

July 15, 1964

To the Graduate Council:

I am submitting herewith a thesis written by Willena Stone Beagle entitled "Nutrition Field Observations and Experiences in the State of Indiana." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Beth Duncan
Major Professor

We have read this thesis
and recommend its acceptance:

Harold H. Walker
John T. Smith

Accepted for the Council:

Dean of the Graduate School

NUTRITION FIELD OBSERVATIONS AND EXPERIENCES
IN THE STATE OF INDIANA

A Thesis
Presented to
the Graduate Council of
The University of Tennessee

In Partial Fulfillment
of the Requirements for the Degree
Master of Science

by
Willena Stone Beagle

August 1964

ACKNOWLEDGEMENT

The student wishes to express her appreciation to Miss Frances A. Heymans, Director of the Division of Nutrition, Indiana State Board of Health, for her efforts in making the field training a profitable experience. The student is grateful to the other members of the staff in the Division of Nutrition for their help in providing learning opportunities in public health nutrition. In appreciation for her guidance in writing this report, the student acknowledges the assistance of Miss Beth Duncan, Nutrition Department, University of Tennessee. Appreciation is also extended to Dr. Harold H. Walker, Public Health Education Department, University of Tennessee, and to Dr. John T. Smith, Nutrition Department, University of Tennessee, for their assistance.

W. S. B.

TABLE OF CONTENTS

	PAGE
INTRODUCTION.	1
THE STATE OF INDIANA.	5
THE INDIANA STATE BOARD OF HEALTH	11
THE DIVISION OF NUTRITION	17
THE NUTRITION PROGRAM	21
Nutrition Services to Institutions.	21
Hospitals	21
Special institutions.	24
Children's institutions	25
Health facilities	26
Community Nutrition Program	28
School lunch program.	28
School nutrition education program.	30
Weight control program.	34
In-service education and training programs.	34
Clinical program.	35
Co-operation with other state agencies and organizations.	36
Mass communication.	38
Planning and evaluation of the nutrition program.	39
SUMMARY AND EVALUATION.	41
BIBLIOGRAPHY.	44
APPENDIX.	46

LIST OF FIGURES

FIGURE	PAGE
1. The Organizational Chart of the Indiana State Board of Health, 1963	13
2. Indiana State Board of Health Branch Office Areas, 1962.	15

INTRODUCTION

This report is based upon the student's experiences and observations during a seven weeks' period of field training with the Indiana State Board of Health. The Division of Nutrition provided the guidance for the field experiences. Approximately five weeks and two days were spent in the central office, four days in the Northeastern Branch Office, one day in the Northwestern Branch Office, and three days with the local nutritionist in Marian County. It was impossible to learn the entire health program in a limited period of time; therefore, an attempt is made to describe the program as it appeared during field experiences.

Nutrition field experiences were requested in the state of Indiana for two principal reasons. The first was to become acquainted with a nutrition program that provides both consultant and direct nutrition services from the central and branch offices. Before graduate study, the student had worked as a public health nutritionist in a local health department in Kentucky. It was anticipated that the field experiences in the state of Indiana would help her understand how a nutrition staff functions from the central office. The second reason was to observe a nutrition program that offers consultation to institutions. The student thought orientation to this unfamiliar service would be particularly profitable in her future work of public health nutrition.

One purpose of the field experience was to supplement the academic training in public health nutrition at the University of Tennessee. Throughout the field experience an attempt was made to gain an understanding of how a state nutrition program is planned to meet the needs of the people in each district. The student wanted to observe the methods and techniques used in motivating persons of all ages to translate their knowledge of nutrition into practical application. Another objective of field training was to increase her appreciation and knowledge of the work of public health personnel outside the field of nutrition. To understand how nutrition activities are correlated with activities of other divisions, one must comprehend the scope of services provided through the official health agency.

The University of Tennessee and the Division of Nutrition jointly planned for the student's field experiences to be in the state of Indiana. During academic study, data was gathered about the state and its health programs through pamphlets and booklets published by the Indiana State Board of Health. The Director of the Division of Nutrition planned a training program of varied experiences to help the student accomplish her objectives. Information was obtained during field experiences through written material, conferences, meetings, and observation of and participation in the activities of both official and non-official health agencies in Indiana. Approximately two weeks were spent in conferences, meetings, and observations to orient the student in health services for institutions. A nutrition consultant, a sanitarian, and an advisory nurse were observed as they provided health

services to the institutions. The student learned how nutrition services are incorporated into the total health services by observing personnel from other divisions perform their duties.

Eight days were devoted to conferences with directors or personnel in divisions of the State Board of Health to become acquainted with the public health program. Through conferences and field experiences with personnel of non-official health agencies, a knowledge was gained of how health agencies co-ordinate their services for more effective health programs.

Readings served to increase the student's knowledge of the health agencies and their programs in the state. Among the sources of information were the State Board of Health's annual reports and biennial plans, the Division of Nutrition's procedure manual, and publications regarding health laws.

The information obtained during field training is summarized and presented in the following five chapters of this report. Immediately following this introduction is Chapter I, The State of Indiana. The history, geography, economy, statistics, and health information of the state are presented.

In Chapter II, The Indiana State Board of Health, the history, organization, and function of this official agency are discussed. This chapter gives some indication of the agency's role in solving the health problems.

Chapter III presents the history, organization, and administration of the Division of Nutrition. This information indicates how the

nutrition program is influenced by administrative procedures and organization of the Division.

Chapter IV, The Nutrition Program, discusses specific services that are rendered by the nutrition division. These activities are subdivided into nutrition services to institutions and nutrition education programs in the community.

