D3. | COMMENTS. | 1 |

Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

24-HOUR DIETARY RECALL FORM

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m)

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

| | Office of Management and Budget, Washington, DC 20303. | |
|---------------|--|------------|
| CASE NO: | Stand No. Segment No. Serial No. | |
| FAMILY NO: | | — 1 |
| SP NO: | NAME (First, Middle, Last) AGE SEX | |
| SAMPLE NO: | 1 Mos. 1 Male 2 Female TIME BEGAN 1 am 2 pm noon 1 noon 1 | |
| DECK NO: | AGES 20 +: 12-HOUR FASTING STATUS 1 yes 2 no | |
| | INTERVIEWER NO: LANGUAGE OF INTERVIEW 1 |) |

MP 9303

Rev. 10/89

| 1. | How does the amount of food (you/) consumed yesterday compare with (your/his/her) usual consumption for that day of the week? Was it much more than usual, usual, or much less than usual? | 1 much more than usual 2 usual 3 much less than usual 9 DK |
|-----|--|--|
| 2. | How much plain water (do you/does) usually drink in a 24-hour period? (Include only tap water and spring water.) | 000 none glasses/cups specify ounces per glass or cup ounces 999 DK |
| 3. | What type of salt (do you/does) <u>usually</u> add to (your/his/her) food <u>at the table?</u> | 1 none (5) 2 ordinary salt 3 lite salt 4 salt substitute 9 DK |
| 4. | How often (do you/does) add (ANSWER IN 3) to (your/his/her) food <u>at the table</u> ? Is it rarely, occasionally, or very often? | 1 rarely 2 occasionally 3 very often 9 DK |
| 5. | Thinking about the <u>past month</u> , how many days did you have no food or money to buy food (for)? | 00 ☐ none (7) (6)(6) (7) |
| 6. | Is that because there wasn't enough money to buy food or is there another reason? | 1 ☐ not enough money (7) 2 ☐ another reason (12) 9 ☐ DK (7) |
| 7. | During the past month did (you/) skip any meals because there wasn't enough food or money to buy food? | . □Y 2 □ N (12) 9 □ DK (9) |
| 8. | How many days in the past month did (you/) skip any meals because there wasn't enough food or money to buy food? | no. of days |
| 9. | Did (you/) skip any meals <u>yesterday</u> because there wasn't enough food or money to buy food? | 1 T 2 N 9 DK |
| 10. | During the past month, were there any days when (you/) did not eat at all because there wasn't enough food or money to buy food? | 1 □ Y 2 □ N (12) 9 □ DK (12) |

| 11. | In the past month, how many days were there when (you/) didn't eat at all? | no. of days 99 □ DK |
|-----|--|---|
| 12. | Are you the person who <u>usually</u> prepares the meals at home? | 1 Y 2 N 3 shared preparation 4 food not prepared at home 9 DK |
| 13. | RESPONDENT CODE: | 1 SAMPLE PERSON 2 PROXY 3 SAMPLE PERSON/PROXY |
| 14. | LANGUAGE OF INTERVIEW: | 1 ENGLISH 2 SPANISH 3 ENGLISH/SPANISH 4 OTHER 5 specify |
| 15. | QUALITY OF RECALL: | 1 RELIABLE 2 UNRELIABLE 3 REFUSAL (17) 4 NOT INTERVIEWED (17) |
| 16. | INTERVIEWER'S WORK: | 1 COMPLETED 2 NOT COMPLETED (17) |
| 17. | COMMENTS: | 1 |
| 18. | TIME ENDED: | 1 □ am :2 □ pm 3 □ noon |
| | | |

| VENIPUNCTURE QUESTIONNAIRE _AGES 1 + YEARS | | | | | | |
|---|----------------------|--------------------------------------|---|--|--|--|
| a. STAFF NO. | b. Language of Inter | view 1 English 2 Spanish | c. SAMPLE NO. | | | |
| d. GTT Half-Sample (MORNING ONLY) 1 Yes-Priority 1 2 | No-Priority 2 | e. 1 First Visit 2 Rescheduled Visit | f. Date//_ Time: | | | |
| Do you have hemophilia? This is a hereditary blood-clotting disorder. | | 1 Yes (13) 2 1 | Мо | | | |
| Within the past four weeks have you received any cancer chemotherapy treatment? | | 1 Yes (13) 2 No | | | | |
| 3. Are you currently tak | ing insulin? | 1 Yes 2 1 | No | | | |
| 4. Including your last m at what time did you at all to eat? | | 1 AM 2 PM 3 Noon 4 Midnig | 1 Yesterday 7 Today Before Yesterday | | | |
| 5. Have you had anythi other than water afte | | 1 Yes 2 | No (7) | | | |
| 6. At what time did you anything at all to drir besides water? | | 1 AM PM 3 Noon 4 Midnig | 1 Yesterday { 2 Today 3 Before ht Yesterday | | | |
| 7. COMPUTE NUMBER LATEST TIME IN ITE | | hours ago number | | | | |

CDC 64.17 REV. 10/91

| CHECK ITEM A: IS SP TAKING INSULIN OR NOT | | | | | ilin - Do venipuncture 1 only ncture 1 and 2 | | | |
|---|-----|-----|--------------------------------|-------------------------------------|---|--|--|--|
| 8a. SP 20-59? | | | 1 Yes (R 2 No (9) | | VOLTOX) | | | |
| 8b.SP agrees to VOL TOX | | | 1 Yes (D 2 No (9) | 1 Yes (Draw VOL TOX Tubes) 2 No (9) | | | | |
| 9. HIV Test (18+) | | | 1 Not Refused 2 Refused | | | | | |
| 10.Time: | | | Age of SP in Yo | Age of SP in Years | | | | |
| BLOOD TUBES FILLED (In Priority Order) | 1-3 | 4-5 | 6-11 | 12-19 | 20+ | | | |
| 4 ml SST | 0 | 0 | 0 | 1 | 1 | | | |
| 2 ml lavender | 0 | 0 | 0 | 1_ | 1_ | | | |
| 3 ml lavender | 1_ | 1 | 1 | 1_ | 1_ | | | |
| 3 ml gray | 0 | 0 | 0 | 0 | * 1_/1_ | | | |
| 4 ml SST | 1 | 0 | 0 | 0 | * 0/1 | | | |
| 10 ml red | | 1_ | 1_ | 1_ | 0 | | | |
| 15 ml red | | 1 | 2 | 3_ | 5 | | | |
| 2 ml light blue | | | | 0 | ** 1 | | | |
| 8 ml leukoprep | | | | 1_ | 1 | | | |
| 10 ml gray | | | | | *** 1 Time: | | | |
| 10 ml non silicone coated rec | t | | | | *** 1 Time: | | | |
| The 3 ml gray and 4 ml SST are the only tube Drawn if SP is 40+ Drawn if SP is 20-59, and volunteers for this contractions. | | | | | | | | |
| CHECK ITEM B: AGE | | | P between age P not between | | | | | |