In the last chapter, Summary and Evaluation, the student relates the highlights and significance of the field experiences. Field training is evaluated in terms of the student's objectives.

THE STATE OF INDIANA

Before studying the program of an official health agency of a state, one should have some understanding of the basic factors which have contributed to the health of the people. A brief history of the people and their customs, the geographic features of the area, the socio-economic status, and statistical health data are important to such an understanding.

The geographical area of the present state of Indiana was once part of a track of land known as the Northwest Territory. This territory extended westward from the Appalachian Mountains to the Mississippi River and northward from the Ohio River to the Great Lakes. The Ordinance of 1787 was passed by Congress as the law to govern the people of the Northwest Territory. Two clauses of this ordinance were particularly important in the later development of the state. The first clause "forbade slavery in the area". The second clause "encouraged education by setting apart one section in each township, presumably to be sold and the proceeds to go for the establishment of schools". When the Northwest Territory was divided in 1800, the Indiana Territory was organized. This new territory included the present states of Indiana, Illinois, Michigan, Wisconsin and part of Minnesota. The present state of Indiana was formed in 1810 by the detachment of land from the Indiana Territory (1).

Indiana entered the Union in 1816. The first capital was at Corydon, but in 1825 it was moved to its present location at

Indianapolis. The state's population was composed principally of farmers with a few artisans and tradesmen living in the towns located in the southern part of the state. The central part of the state was still a wilderness controlled by the Indians. In 1818 this central part was purchased from the Indians and the state was opened for settlement. For the next thirty years, settlers of many nationalities entered the state. Most of these pioneers were farmers from the New England States and from the South. At the present time the state is populated, except in the industrial northwest, largely by third and fourth generation descendants of English, Scotch-Irish, and German pioneers (2).

Geographically, Indiana is located between two great waterways: the Ohio River and the Great Lakes. This fact coupled with the state's centralized position in the east central section of the United States has made it truly the "Crossroads of America". The state's ninety-two counties are divided into three regions: the northern lake country, the central agricultural plain, and the southern hilly section (2).

The climate is distinguished by high humidity, much rainfall, moderate cloudiness, and high winds. Although the state occasionally experiences severe winters with protracted below-zero weather, the normal winter temperatures remain around twenty-eight or thirty degrees Fahrenheit (2).

Despite the fact that much of Indiana's virgin forests have been destroyed, the supply of hardwood timber still constitutes a valuable natural resource. The state has great mineral wealth. This wealth is

derived largely from sedimentary rocks consisting of limestone, sandstone, shale, and coal, with large deposits of clay and kaolin in the state. The rich soil, suitable for agriculture in the central part of the state, provides a third natural resource (2).

Although the greater part of the land area is still used for agriculture, the industries of the northwest region rank first in economic importance. On a per capita basis, Indiana ranks eighth among the fifty states in both factory and farm productivity. Indiana's industrial output rates fourth in the United States. The state is first in the production of prefabricated buildings; second in book printing; and third in steel production (3).

The effects of industrialization are many and complex. The rise of cities and the decline of the number of people on farms were observed at the beginning of industrialization. In 1860, 10 per cent of the state's population lived in cities; by 1900, 33 per cent of the people dwelled in cities (1). When the population began to shift from the country to the urban areas, housing did not keep pace with migration. Problems created by crowding were seen in the slum areas. In the industrial areas of the state, the manufacturing plants contaminate the atmosphere with smoke, fumes, vapors, and toxic gases. The waste products from these plants are discharged into the streams. Thus, air and water pollution have become major problems in these areas.

There are approximately 10,000 migrant workers each year in Indiana (4). These laborers are employed for a period of time ranging from four to six weeks. Workers and their families are not in one

place long enough to receive adequate medical care. Many health problems have come about due to poor sanitary conditions, low-income status, language barriers, and patterns of eating that do not conform to food availability in the area.

In a conference with personnel from the Indiana Chamber of Commerce, the student was told that in 1962 the per capita income was \$2,350. The average per capita income for the same period in the United States was \$2,366. For the month of March 1964 the per cent of unemployment was 4.6 per cent. The national figure for this same month was 5.9 per cent.

The estimated July 1, 1962 population for Indiana was 4,751,100 (5). The population of the state is increasing by approximately 73,000 persons per year. The metropolitan areas have accounted for approximately 75 per cent of this population growth (4).

Between 1950 and 1960 there was an increase in non-white population; the increase was three times the over-all growth rate of 56 per cent. As of April 1, 1960 the non-white proportion of the state's population was 5.9 per cent (6).

Births to Indiana residents dropped sharply in 1962. The birth rate of 22.9 per 1,000 population was the lowest for the state since 1945 (5). The birth rate gives some indication of how rapidly the health program should be expanded or decreased to meet the future needs of the population.

The ten leading causes of death in 1962 in the order of their prevalence were: heart disease, cancer, vascular lesions affecting

the central nervous system, certain diseases of early infancy, diseases of the arteries, accidents (excluding motor vehicles), motor vehicle accidents, pneumonia (excluding newborns), diabetes mellitus, and suicide (5). The three leading causes of death are diseases often associated with aging. A study in 1960 indicated that 9.6 per cent of Indiana's population was over sixty-five years of age (7). Many of these people are patients or residents in hospitals or health facilities. The food service managers in a number of these institutions need assistance with nutrition and dietary problems. As stated, diabetes mellitus was the ninth leading cause of death in 1962. Medical authorities believe diabetes mellitus can be controlled through proper medication, diet, and exercise. The nutritionists find diabetic diet orders to be one of the leading therapeutic diet prescriptions written for patients in institutions.

In the state there are approximately 500,000 overweight individuals (8). Obtaining and maintaining optimum weight may increase the person's life span. It is stated by authorities that optimum weight may lessen the severity of diabetes mellitus or heart disease.

Studies of children's dietary habits revealed the problem of faulty eating practices. This suggests the need for nutrition education in the early years of life.

The health status of the population helps determine the nutrition program that is to be planned. Health statistics may indicate a continuation of the existing nutrition program or a change in the program.

Variations in geography, socio-economic status, and health

status of the people in different areas of the state influence the nutrition program. Each nutrition consultant must plan the program in her area to meet the nutritional needs of the people. The increase in non-white population and the decrease in the birth rate in Indiana must be considered in planning future programs. Because of the growth of the aged population in the state, dietary problems have arisen. In institutions where aged persons are housed, operators need assistance with dietary and nutrition problems. The number of overweight individuals and the dietary studies showing children's eating patterns suggest the need for continued nutrition education. The conditions found among families of migrant workers and families suffering from economic stress indicate the need for assistance in food budgeting.

THE INDIANA STATE BOARD OF HEALTH

The Indiana State Board of Health was created in 1881 by a law which defined its purposes, powers, and duties. A governing board of five members was established and it was specified that the secretary of the Board of Health shall be a physician who shall be health officer of the state (8). Through the efforts of a small group of doctors, this official health agency was established on a \$5,000 annual budget (9). It has expanded into a complex public health entity which affects the life of every citizen of Indiana.

Under the Health Administration Act of 1953, all official health services in the state were combined under the administration of one director and called the State Department of Health. The Indiana State Board of Health was one of three divisions of the State Department of Health; the other two were Mental Health and Medical Services. The 1961 Indiana General Assembly abolished the structure of the State Department of Health. This session created a Department of Mental Health and the Indiana State Board of Health. The responsibility of the administration of six institutions and one agency was transferred to the Indiana State Board of Health. These institutions include two hospitals, two institutions and two schools. The two hospitals are the Southern Indiana Tuberculosis Hospital, at New Albany, and the Indiana State Hospital for Chest Diseases, at Rockville. The institutions are the Indiana State Soldiers' Home, at Lafayette, and the Indiana Soldiers' and Sailors' Children's Home, at Knightstown. The two schools are the Indiana School for the Blind, and the Indiana School for the Deaf; both schools are located in Indianapolis. The agency is the Indiana Agency for the Blind in

Indianapolis (10). Each institution has its own administrator and staff; the responsibility for setting policies for these institutions was delegated to the Bureau of Special Institutions of the Indiana State Board of Health.

The Indiana State Board of Health in accordance with the law is charged with the over-all responsibility of protecting and promoting the health and well-being of the citizens of Indiana. Its policies are established by a nine-member executive board appointed by the governor. The professions represented on the executive board are: three physicians, one registered nurse, one dentist, one veterinarian, one engineer, one pharmacist, and one lay member. Since the term, "State Board of Health" is customarily used in Indiana to designate only the program-operating body, the nine-member policy and executive body is known as the Executive Board.

This executive board selects the state health commissioner whose appointment is subject to the approval of the governor. The commissioner serves as secretary to the executive board and as administrator for the staff of the State Board of Health. The operating staff consists of approximately 440 employees, 50 per cent of whom are professional personnel (11). The supervision of the staff is delegated through bureau and division directors. The eight bureaus and their divisions are clearly shown on the organizational chart (Figure 1). A division was placed under a bureau on the basis of the division's functional activities. The programs executed by the State Board of Health fall into the following seven basic categories: sanitation, education,