| CHECK ITEM C | 1 3 ml gray top tube filled 2 3 ml gray top tube not filled (13) |
|--|--|
| 11.Trutol given (Do not give Trutol to persons taking insulin) | 1 Yes:{ |
| 12.2-hour blood specimen | 1_3 ml gray: 1 AM { 2 PM 1_4 ml SST 3 Noon |
| RESULTS OF EXAMINATION 13. Venipuncture 1 | Result Code Comment Code |
| 14. Venipuncture 2 -2 hour specimen | Result Code Comment Code |
| Result Codes | |
| 110 Blood drawn, all tubes (VP I). | |
| Drew 2 hour 3 ml gray top and 4 ml SS | T tubes and completed incomplete first draw protocol (VP II). |
| 111 Blood drawn, some tubes (VP I). | |
| Drew one or both 2 hour tubes and did | not complete the first draw protocol (VPII). |
| 112 Safety exclusion (e.g., hemophilia, SP of | on cancer chemotherapy) |
| 113 Refused - uncooperative. | |
| 114 Out of time. | |
| 115 Unable to puncture vein, phlebotomy a | ttempted but unsuccessful. |
| 116 SP unable to understand instructions (d | due to language or cognitive impairment). |
| 117 Equipment/supply problems. | |
| 118 Other reason (limit this to: SP sent hor | ne by physician or inadequate staff to draw blood - explain). |
| 210 Done at prior session. SP rescheduled visit SP (VP I). | and 1st blood draw was completed at the previous |
| SP rescheduled and second blood draw | w was completed at the previous visit (VP II). |

VENIPUNCTURE COMMENT CODE

| CODE | CATEGORY | INSTRUCTIONS |
|------|--------------------------|---|
| 01 | SP refusal | SP or parent/guardian of SP refuses venipuncture/trutol |
| 02 | SP III/faints | SP becomes ill or faint in reaction to the procedures |
| 03 | SP in prone position | SP reclining during venipuncture |
| 04 | Multistick required | Two attempts: venipuncture procedure unsuccessful (no blood) |
| 05 | SP uncontrollable | Unable to control SP; venipuncture procedure unsuccessful (no blood) |
| 06 | Veins not palpable | Unable to palpate veins; venipuncture procedure unsuccessful (no blood) |
| 07 | Condition of veins | Venipuncture unsuccessful (some or no blood) due to condition of SP's veins, e.g., too small, fragile, too deep, rolling, etc. |
| 80 | Medical exclusion | Physician excluded SP from venipuncture/trutol |
| 09 | Glove deterrent | Venipuncture unsuccessful (<u>some or no</u> blood) because appropriate gloves are not available |
| 10 | Dry run | Subject examined during dry run session; not a regular SP |
| 11 | Problems with needle | Venipuncture incomplete (some or no blood) due to problems with the needle, e.g., improper selection - wrong size or type; improper handling - pushed needle through vein or needle slipped out of vein; malfunction - defective sheath, etc. |
| 12 | Problems with vacutainer | Venipuncture incomplete (some or no blood) due to problems with the vacutainer, e.g., no vacuum or cracked |
| 99 | Other reasons | Limit use of this code only to reasons that cannot be coded with one of the above categories |

DENTIST'S EXAM (Ages 1 and Older) STAFF NO. SAMPLE NO. 1. Has a doctor or dentist ever told you that you must take antibiotics I ☐ Yes (MEDICAL EXCLUSION) 2 🗌 No (e.g., penicillin) before you get a dental check-up or care? Before we begin, I'd like to read you a list of health conditions that some people have. As I read off each condition, please tell me whether or not a doctor has ever told you that you have the condition. Has a doctor ever told you that you have: 2. A heart_problem? 1 ☐ Yes 2 No (Q8) Was the heart problem due to ... 3. Congenital heart murmurs? 1 ☐ Yes (MEDICAL EXCLUSION) 4. A heart valve problem? 1 ☐ Yes (MEDICAL EXCLUSION) 5. Congenital heart disease? 1 ☐ Yes (MEDICAL EXCLUSION) . 2 ☐ No 6. Bacterial endocarditis? I ☐ Yes (MEDICAL EXCLUSION) 2 🗌 No Has a doctor ever told you that you have: 7. Rheumatic fever? 1 ☐ Yes (MEDICAL EXCLUSION) 2 🗌 No 8. Kidney disease requiring renal dialysis? 1 ☐ Yes (MEDICAL EXCLUSION) 2 🗌 No 9. Hemophilia? 1 ☐ Yes (MEDICAL EXCLUSION) 2 🗌 No Do you have: 10. A pacemaker or other artificial material in your heart, veins or arteries? 1 Yes (MEDICAL EXCLUSION) 2 🔲 No 11. A hip, bone, or joint replacement? 1 ☐ Yes (MEDICAL EXCLUSION) 2 🔲 No

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| 12. CHECK ITEM A. | 1 | |
|--|---|---|
| 13-14. CHECK ITEM B (DENTIST OBSERVATION) | EDENTULOUS IN UPPER JAW 1 No (END) 2 Yes, denture present (Q17) 3 Yes, no denture visible | EDENTULOUS IN LOWER JAW 1 No (END) 2 Yes, denture present (Q18) 3 Yes, no denture visible |
| 15-16. Do you have (a) denture(s) or (a) plate(s) for your (upper/lower) jaw? | 1 Yes 2 No (Q23) | 1 Yes 2 No (Q24) |
| 17-18. Do you usually wear your (upper/lower) denture(s) (plate) | 1 All the time 2 ·Only when awake 3 Only occasionally 4 Don't wear them | 1 All the time 2 Only when awake 3 Only occasionally 4 Don't wear them |
| 19-20. During the past year, have you had problems with your denture(s) (plate)? | 1 Yes 2 No | 1 ☐ Yes 2 ☐ No |
| 21-22. Do you think that you need (a) new denture(s) (plate) or that the one you have needs refitting? | 1 | 1 Yes 2 No |
| 23-24. How long has it been since you had any natural teeth to chew with in your (upper/lower) jaw? | 1 Less than one year 2 1-4 years 3 5-9 years 4 10-19 years 5 20 or more years | 1 Less than one year 2 1-4 years 3 5-9 years 4 10-19 years 5 20 or more years |
| 25. CHECK ITEM C. CHECK ALL THAT APPLY. | 1 Loss of attachme 1 Some componer or medical exlus | rplete due to pain/safety ents incomplete due to pain/safety hts incomplete other than for age ion reasons, or pain/safety reasons as or loss of attachment |

| 26. | REASONS TEST INCOMPLETE OR NOT DONE: | 1 2 3 4 5 | 00000 | Hardware malfunction or lack of supplies Insufficient time available or room not available Examinee refused or uncooperative Examinee unable to physically cooperate Comments: |
|---------------|--------------------------------------|-----------------------|-------|--|
| | | | | |
| | | | | |
| - The Landson | | | | |
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| | | | | |
| | | | | |

ALLERGY TEST AGES 6-19 ALL AND 20-59 EVEN.