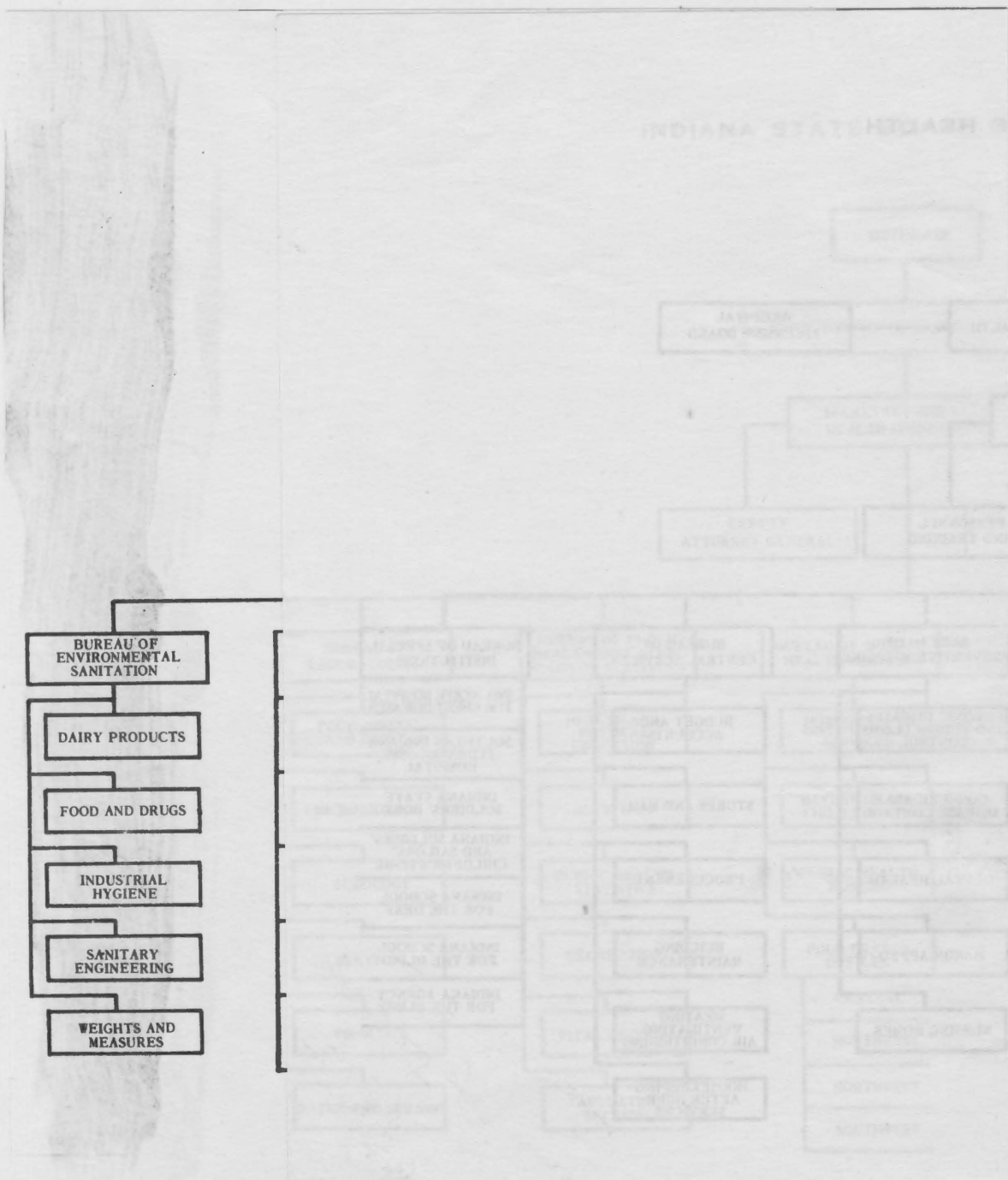
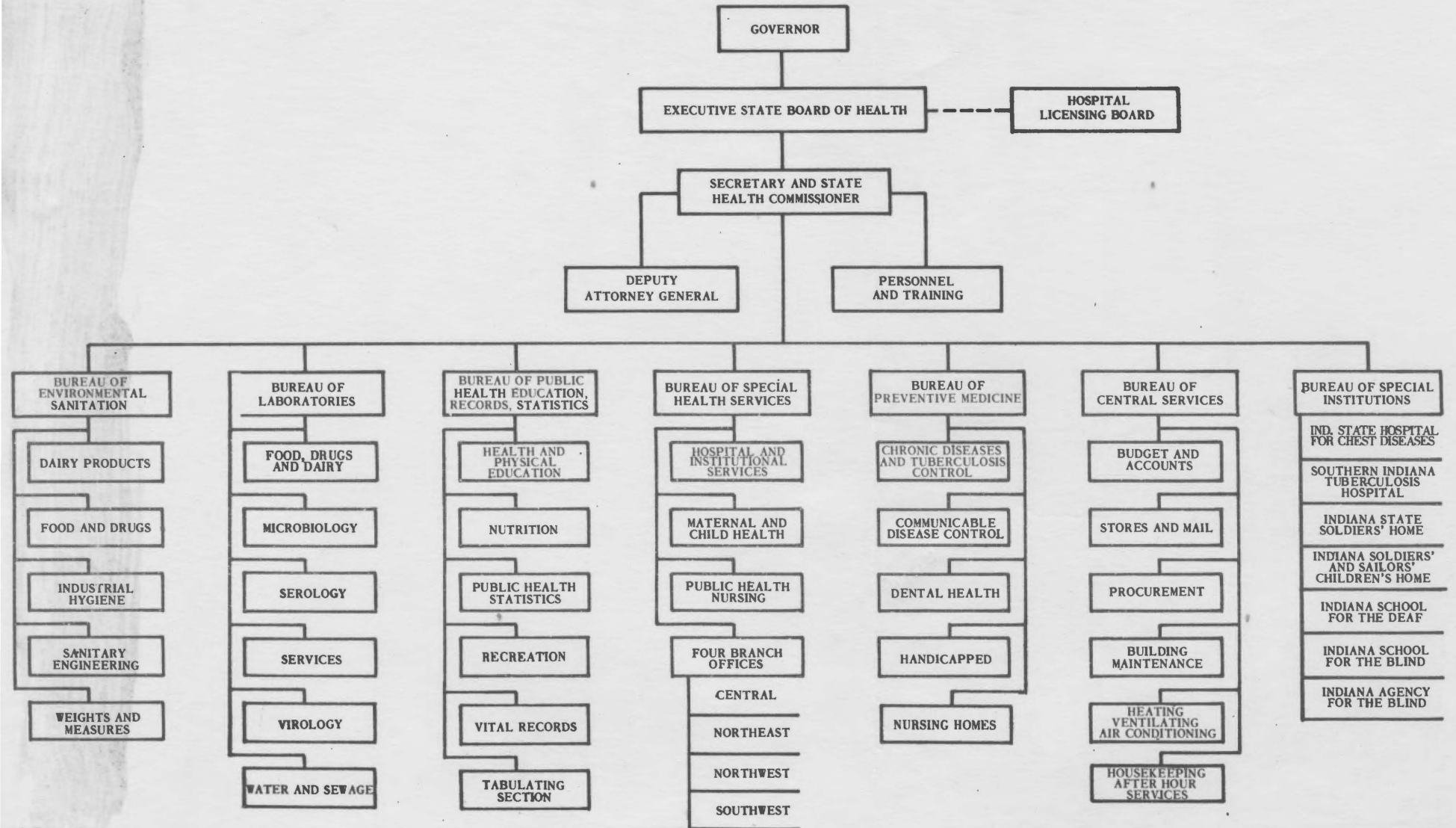


Figure 1. The Organizational Chart of the Indiana State Board of Health, 1963.

INDIANA STATE BOARD OF HEALTH



communicable disease control, chronic disease control, maternal and child health, vital records, and laboratory analysis.

The State Board of Health is supported by state tax revenues. However, it may accept federal funds which are granted on a categorical basis. The Board has some latitude with grants which are designated for "general health". For the year that ended June 30, 1963 approximately \$3,000,000 was expended by this agency (4).

As the official health agency, the State Board of Health serves in a consultant capacity to local health and governmental authorities in an effort to help them determine and meet their health needs. This board encourages the organization of local health departments and assists in selecting and training personnel to administer the health programs. It renders services directly to citizens only when these services cannot be provided practically and economically by local health departments.

To render health services more efficiently the state is divided into five areas. The central office serves the Central and Southeastern areas; the Northwestern, Northeastern, and Southwestern areas have branch offices of the State Board of Health (Figure 2). Each branch office renders services to approximately eighteen counties. Some positions are vacant, but basically the personnel in each of the branch offices include: a sanitary engineer, a sanitarian, a public health nurse, a nutritionist, a health educator, a dairy inspector, and two food and drug inspectors.

In Indiana part-time local health departments are mandated by

Northwestern Branch Office
205 Harrison
LaPorte, Indiana

Northeastern Branch Office
709 Clay St.
Fort Wayne, Indiana

Central Branch Office
1330 West Michigan Street
Indianapolis, Indiana

Southeastern Area
1330 W. Michigan St.
Indianapolis, Indiana

Southwestern Branch Office
307 Harned Avenue
Washington, Indiana

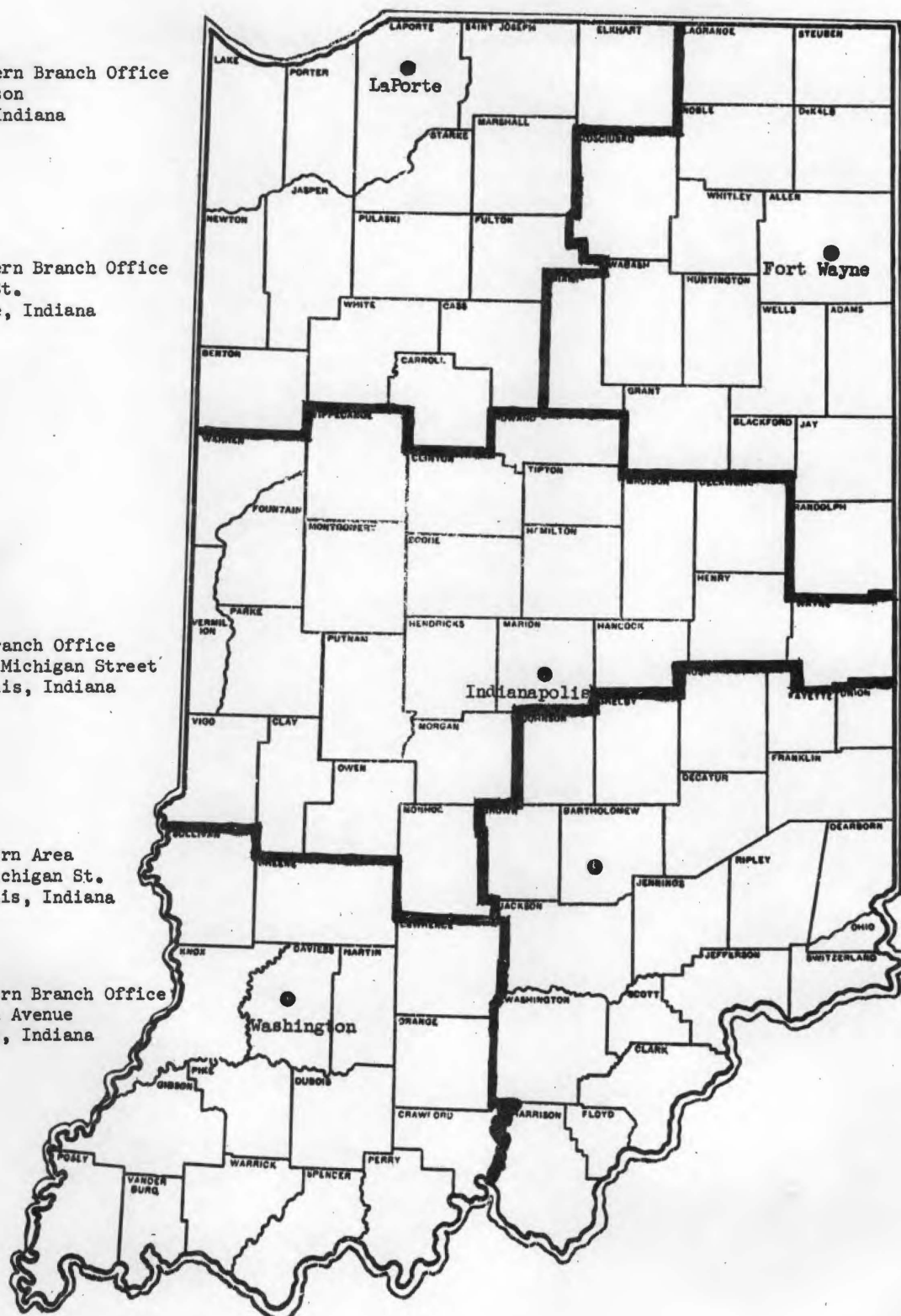


Figure 2. Indiana State Board of Health, Branch Office Areas, 1962.

state statutes. The law provides for full-time local health departments, but does not make them mandatory. The number of part-time health units (part-time health officer only), both city and county, totals 169. Full-time health units number twenty-eight. It has been recognized by state health officials that full-time local health units are the most effective means of rendering health services. Although there has been a steady growth in the development of local health units, Indiana has not been able to develop units on a state wide basis.