| STAFF NO. | | | SA | MPLE NO | · | | | | |
|-----------|--|---------------------|----------------|---------|-------------------|---|---------------|----------------|-------------------------------------|
| 1. | Are you now having problems brea | thing in your che | est or lungs? | 1 [|] Yes (Q: | 2) | 2 🗆 No (| (Q4) | |
| 2. | Do you usually have breathing prob | olems in your che | est or lungs? | 1 [|] Yes (Q | 3) | 2 🗆 No | Exclude | |
| 3. | Is your current breathing problem vin your chest or lungs? | worse than usual | | 1 { |] Yes - E | xclude | 2 🔲 No | (Q4) | |
| 4. | Have you had a past severe reaskin testing? | action to allerg | jen | 1 [|] Yes - E: | xclude | 2 🗌 No | | |
| 5. | Does sample person have seve infection on both arms? | re eczema or | | 1 [| Yes - E . | xclude | 2 🗌 No | | |
| IF C | ONLY ONE ARM USED, INDICAT | E WHICH ARM | l: 🔲 rig | ght | □left | (Indicate | reason be | low for use of | one arm.) |
| | | Flare | | | | Whea | al | | *Reason for |
| | | Length (mm) | Width (mm) | Yes Yes | luent No | Length (mm) | Width (mm) | **Minutes | no injection of this Allergen |
| 1. | Negative Control | | | | | | | | |
| 2. | White Oak | | | | | | | | |
| 3. | Cat | - | | | | | | | |
| 4. | Mite | | | | | | | | |
| 5. | Alternaria | | | | | | - | | |
| 6. | Rye Grass | | | | | | - | | |
| 7. | Peanut | | | | | | | | |
| 8. | Russian Thistle | | | | | | | | |
| 9. | German Cockroach | ******** | - | | | | | | |
| 10. | Bermuda Grass | | | | | | | وسنتيست | |
| 11. | Ragweed | | | | | | | | |
| 12. | Positive Control | | | | | | | | |
| | *Reason no injection for spe | ecific allergen: | | 7 🗀 | Refused | gen or sup due to rep - other rea | orted alle | rgy | |
| | **Minutes from administration to | reading (only if di | itters from 15 | mitiute | s <u>+</u> 5 minu | tes) | | | |

CDC 64.33 Rev. 11/90

| RESULTS OF EXAMINATION: | 1 2 3 | | Test done Test incomplete Test not done |
|--------------------------------------|-----------------------|------|---|
| REASONS TEST INCOMPLETE OR NOT DONE: | 1 2 3 4 5 | 0000 | No allergen or other supplies Insufficient time available or room not available Examinee refused or uncooperative Examinee medically excluded by staff for safety Comments: |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

AUDIOMETRY AND TYMPANOMETRY

AGES 6-19 YEARS

| a. | STAFF NO. | b. Audiometer No. | c. Tympanome | eter No. | d. SAM | PLE NO. |
|----|--|--------------------------------------|--------------|-------------------------------------|-------------------------------------|-------------|
| Α. | CONDITIONS AFFECTING TEST | RESULTS (ALL AGES) | | | | |
| 1. | Have you had a cold or sinus p | roblems within the past w | eek? | | 1 □ yes | 2 🗖 no (Q3) |
| 2. | Do you have a cold or sinus pro | oblems today? | | | 2 🗌 no | |
| 3. | Have you been exposed to a v | ery loud noise within the p | | 2 🗍 no (Q%) | | |
| 4. | How many hours ago did the r | 66 ☐ Less than 1 hour # hours ago | | | | |
| 5. | Have you listened to music wi the past 24 hours? | | 1 🗌 yes | 2 <u>no</u> (Q7) | | |
| 6. | How many hours ago did you | 66 🗌 Less than 1 hour # hours ago | | | | |
| 7. | 7. Have you had buzzing, ringing or other noises in your ears today? | | | |] No] Right] Left] Both | |
| 8. | Have you had an earache with | hin the past week? | | 3 - 4 - |] No] Right] Left] Both | |
| 9. | Do you now have a tube in yo | our right or left ear?* | 3 4 |] No] Right] Left] Both | | |

PHS 6214-3 Rev. 08/88

| 10. Do you have dr | ainage/discharge fron | n eitner ear?* | 2 No 3 Right 4 Left 5 Both START HERE IF SAMPLE NUMBER EVEN B2. AIR CONDUCTION-RIGHT EAR | | | | | | |
|------------------------------|--------------------------|--|---|--|--|--|--|--|--|
| | SAMPLE NUMBER OD | D | | | | | | | |
| Hearing level (dB) (a) | Frequency (Hz) (b) | Retest L with masking on R** (c) | Hearing level (dB) (a) | Restest R with masking on L** (c) | | | | | |
| | 1000 | | | 1000 | | | | | |
| | 2000 | | | 2000 | | | | | |
| | 3000 | | | 3000 | | | | | |
| | 4000 | | | 4000 | | | | | |
| | 6000 | | | 6000 | | | | | |
| | 8000 | | | 8000 | | | | | |
| | 1000 | | | 1000 | | | | | |
| | 500 | | | 500 | | | | | |
| | AUDIOMETRY: | OT DONE: | 3 Test r 1 Hard 2 Insuf avail 3 Exam 4 Exam that 5 Exam 6 Exam instr | ncomplete not done ware malfunction or ficient time available | e or room not poperative g condition y of test ically cooperate erstand test age barrier erstand test r reasons | | | | |

| D. | TYMPANOMETRY |
|-------------|--|
| Ric | gnt Ear |
| | 1 Obtained 2 Not obtained |
| | Left Ear |
| | 1 Obtained 2 Not obtained |
| RESULTS | OF TYMPANOMETRY: |
| 1 2 3 | ☐ Satisfactory Test ☐ Test incomplete ☐ Test not done |
| RE | ASONS TEST INCOMPLETE OR NOT DONE: |
| 1 2 | ☐ Software malfunction ☐ Hardware malfunction or lack of supplies |
| 3 | Insufficient time available or room not available |
| 4 5 | ☐ Examinee refused ☐ Examinee medically excluded by |
| 6 | staff for safety Examinee has pre-existing condition that would affect validity of test |
| 7 8 | Examinee unable to physically cooperate Examinee unable to understand test |
| 9 | instructions due to language barrier Examinee unable to understand test |
| 10 | instructions due ot other reasons State |
| , | Comments. |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| taff No. | AGES 8 AND OLDER | | | | | | | |
|---|--|------------------------------|----------------|--------|--|--|--|--|
| | Cassette No. | Disk No. | Sample No |). | | | | |
| | | | | | | | | |
| HYSICAL CAPACIT | Y | | | | | | | |
| . In the past thre | In the past three weeks have you had any surgery on your chest or abdomen? | | | | | | | |
| Have you been he congestive heart | ☐ yes | no | | | | | | |
| | OM SPIROMETRY ANY PERSON WHO EART ATTACK ("YES" IN 1 OR 2). | HAS HAD RECENT CHEST OR | ABDOMINAL SURG | ERY OR | | | | |
| | ed a cigarette, eaten a heavy meal or in the past hour? | used any medications to help | ☐ yes | no | | | | |
| 4. In the past few | days have you had a cough, cold, or c | other acute illness? | ☐ yes | □no | | | | |
| 5. In the past three weeks have you had any respiratory infections, such as flu, pneumonia, bronchitis, or a severe cold? | | | | | | | | |
| 2 | ctory test (3 valid tests) complete or Unsatisfactory of done INCOMPLETE, UNSATISFACTORY control failure detected ermination of expiration, cient effort Ilness (VRI, flu, pneumonia) fully unable favy meal finee unable to understand test instruct language barrier finee unable to understand test fictions due to other reasons ficient time available or room not | tions 1 Pes 2 No | on tape | | | | | |

CDC 64.34 Rev. 11/90 Department of Health and Human Services
Public Health Service
Centers for Disease Control
National Center for Health Statistics

Third National Health and Nutrition Examination Survey

NHANES III

DIETARY FOOD FREQUENCY

(AGES 12-16 YEARS)

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or the establishment in accordance with section 308(d) of the Public Health Service Act (42 USC 242m)

Public reporting burden for complete participation in the NHANES III is estimated to average five hours. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to PHS Reports Clearance Officer; Room 721-H, Humphrey Building; 200 Independence Avenue, SW; Washington, DC 20201; ATTN: PRA, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503

| Regulatory Affairs | Office of Management and Budget, Washin | gton, DC 20503 | and to the office of information and |
|--------------------|---|----------------------------|--------------------------------------|
| CASE NO: | | | |
| | Stand No. Segment No. Se | rial No. | |
| FAMILY NO: | | | |
| | | NAME (First, Middle, Last) | |
| SP NO: | | | |
| | | AGE | SEX |
| SAMPLE | | | 1 |
| NO: | | | |
| DECK | 619 | | TIME BEGAN 1 □ am |
| NO: | 619 | | 2 pm : 3 noon |
| | <u></u> | | TIME ENDED 1 ☐ am |
| | INTERVIEWER NO: | ANGUAGE OF INTERVIEW | 2 pm : 3 noon |
| | Į: | 1 □ English 2 □ Spanish | |
| | DATE OF EXAMINATION | 3 □ Other 4 | |
| | MO. DAY YR. | SPECIFY | |
| | | | |

| FOO | FOOD FREQUENCY | | | | | | | |
|-----|--|---|---|--|--|--|--|--|
| | HANE | CARD FF. | | | | | | |
| 1. | certai usual you u week MILK | I'm going to ask you how often you usually eat in foods. When answering think about your diet over the past month. Tell me how often usually ate or drank these foods per day, per , per month, or not at all. AND MILK PRODUCTS are milk and milk products. Do not include use in cooking. | Times Day Week Month Never DK per D 2 W 3 M Or 4 N 9 DK | | | | | |
| | a. | How often did you have chocolate milk and hot cocoa? | per 1 D 2 W 3 M Or 4 N 9 DK | | | | | |
| | b. | How often did you have milk to drink or on cereal? Do not count <u>small</u> amounts of milk added to coffee or tea | peri D 2 W 3 M Or 4 N 9 DK | | | | | |
| | C. | CHECK ITEM. REFER TO RESPONSES IN 1a AND 1b. | ☐ "Never" in both 1a and 1b (1e) ☐ Other | | | | | |
| | d. | What type of milk was it? Was it <u>usually</u> whole, 2%, 1%, skim, nonfat, or some other type? IF SP CAN NOT PROVIDE USUAL TYPE MARK ALL THAT APPLY. | whole/regular 2%/low fat 1% skim/nonfat buttermilk evaporated other specify | | | | | |
| | e. | Yogurt and frozen yogurt | per 1 D 2 W 3 M Or 4 N 9 DK | | | | | |
| | f. | Ice cream, ice milk, and milkshakes | per 1 D 2 W 3 M Or 4 N 9 DK | | | | | |
| | g. | Cheese, all types including American, Swiss, cheddar, and cottage cheese | per 1 D 2 W 3 M Or 4 N 9 DK | | | | | |
| | h. | Pizza, calzone, and lasagna | per 1 D 2 W 3 M OF 4 N 9 DK | | | | | |
| | i. | Cheese dishes such as macaroni and cheese, cheese nachos, cheese enchiladas, and quesadillas | per: D 2 W 3 M Or 4 N 9 DK | | | | | |

| 2. | MAIN D | ISHES, MEAT, FISH, CHICKEN, AND EGGS | Times | _ per | Day i D | Week ₂ □ W | Month | or | Never | DK 9 DK |
|----|--------|--|-------|-------|------------|---------------|--------|----|-------|------------|
| | Next a | are main dishes, meat, fish, chicken, and eggs. | | | | | | | | |
| | a. | How often did you eat any type of stew or soup containing <u>vegetables</u> , including minestrone, tomato, and split pea? | | _ per | ٥۵، | .□w | ₃ | or | 4 🔲 N | y 🔲 DI |
| | b. | Spaghetti and pasta with tomato sauce | | _per | 1 🗆 D | ,□w | 3 □ M | or | 4 🗌 N | 9 🗖 DI |
| | C. | Bacon, sausage (chorizo) and luncheon meats such as hot dogs, salami, and bologna | | _ per | 1 🔲 D | ,□w | ₃ 🗍 M | or | 4 🗆 N | 9 🔲 DI |
| | d. | Liver and other organ meats such as heart, kidney, tongue, and tripe (menudo) | | _ per | ' [] D | √□w | ₃ [] M | or | 4 🔲 N | ام 🔲 و |
| | e. | Beef, including hamburger, steaks, roast beef, and meatloaf | | _ per | י 🗌 ט | √Ūw | 3 🗌 M | or | 4 □ N | ام 🗖 و |
| • | f. | Pork and ham, including roast pork, pork chops, and spare ribs | | _ beı | 1 🔲 D | 2 □ W | з | or | 4 🗌 N | 9 🗖 DI |
| | g. | Shrimp, clams, oysters, crab, and lobster | | _per | ¹□D | ∡□w | 3 | or | 4 🔲 N | 9 🔲 DI |
| | h. | Fish including fillets, fish sticks, fish sandwiches, and tuna fish | | _ per | 1 🔲 D | ₃□w | 3 🗌 M | or | 4 □ N | 9 🔲 DI |
| | i. | Chicken, all types, including baked, fried, chicken nuggets, and chicken salad. Include turkey. | | per | 1 □ D | ³□w | з 🔲 М | or | 4 🔲 N | 9 🔲 DI |
| | j. | How often did you have eggs including scrambled, fried, omelettes, hard-boiled eggs, and egg salad? | | per | 1 🔲 D | 2□W | 3 🔲 M | or | 4 🗌 N | 9 🔲 Di |
| 3. | FRUI | TAND FRUIT JUICES | | | | | | | | |
| | | are fruit juices and fruit. Include all forms-fresh, en, canned, and dried. | | | | | | | | l |
| | a. | How often did you have orange juice, grapefruit juice and tangerine juice? | | per | 1 🔲 D | 2□W | 3 □ M | or | - □ N | 4 🔲 D |
| • | b. | Other fruit juices such as grape juice, apple juice, cranberry juice, and fruit nectars | | per | 1 🗆 D | 2□W | 3 □ M | or | 4 🔲 N | 9 🗖 Þ |
| | C. | Citrus fruits including oranges, grapefruits, and tangerines | | per | 1 🗆 Þ | 2□w | ₃ 🔲 M | or | 4 🗆 N | , 🗆 Þ |
| | d. | Melons including cantaloupe, honeydew, and watermelon | | per | ۵□۱ | √□w | 3 🔲 M | or | 4 🗌 N | , 🗆 D |