THE DIVISION OF NUTRITION

Nutrition services in the Indiana State Board of Health began in 1937 when the first nutritionist was assigned to the Division of Maternal and Child Health. In 1945, the nutritionist was transferred to the Division of Health Education due to limited office space in the Division of Maternal and Child Health. After the State Board of Health established five branch offices in 1945, nutrition consultants were added to the staff in branch offices. In 1948, the first nutrition consultant for institutions was employed. Until 1954, the nutrition staff members functioned as a nutrition section. This section was established as a separate division of the Bureau of Public Health Education, Records, and Statistics. Nutrition is still a division of this bureau.

The Director of the Division of Nutrition is responsible for the administration of the total nutrition program and for the technical supervision of the nutrition staff. The division director is administratively responsible to the bureau director, who in turn, is responsible to the State Health Commissioner.

Other personnel of the division include one institution nutrition consultant and five branch office nutrition consultants. The Institution Nutrition Consultant works with food service personnel in the 126 hospitals in Indiana to help upgrade food service. The five branch office nutrition consultants provide a generalized nutrition program within their area (Figure 2, page 15). Although the five

nutrition consultants are administratively responsible to their branch office directors, technical supervision is received from the Director of the Division of Nutrition.

Staff members must meet the state merit system qualifications. Classification of a staff member is determined according to her education, training, and experience. Specifications for nutrition consultant positions are presented in the Appendix (see page 48).

Since nutrition services are primarily educational, this division functions effectively in a bureau providing health education services. Association with the health educators helps the nutrition staff to learn of health programs and where nutrition activities can be integrated. Because of its placement in a bureau recognized for service, the nutrition division receives many requests from other personnel of the official health agency. All of these factors have helped the nutrition program to expand and become a vital part of the over-all health services in Indiana.

The Director of the Division of Nutrition attends the weekly staff meetings held by the Director of the Bureau of Public Health Education, Records, and Statistics. At this meeting personnel of the bureau report briefly about the activities of the previous week and tentative work plans for the coming week. After attending staff meetings, the student is convinced that this is an excellent procedure for personnel to keep informed of health programs, exchange ideas, and plan health education activities.

Quarterly staff meetings are planned for nutrition consultants

by the director. At these meetings, programs are planned and evaluated and in-service education is provided for the nutrition consultants. During these two-day staff meetings the nutrition program is evaluated in terms of services being provided and the effectiveness of the methods used in the different areas of the state to improve the eating patterns of the people. Future plans are made and discussed for the nutrition program in the state.

Accurate records and reports are necessary for planning and evaluating the nutrition program. Nutrition consultants serving the five areas of the state and the Institution Nutrition Consultant report weekly activities in writing. Each month the consultants complete the "Monthly Activity Report, Division of Nutrition," (see Appendix, page 53). These monthly reports are circulated among nutrition staff members so they may keep informed of activities; later the reports are filed in the nutrition division. From these monthly reports, each nutrition consultant compiles an annual report of the total nutrition services rendered within her area of the state. The Director of the Division prepares an annual report of the total nutrition activities for the year. A copy is sent to the Director of the Bureau of Public Health Education, Records, and Statistics and to the State Health Commissioner. This annual report of the nutrition activities is presented in the State Board of Health's annual report.

Staff members are encouraged to become active in state and national professional organizations in order to keep informed of new trends in nutrition and the related fields. Each staff member is

encouraged to attend annual state meetings of the Indiana Dietetic Association, the Indiana Home Economic Association, and the Indiana Public Health Association. During field training, the student attended two of these professional meetings. Opportunity to attend meetings of professional organizations outside the state is rotated among the nutrition staff.

The organization and administrative procedures influence the program that is planned and executed by the nutrition division. Staff meetings, reports of activities, in-service education for staff members, and opportunities for professional advancement are important for the operation of an efficient and well-organized program.

THE NUTRITION PROGRAM

The objective of the nutrition program in Indiana is to improve the health status of the people through the development of good food habits. Therefore, the Division of Nutrition is concerned with planning, organizing, and executing an educational program to meet this goal. The program in this state is directed toward providing nutritional guidance through education for all segments of the population.

I. NUTRITION SERVICES TO INSTITUTIONS

Hospitals

The Institution Nutrition Consultant in the Division of Nutrition provides nutrition and dietary services to hospitals almost exclusively. She co-operates with the Division of Hospital and Institutional Services in the four major areas of her work. These areas are (1) surveys, as a basis for licensure; (2) dietary consultation; (3) consultation services on construction plans for hospital dietary facilities; and (4) in-service education programs for dietary personnel. Request for her services may be made by a hospital administrator to the hospital division or to the nutrition division. A consultation visit is arranged by the institution consultant and the hospital administrator. The Director of the Division of Hospital and Institutional Services is informed of nutrition services rendered by the institution consultant. A copy of all correspondence and a narrative report of each visit to a hospital are sent to the director.

Surveys. In 1945, Indiana passed the Hospital Licensing Law requiring all hospitals to be licensed and regulated by the State Board of Health. Indiana was the third state to pass a licensing and regulating law for hospitals (10).