| ' 3. | FRUIT | AND FRUIT JUICES (cont.) | Times | _ per | Day 1 D | Week ₂ □ W | Month J M | or | Never | DK 9 DK |
|-------------|-------|--|-------|-------|------------|---------------|--------------|----|-------|------------|
| | e. | Peaches, nectarines, apricots, guava, mango, and papaya | | _ per | 1 🔲 D | , □ w | s∏ M | or | 4 🗌 N | 9 🔲 DK |
| | f. | How often did you have any other fruits such as apples, bananas, pears, berries, cherries, grapes, plums, and strawberries? (Include plantains.) | | _ per | , [] D | 2 □ W | 3 <u></u> M | or | 4 □ N | 9 □ DK |
| 4. | VEGE | <u>TABLES</u> | | | | | | | | |
| | reme | e next questions are about vegetables. Please imber to include fresh, raw, frozen, canned, and ed vegetables. | | | | | | | | |
| | a. | How often did you have carrots and vegetable mixtures containing carrots? | | per | 1 🔲 D | 2 □ W | 3 ☐ M | or | 4 🔲 N | g 🔲 DK |
| | b. | Broccoli | | per | , 🗆 D | .□w | 3 □ M | or | 4 🗌 N | y □ DK |
| | с. | Brussels sprouts and cauliflower | | per | 1 🗆 D | 2□W | 3 M | or | 4 🗌 N | 9 🗌 DK |
| | d | White potatoes, including baked, mashed, boiled, french-fries, and potato salad | | per | 1 🔲 D | 2 □ W | 3 🔲 M | or | 4 🗌 N | 9 🔲 DK |
| | е | Sweet potatoes, yams, and orange squash including acorn, butternut, hubbard, and pumpkin | | pe | ¹ □ D | 2 □ W | 3 🔲 M | or | 4 🔲 N | 9 🗌 DK |
| | f. | Tomatoes including fresh and stewed tomatoes, tomato juice, and salsa | | per | 1 🗆 D | ₂□w | 3 🔲 M | or | 4 🔲 N | 9 🗌 DK |
| | g. | Spinach, greens, collards, and kale | | per | 1 🔲 D | 2 □ W | 3 □ M | or | 4 🗌 N | 9 |
| | h. | Tossed salad | | per | 1 🗆 Þ | 2 □ W | 3 ☐ M | or | 4 🔲 N | 9 🗖 DK |
| | i. | Cabbage, cole slaw, and sauerkraut | | per | ם□ו | ∠□w | з 🔲 М | or | 4 🔲 N | 9 🔲 DK |
| | j. | Hot red chili peppers. Do not count ground red chili peppers. | | pe | 1 🗆 D | 2 □ W | 3 🔲 M | or | 4 🔲 N | 9 |
| | k. | Peppers including green, red, and yellow peppers | | pe | , 1 D | w | 3 ☐ M | or | 4 🔲 N | 9 🔲 DK |
| | ł. | Any other vegetables such as green beans, corn, peas, mushrooms, and zucchini | | pe | r : 🗆 D | . □ w | M 🗋 ذ | Or | a □ N | y 🗖 DK |

| | | NO ANITO SEPERALS AND SOURCES | | Times | Day | Week | Month | | Never | DK |
|----|-----|---|--------------|-------|--------|--------|--------|----|--------|---------|
| 5. | REA | NS, NUTS, CEREALS, AND GRAIN PRODUCTS | | 1 | 1 Day | | ; [] M | or | | " □ DK |
| | a. | How often did you have beans, lentils, and (chickpeas /garbanzos)? Include kidney, pinto, refried, black, and baked beans | | per | . □ D | >□w | ; | or | : | 9 🗍 DK |
| | b. | Peanuts, peanut butter, other types of nuts, and seeds | | þei | □ D | , [] W | : | or | 4 🗌 N | υ DK |
| | Now | I'm going to ask how often you ate certain als. | | | | | | | | |
| | C. | How about All-Bran, All-Bran Extra Fiber, 100% Bran, and Fiber One? | | per | ; [] D | , 🗆 w | ₃ | or | 4 🗆 N | y 🗍 ÐK |
| | d. | Total, Product 19, Most, and Just Right | _ | per | ; | 2□w | ₃ | or | 4 🔲 N | y [] DK |
| ~ | e. | All other cold cereals like corn flakes, Cheerios, Rice Krispies, and presweetened cereals | | per | : [] D | w | 1 □ W | or | 4 🗌 N | y 🗍 DK |
| | f. | Cooked, hot cereals like oatmeal, cream of wheat, cream of rice, and grits. | | per | □□ | w | ₃ [] M | or | .: 🔲 N | 9 🗌 DK |
| | | v let's talk about white bread products only. I'll about dark breads next. | | | | | | | | |
| | g. | How often did you have white bread, rolls, bagels, biscuits, English muffins, and crackers? Include those used for sandwiches | | per | 1 🗍 D | √∏w | ı∏ M | or | 4 🔲 N | y 🗌 OK |
| | h | Dark breads and rolls, including whole wheat, rye, and pumpernickel | - | per | 1 🗆 D | ∠□w | ₃ [] M | or | ₁ [] N | y 🗍 DK |
| | i. | Corn bread, corn muffins, and corn tortillas | | per | , 🗆 Þ | ,□w | ₃ [] M | or | 4 🗍 N | 9 □ DK |
| | j. | Flour tortillas | | per | 1 🗆 D | ,□w | ₃ | or | a □ N | 9 🔲 DK |
| | k. | Rice | | pe | r 1 D | .□w | ₁ [] M | or | 4 🔲 N | y □ DK |
| | I. | <u>Salted</u> snacks such as potato chips, taco chips, corn chips, and salted pretzels and popcorn | | per | 1 🗆 D | 2□W | ₃ | or | 4 □ N | 9 □ DK |
| | | *************************************** | . L . | | | | | | ~-~- | |