As stated previously, the institution consultant has the responsibility of surveying dietary departments to obtain data for the licensing program. A conference is held annually with hospital administrative consultants from the hospital division to determine where surveys are needed. An attempt is made to survey each dietary department at least once every four years. In 1963, dietary departments of thirty-seven hospitals were surveyed (12). To facilitate the survey a checklist is used. Information is recorded in regard to the supervision of the dietary department, the policies and procedures for employees, records of food cost and menus served, preparation and service of food, and layout of equipment. At the conclusion of the survey, the consultant explains her findings and recommendations to the administrator. A letter is sent later to the administrator with recommendations relating to non-compliances. A duplicate copy is filed in the hospital division.

The student observed a sanitarian surveying a hospital to obtain information regarding sanitary conditions. He inspects the equipment of the kitchen; the temperatures of the refrigerator, freezer, and dishwasher; the procedures of handling food; and cleanliness of the storeroom. He mails a written report of the findings to the hospital administrator and the director of the hospital division.

Dietary consultation. The institution consultant provides consultation services to food service managers who have had no formal training in dietetics. The manager is given assistance with food service operations. Among consultation services may be a discussion of menu planning, food purchasing, policy and procedures for employees and equipment layout. Hospitals can mail the consultant a week's menus to be checked for nutritive value. The menus are evaluated and returned to the hospital with a letter which indicates the weaknesses in the menus and suggestions for improvement.

Consultation services on construction plans for hospital dietary facilities. The Institution Nutrition Consultant reviews blueprints, schematic, and preliminary plans for remodeling or construction of hospital dietary facilities. The prime purpose of this service is to equip and arrange the dietary department for an efficient food service operation. The institution consultant makes her recommendations on the plans in accord with regulations set by law. She works closely with the Division of Sanitary Engineering when reviewing plans; engineering codes and regulations regarding the construction and installation of equipment influence the placement of dietary equipment. The institution consultant's study of plans includes size and location of the dietary department, selection and layout of equipment, flow of traffic, and work areas within the kitchen. In 1963, fifty-five blueprints were reviewed (12).

In-service education for dietary personnel. Six dietary conferences are held each year throughout the state. These are one-day

"refresher" conferences held for food service managers. The Division of Hospital and Institutional Services, the Division of Food and Drugs, and the Area Council of the Indiana Hospital Association co-operate with the Division of Nutrition in planning and conducting these programs. The program for the conference is planned around the needs of the hospital food service personnel in the area in which the conference will be held. The needs are determined by the findings from surveys and consultation visits to the hospitals.

Special Institutions

As previously stated, the State Board of Health has the responsibility of supervising the administration of six institutions. The names and location of these special institutions were included in Chapter II. In August 1963, a nutrition consultant was assigned to the Bureau of Special Institutions to help improve the food service in these institutions. Her prime objectives are to improve the food service for the residents of these institutions and to assist the management in employing and training qualified food service managers.

The student accompanied the nutrition consultant on visits to the School for the Blind and the School for the Deaf. The nutrition consultant has assisted the administrator of the School for the Blind in employing a dietitian. Assistance is being given in planning the construction of a new food service facility in this school. The School for the Deaf was visited to see a recently constructed dietary department. The consultant discussed the efficiency of this food service operation with the manager.

Food served in these six state institutions is purchased through a central system. The student reviewed the specification guide which is used to purchase food. Each institution makes a food order once a month; the nutrition consultant checks the amount and kind of food ordered. She often checks the institution's supply of frozen foods for quality and quantity.

Children's Institutions

In 1963, the nutrition staff surveyed dietary departments in fifty-six of the seventy-four children's institutions (12). The data on these surveys were used by the Indiana State Department of Public Welfare in the licensing program for children's homes and day nurseries.

In 1964, the staff members of the nutrition division developed questionnaires to replace surveys as the basis for licensure. Copies of the questionnaires, Food Service Program for Children's Homes and Food Service Program for Day Nurseries, are included in the Appendix (see pages 57-65). Each children's home and each day nursery will complete the respective questionnaire and return it to the Department of Public Welfare. The questionnaire pertains to the food service in the institution. This completed form will indicate the institution's provisions for planning menus, preparing and serving food. The nutrition division plans to review the contents of the questionnaire on the basis of compliance to regulations. The nutrition and welfare staff members arrange for consultation visits to the children's institutions to discuss recommendations for improvements. It is anticipated by the

nutrition division that in the future these questionnaires may be used only in new children's homes and day nurseries.

Health Facilities

In 1963, the General Assembly repealed the Indiana Nursing Home Law and passed the Indiana Health Facilities Law, which became effective in 1964. According to the new law all health facilities, excluding hospitals, shall be classified and licensed by the Health Facilities Council. The health facilities are classified according to the type of care administered in the home. Classifications are (1) residential care homes, (2) comprehensive nursing care homes, and (3) combination residential and comprehensive nursing care homes (13). Boarding homes, county homes, and nursing homes are classified and licensed by this new council. In a conference with the Director of the Division of Health Facilities, the student was informed that Indiana has eleven residential care homes, 456 comprehensive nursing care homes, and sixty combination residential and comprehensive nursing care homes.

The homes are licensed annually; the council meets semi-annually to issue licenses. The Division of Health Facilities has the responsibility of collecting data for the licensure program. Advisory nurses and "visitors" from this division inspect the health facilities for compliance to regulations set by law. The term "visitors" is used to designate the male inspectors who check the homes for safe building construction, adequate floor space and sufficient light, toilet facilities, water supply, and sewage disposal. Advisory nurses check

the medical records, drugs, staff qualifications, patient care, nursing facilities, and general sanitation. Members of the nutrition staff assist personnel from the health facilities division with surveys of the food service programs in homes that have fifty patients or that have many food service problems. Data must be collected on planning menus and therapeutic diets, preparing and serving food, and dishwashing procedures.