| 6. | DESSERTS, SWEETS, AND BEVERAGES | | Times | _ per | Day DD | Week ₂ □w | Month ₃ ☐ M | or | Never | DK DK |
|----|---|----|-------|-------|--------------|--------------|--------------|--------|--------|------------|
| | How often did you have cakes, cookies, brownies, pies, doughnuts, and pastries? | | | _ per | , <u> </u> D | .□w | ₃ | or | 4 □ N | 9 🔲 DK |
| | b. Chocolate candy and fudge | | | _ pei | □ D | ∠□w | ı □ M | or | -ı 🔲 N | 9 🔲 DK |
| | Next are hot and iced beverages. | | | | | | | | | |
| | c. How often did you have Hi-C, Tang, Hawaiian Punch, Koolaid, and other drinks with <u>added vitamin C</u> | | | _ per | 1 🔲 D | 2 □ W | M ☐ E | or | a □ N | 9 🔲 DK |
| | d. Diet colas, diet sodas, and diet drinks such as Crystal Light | | | _ per | 1 🔲 D | 2 □ W | 3 □ M | or | 4 □ N | 9 🔲 DK |
| | e. Regular colas and sodas, not diet | | | _ per | 1 🔲 D | 2 | i □ Ņ | or | 4 □ N | 9 DK |
| | f. Regular coffee with caffeine | | | _ per | ı 🔲 Þ | 2 □ W | 3 □ M | or | 4 🔲 N | y 🔲 DK |
| | g. Regular tea with caffeine | | | pe | | 2 □ W | 3 □ M | or | 4 🗌 N | 9 🗌 DK |
| | h. Beer and lite beer | | | pe | : [] D | 2 □ W | ₃ [M | or | 4 🔲 N | 9 |
| | i. Wine, wine coolers, sangria, and champagne | | | pe | r D | 2 □ W | M; ' | or | a □ N | 9 🔲 DK |
| | j. Hard liquor such as tequila, gin, vodka, scotch, rum, whiskey and liqueurs, either alone or mixed | | | _ per | 1 🗆 D | 2 □ W | 3 🔲 M | or | 4 🗌 N | 9 🗍 DK |
| 7. | FATS How often were these items added to your foods after preparation? For example, this would include on top of vegetables or baked potatoes or as a spread on bread. | | | | | | | | . [] 8 | . . |
| | a. Margarine | -+ | | pe | | | M <u> </u> L | or | 4 🔲 N | 9 □ DK |
| | b. Butter | | | pe | er 1 🔲 D | 2 □ V | v 3 ☐ M | or | 4 🔲 N | y □ DK |
| | c. Oil and vinegar, mayonnaise and salad dressings such as Italian and Thousand Island, including those added to salads and sandwiches | | | pe | · □ 0 | 2 □ W | 3 <u> </u> | or | 4 🗍 N | 9 🔲 DK |

| 8. | Have I missed any other foods or beverages that you had at least once per week in the past month? | Times Day Week Month Never Dper 1 D 2 W 3 M Or : N 9 | |
|-----|---|---|--------|
| | ☐ yes (specify) ☐ no (9) | | |
| | | per 1 D 2 W 3 M Or 4 N 9 | DK |
| | | ber 1 D 5 M 3 W or 4 U N a | DK |
| | | per 1 D 2 W 3 M Or 1 N 9 | DK |
| | | per i D / W / M Or 1 N 9 | DK |
| | | per 1 D 2 W 3 M Or 4 N 9 | y 🔲 DK |
| | | per: D 2 W 3 M or 4 N 9 | y 🗌 DK |
| 9. | Quality of food frequency interview. (To be completed by interviewer) | ☐ reliable ☐ unreliable ☐ refusal Comments | |
| 10. | RESPONDENT | | - |
| | OITELITI | ☐ sample person ☐ proxy ☐ sample person/proxy | |
| | | | |

| Staff No. | b. Disk No. | c. Scan N | d. Sample No. |
|-----------------------|--|------------------------|--|
| Pregnancy S | tatus | | |
| | e < 60 years old, ask: | | |
| | any possibility that you might | be pregnant? | 1 ☐ No 2 ☐ Yes - No Bone Scan 3 ☐ DK - No Bone Scan |
| 2. Results o | of pregnancy test | | 1 ☐ No 2 ☐ Pregnant - No Bone Scan 3 ☐ DK - No Bone Scan |
| Hip Scan | | | |
| Ask examin | ee: | | |
| 1. Have yo | u ever fractured or broken yo | our left hip? | 1 |
| 2. Do you left hip | nave a pin or artificial hip repl | lacement joint in your | 1 ☐ Yes - go to B3 2 ☐ No - Scan Left Hip |
| 3. Have yo | u ever fractured or broken yo | ur right hip? | 1 ☐ Yes - No bone Scan 2 ☐ No - go to B4 |
| 4. Do you right hi | have a pin or artificial hip rep p? | lacement joint in your | 1 ☐ Yes - No Bone Scan 2 ☐ No - Scan Right Hip |
| | | | |
| | | | |
| | | | |

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| C. | RESULTS OF EXAMINATION: | 1 2 3 | 000 | Test done Test Incomplete Test not done |
|----|--------------------------------------|-------------|-------------|---|
| | | _ | _ | |
| D. | REASONS TEST INCOMPLETE OR NOT DONE: | 1 | | Equipment malfunction or lack of supplies Insufficient time available or room not |
| | | 3 | | available |
| | | 4 | | Examinee medically excluded by staff for safety (example - pregnant) |
| | | 5 | | Examinee has pre-existing condition that would affect validity of test (example - hip |
| | | 6 7 | | |
| | | , | | Comments: |
| | | | | |
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|] | | | | |
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GALLBLADDER ULTRASOUND

| | AGES 20-74 | YEARS |
|----|---|---|
| 1. | STAFF NO. | 2. SAMPLE NO. |
| 3. | CASSETTE NO. | 4. TAPE COUNTER |
| 5. | Including your last meal and any snacks, at what time did you last have anything at all to eat? | 1 A M. 2 P.M. 3 Noon 4 Midnight |
| 6. | COMPUTE NUMBER OF HOURS SINCE TIME IN QUESTION 5. | hours ago number |
| 7. | Surgical Scars | 1 Yes Mark Areas 2 No |
| 8. | AREAS | 2 3 |

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| ANA | TOMICAL LANDMARKS VISIBLE | |
|-----|---|---|
| 9. | Liver Margin on Long Scan | 1 □ Yes 2 □ No |
| 10. | Portal Vein at Liver Hilum | 1 ☐ Yes 2 ☐ No |
| 11. | Intrahepatic Right Portal Vein | 1 □ Yes 2 □ No |
| 12. | Anterior Wall of GB visible? | 1 ☐ Yes (Go to Q. 17) 2 ☐ No |
| 13. | Region 1 or 2 scar and 2 yes in 9-11 | 1 ☐ Mark Final 7, Go to Q. 31 |
| | Region 1 scar and less than 2 yes in 9-11 | 2 ☐ Mark Final 8, Go to Q. 31 |
| | Region 2 scar and less than 2 yes in 9-11 | 3 ☐ Mark Final 12, Go to Q. 31 |
| 14 | No scar and 2 yes in 9-11 | 1 ☐ Yes 2 ☐ No, Mark final 11, Go to Q. 31 |
| 15. | Dense shadowing in GB region? | 1 ☐ Yes, Mark Final 2, Go to Q. 31 2 ☐ No |
| 16. | CHECK ITEM A Did examinee fast for 5 hours or more in Q. 6? | 1 ☐ Yes, Mark Final 9, Go to Q. 31 2 ☐ No Mark Final 10, Go to Q. 31 |
| 17. | Shadowing behind anterior wall? | 1 ☐ Yes, Mark Final 5, Go to Q. 31 2 ☐ No |
| 18. | Thickness of GB Wall | mm |
| 19. | Over 3 mm | 1 ☐ Yes, Go to Q. 20 2 ☐ No, Go to Q. 21 |
| 20. | Wall calcification present? | 1 ☐ Yes, Mark Final 15, Go to Q. 21 2 ☐ No, Mark Final 14, Go to Q. 21 |

| 1. | (Other) areas of wall contour irregularity or clumps of echoes adjacent to inner wall? | 1 ☐ Yes 2 ☐ No, Go to Q. 27 |
|-----|--|--|
| 22. | Shadowing from area of wall irregularity or clumps of echoes? | 1 Yes 2 No, Go to Q. 26 |
| 23. | Shadowing reproducible in 2 views? | 1 ☐ Yes 2 ☐ No, Mark Final 6, Go to Q. 21 |
| 24. | Measurement of largest echo clump | mm 99 Unobtainable |
| 25. | One or multiple clumps | 1 One Mark Final 3, Go to Q. 21 2 Multiple Mark Final 4, Go to Q. 21 |
| 26. | Movement of echo clumps? | 1 ☐ Yes, Mark Final 16, Go to Q. 21 2 ☐ No, Mark Final 13, Go to Q. 21 |
| 27. | Clumps or diffuse echoes within fluid? | 1 ☐ Yes, Go to Q. 29 2 ☐ No, Go to Q. 28 |
| 28. | CHECK ITEM B | 1 Final boxes 2-16 blank Mark Final box 1 and Go to Q. 31 2 Final boxes 2-16 Not Blank Go to Q. 31 |
| 29. | Shadowing from echoes? | 1 ☐ Yes 2 ☐ No, Mark Final 16, Go to Q. 31 |
| 30. | Shadowing reproducible in 2 views? | 1 ☐ Yes, Mark Final 4, Go to Q. 31 2 ☐ No, Mark Final 6, Go to Q. 31 |
| 31. | Any other non GB finding? | 1 ☐ Yes, Go to Q. 32 2 ☐ No, Go to Q. 43 |

| 32. \ | Which organ? | 1 Renal, Mark Final 17 2 Hepatic, Mark Final 18 3 Aortic, Mark Final 19 4 Epigastric, Mark Final 20 5 Pelvic, Mark Final 21 6 Other, Mark Final 22 |
|-------|--|--|
| | GO TO QUESTION 43 | |
| | GALLBLADDER FINDING | 5 |
| 33. | Normal GB | 10 |
| | Gallstones or Calcified GB | 2 🗆 |
| | Gallstones One Multiple | 3 <u> </u> 4 <u> </u> |
| | Gallstones, GB Filled | 5 🗀 |
| | No Conclusion - Echo Clumps, Wall Irregular, Diffuse Echoes within fluid with only 1 shadowing view | 6 🗆 |
| | Cholecystectomy - RUQ or EPI Scar, 2 Landmark Observed | 7 🗆 |
| | Cholecystectomy - RUQ Scar, <2 Landmark Observed | 8 🗆 |
| | No Conclusion - No Scar, No Shadow, 2 Landmark observed, SP Fast | 9 🗆 |
| | No Conclusion - No Scar, No Shadow, 2 Landmark Observed, SP Nonfast | 10 🗆 |
| | No Conclusion - No Scar, < 2 Landmark observed | 110 |
| | No Conclusion - EPI Scar, < 2 landmark observed | 12 🗆 |
| 34. | Abnormal GB - Focal W.T., No Shadowing, Clumps with NO movement | 13 🗆 |
| 35. | Abnormal GB - Diffuse W.J., With NO Calcification | 14 🗆 |
| | Abnormal GB - Diffuse W.T., with Calcification | 15 🗆 |
| 36. | Abnormal Bile - No Shadowing, Internal Echoes with Movement | 16 🗆 |

| | OTHER | NON (| SALL | BLADDER FINDINGS |
|-------------|--------------------------------------|--------------------------------------|--------|---|
| 3 7. | RENAL | , ·- | | 17 🗆 |
| 38. | HEPATIC | | | 18 🗆 |
| 39. | AORTIC | | | 19 🗀 |
| 40. | EPIGASTRIC | | | 20 🗖 |
| 41. | PELVIC | | | 21 🗆 |
| 42. | OTHER | | | 22 🗆 |
| 43. | RESULTS OF EXAMINATION: | 1 2 3 | | Test done Test incomplete Test not done |
| 44. | REASONS TEST INCOMPLETE OR NOT DONE: | 1 2 3 4 5 6 7 8 | 000000 | Toshiba malfunction VCR malfunction Insufficient time available or room not available Examinee refused or uncooperative Examinee medically excluded by staff for safety Examinee unable to physically cooperate Examinee did not fast for 5 hours or more Comments: |

CENTRAL NERVOUS SYSTEM TESTS **AGES 20-59 ODD** SAMPLE NO. COMPAQ NO. 1 \square about the usual amount 1. How much sleep did you get last night? Would you say about the 2 🔲 less than usual usual amount, less than usual, or more than usual? 3 more than usual 2. Right now would you say you are feeling energetic, fresh, 1 🔲 energetic average, tired, or exhausted? 2 | fresh 3 ☐ average 4 ☐ tired 5 🗌 exhausted 3. How much familiarity do you have with computers or video I ☐ none 2 ☐ some Would you say none, some, or a lot? 3 ☐ a lot 4. Not counting decaffeinated products, how many 0 ☐ none cups of coffee, tea or cola have you had in 1 🗆 1 2 2 2 + 5. How many drinks of alcohol have you had in the 0 ☐ none past 3 hours? Include any alcoholic drinks such as wine, beer, or hard liquor. 1 🗆 1 2 2 + 6. Which hand do you prefer to use for this test? 1 🔲 Right 2 ☐ Left 1 🗆 Y 2 🗆 N

1 🗆 Y

1 🗆 Y

1 None/not at all
2 Some
3 A lot
4 As hard as I could

2 🗆 N

2 🔲 N

PHS 6300 4

Rev. 11/89

STAFF NO.

games?

TESTS COMPLETED

Simple Reaction Time

Serial Digit Learning

Symbol Digit Substitution

How hard did you try to perform this computer test?

NEUROBEHAVIORAL INDICES

the past 3 hours?

| RESULTS OF EXAMINATION: | 1 2 3 | Satisfactory test Test complete but unsatisfactory Test not done |
|--------------------------------------|---------------------------------|--|
| REASONS TEST INCOMPLETE OR NOT DONE: | 1 2 3 4 5 6 7 | Equipment malfunction Insufficient time available or room not available Examinee refused or uncooperative Examinee unable to physically cooperate Examinee unable to understand test instructions due to language barrier or due to other reasons Examinee very frustrated, angry or inattentive Comments: |
| | | |

| ECG AGES 40 AND OLDER STAFF NO. SAMPLE NO. | | | | | | | |
|--|---|--|--|--|--|--|--|
| STAFF NU. | JAIVIFLE INU. | | | | | | |
| Diskette No. | | | | | | | |
| RESULTS OF EXAMINATION: | 1 Test done 2 Test Incomplete 3 Test not done | | | | | | |
| REASONS TEST INCOMPLETE OR NOT DONE: | Software malfunction Hardware malfunction or lack of supplies Insufficient time available or room not available Examinee refused or uncooperative Examinee medically excluded by staff for safety Examinee unable to physically cooperate Comments: | | | | | | |
| | | | | | | | |
| Data recorded 1 | | | | | | | |

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| FUNDUS PHOTOGRAPHY AGES 40 AND OLDER | | | | | | | |
|---|--|---|--|--|--|--|--|
| STAFF NO. | FILM NO | SAMPLE NO. | | | | | |
| 1. Eye Color: A. Rig | ght eye 1 🗆 blue 2 🗖 other 3 🗖 brown | B. Left eye 1 ☐ blue 2 ☐ other 3 ☐ brown | | | | | |
| NOTE: Photograph right enumber is odd. | NOTE: Photograph right eye if sample number is even and left eye if sample | | | | | | |
| 2. Pupil size before dilation in norma | al room light: | _mm | | | | | |
| Pupil size during photography as measured on camera monitor: | 3. Pupil size during photography | | | | | | |
| 4. Elapsed time between darkening room and taking photograph:minseconds | | | | | | | |
| 5. RESULTS OF EXAM: | 1 Right eye done 2 Right eye done but o 3 Left eye done 4 Left eye done but di 5 Neither eye done | | | | | | |
| 6. REASONS TEST INCOMPLETE OR N | 2 | Equipment problem or lack of supplies Refused or uncooperative Eye removed Movement No Fixation Corneal change Pupil not dilated Severe Lens opacity Vit Hem or opacity Insufficient time available or room not available Examinee medically excluded by staff for safety COMMENTS: | | | | | |
| | | | | | | | |

Pit5 6313 19 Ri v. 15 8t

| OMB | Nia | na: | n.n | 2 | 7 |
|-------|-----|-----|--------|----|---|
| CIVID | NO. | U32 | · v• u | 23 | • |

JOINT RADIOGRAPHS AGES 60 AND OLDER

| SAMPLE NO. | | |
|--------------------------|--|--|
| | | |
| | | |
| | | |
| es available e | | |
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| | | |
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| | | |

PHS 6300-10

Rev 8/88

PERFORMANCE TEST 60 YEARS OLD AND OLDER STAFF NO. SAMPLE NO. 1 no apparent restriction Health Status Screener 2 presently in wheelchair 3 ☐ recent surgery 4 injury 5 other health condition Activity Left Right 1 Fully 3 Unable 1 Fully 3 Unable 2 Partially 4 Refused 2 Partially 4 Refused Shoulder - External Rotation 1 Fully 3 Unable 1 Fully 3 Unable 2 Partially 4 Refused 2 Partially 4 Refused Shoulder - Internal Rotation Timed Maneuver 1 🗌 Yes Ability to pick up key 2 No (5) 4 🗌 Refused (5) Ability to hold key 1 🗌 Yes 2 No (5) 3 Not done (5) 4 Refused (5) c. Time in seconds to unlock lock seconds 00 Not done (5) 77 Refused (5)

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| 5 . | Single Chair Stand | | |
|------------|---|---|---|
| | a. In wheelchair | 1 yes (5b) 2 no (5c) | |
| | b. If in wheelchair ask: | | |
| | Can you get up from your wheel chair by yourself? | 1 🗌 yes (5c) 2 🗎 no (to 9) | |
| | c. Use of arms to scoot forward | 1 □ yes 2 □ no | 3 🔲 unable to move |
| • • • • | | | |
| | d. Ability to stand | 1 Yes - without arms 2 Yes - with arms for pushing 3 Unable (9) 4 Refused (7) | off (7) |
| 6. | Repeated Chair Stands: | | |
| | a. Time to complete 5 stands | seconds | 77 🔲 Refused (7) |
| | | stands (if less than 5) | |
| | | | |
| | b. Chair height (floor to seat) | inches | |
| 7. | Hipflex and Knee Flexion | Right 1 | Left 1 ☐ Fully 3 ☐ Unable 2 ☐ Partially 4 ☐ Refused |
| 8. | Tandem stand | | |
| | a Ask: | | |
| | Are you able to stand by yourself without holding on to anything? | ☐ yes (to 8b) ☐ no (to 9) | |
| • • • • | b. Number of seconds tandem stand held | seconds | 777 🗆 Refused |
| | | | |
| 9 | Measured Walk | (| |

| b | Ask: | | |
|-------|--|---|---|
| | Are you able to walk alone without holding on to another person? You may use a cane or walker. | 1 | |
| | | | |
| | | Trial A | Trial B |
| c. | Number of seconds to complete 8 foot walk | seconds | seconds |
| | • | 777 🗆 Refused | 777 🔲 Refused |
| d. | Total number of steps | steps | steps |
| e. | Pain reported on walking? | 1 | |
| d. | Type of floor surface | 1 linoleum/tile/wood 2 low-pile carpet 3 thick-pile carpet | |
| f. | Type of device used | 1 none 2 cane 3 walker 4 other | |
| RESU | JLTS OF THE EXAMINATION: | 1 | |
| REASC | ONS TEST INCOMPLETE OR NOT DONE: | 1 | cluded by staff or safety specified by staff or safety derstand test instructions due |

MEC EXIT QUESTIONNAIRE

AGES 12+ PROXY AGES 6-11

| a. Venipuncture Yes No | | b. Sample Number | | |
|--|--|--|----------------------|----------------|
| c. Age | d. Language of Inte | erview | e. Sex | |
| Years | English | Spanish | | Male Female |
| We have three final questi | ons to ask you about you | r participation in this su | rvey. | |
| Do you have any commutat were asked? | nents about the interviewe | er who came to your ho | use or the questions | ; |
| □No | | | | |
| I I - | | | | |
| | | | | |
| 2. Did you find any part o | f the examination unpleas | ant? | | |
| No | | | | |
| YesSpecify | | | | |
| | | | | |
| | | _ | | |
| CHECK ITEM. REFER TO | DAGE OF SP. | 12+ YEARS (3a) | | |
| CHECK ITEM. REFER TO | AGE OF SP. | 12+ YEARS (3a) 6-11 YEARS (3b) | | |
| 3a. As part of our quality Would you be willing | | 6-11 YEARS (3b) d to examine some indimination again, includir | | |
| 3a. As part of our quality Would you be willing | control program, we need to participate in this exa | 6-11 YEARS (3b) d to examine some indimination again, includir | | |
| 3a. As part of our quality Would you be willing drawn? You will red No Yes 3b. As part of our quality Would your child be | control program, we need to participate in this exameleive an additional payme | d to examine some indimination again, includir nt. d to examine some indimination again, includir nt. | ng having your blood | l |

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For answers to questions about this report or for a list of reports published in these series, contact:

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