To facilitate surveys an inspection form is used. This form, "Inspection Form for Health Facilities," is included in the Appendix (see page 66). Each person surveying a portion of the home uses this form; he or she marks only the regulations which apply to the segment being surveyed. The non-compliances to regulations are marked and comments are made. To check the menus for nutritive value, the nutritionists use the "Menu Planning Check List" (see Appendix, page 67).

The staff conducting the survey meets with the operator of the home to discuss the non-compliances to regulations. A copy of each inspection sheet remains with the operator of the home. A duplicate copy is filed with a list of non-compliances observed in the health facilities division. Data from these forms are used to make decisions on licensure by the Health Facilities Council.

The student observed dietary survey procedures in two health facilities. The nutrition consultant gathered data by observing the preparation of the meals served that day. She checked the patient's records for therapeutic diet orders, and evaluated the week's menus for nutrients. The consultant assists food service managers in solving nutrition and dietary problems which they encounter.

The student observed a meeting of the Health Facilities Council. This council met for the purpose of licensing homes. The Director of the Division of Nutrition spoke briefly to the Council on "The Equipment Necessary for Feeding Children". The student also attended a Health Facilities Institute. The purpose of this meeting was to orient owners and operators to the new regulations set forth by law. A nutrition consultant spoke briefly to the group about the food service regulations and showed the audience nutrition educational materials which are available for use in the dietary departments.

The members of the nutrition staff are planning in-service education meetings for personnel in the Division of Health Facilities. The purpose of the meetings will be to interpret the food service regulations. With the expansion of this program, personnel from the health facilities division will be surveying a number of the dietary departments.

II. COMMUNITY NUTRITION PROGRAM

The nutrition consultants plan community nutrition programs to meet the needs of the people. The consultants work with the staff of the divisions of the State Board of Health and other state agencies to help improve the nutritional status of the population.

School Lunch Program

The School Lunch Division of the Department of Public Instruction employs a home economist to visit the schools participating in the

federal lunch program. She makes administrative reviews of the school lunches, gives advice on the use of government commodities, and aids in the planning of menus. Due to the number of schools participating in the federal lunch program, the home economist cannot review all programs. The nutrition consultants assist the School Lunch Division by reviewing school lunch programs.

The nutrition consultant visits a school by appointment to make an administrative review of the lunch program. She obtains information concerning the kitchen equipment, storage facilities, food preparation, food service, and clean-up procedures. She checks the school lunch records and the cost of lunches. The menus for the past month are checked for the amount and kind of food served daily. The "Type A" lunch requirements established by the United States Department of Agriculture are used as a basis for judging adequacy of nutrients. At the conclusion of the review, the nutrition consultant discusses her findings with the lunchroom manager and the principal of the school. A detailed report of the review and recommendations are sent to the School Lunch Division. This division sends a letter to the school stating the recommendations. The school administrator answers this letter with a list of improvements made since the review or the school's intentions to comply with recommendations.

The student accompanied a nutrition consultant to two schools for the purpose of reviewing the lunch programs. Under the supervision of the consultant the student reviewed the program in one school. The student checked phases of operation and school lunch records. The

findings of the review were discussed with the lunchroom manager and principal before leaving the school.

Regular county-wide workshops for food managers and cooks are held each year. The Division of Nutrition assists the School Lunch Division in planning, executing, and evaluating these workshops. The programs are planned around the needs of the food service personnel attending the workshop.

School Nutrition Education Program

The nutrition consultants assist teachers in planning, organizing, and executing nutrition education programs. The consultants provide nutrition services to school personnel who have indicated an interest in and a need for nutrition education. Methods used to assist school administrators and teachers with their nutrition education programs are discussed in the following paragraphs.

Dietary surveys. Pertinent information about food habits can be obtained through dietary surveys. The school children are given survey forms and asked to write down the food and the amount of food eaten. The usual procedure is to record food intake for three days. The school children are encouraged to evaluate their own diets. Dietary surveys are used as a basis for planning a school nutrition education program since the surveys indicate areas of greatest food needs. The consultant assists the teacher with conducting and evaluating the dietary survey. The findings are discussed and plans are made for classroom activities that will help improve dietary habits. The consultant makes follow-up

visits after assisting the teacher with planning and organizing the program. Follow-up visits are made to learn how effective the program is and to give further assistance if needed. Re-surveys of dietary habits are often conducted the following school year to help evaluate the effectiveness of the program in improving food habits.

Classroom teaching. The nutrition consultants teach a nutrition class as a demonstration to the teacher. Consultants demonstrate what nutrition information and illustrative materials can be taught and used in the classroom. It is assumed that attitudes toward food that are formed by children in pleasant classroom activities will improve eating practices.

Animal feeding demonstrations. One of the devices used in classrooms to illustrate the relationship between food intake and body growth is the animal feeding demonstration. White rats or chicks are usually used in these demonstrations because these animals are easily acquired, easily cared for, and results in growth are visible in a six-weeks' period. Nutrition consultants assist the teachers in planning the demonstrations and obtaining the animals and necessary equipment. Suggestions are made to the teachers on nutrition information to include in classes that will correlate with the demonstrations. School children feed and weigh the animals, and plot the animals' growth rates on wall graphs. Publicity by the children usually arouses interest among other students in the school. The children discuss their classroom project at home, thus reminding parents of the effect of food upon growth.

Nutrition education of classroom teachers. Interested school administrators often request nutrition education for their teachers. Consultants provide education for teachers through group meetings. The program usually includes instructions on basic nutrition facts, techniques of presenting nutrition information, or use of illustrative materials. Teachers and school administrators are informed of free and inexpensive nutrition education materials. Consultants illustrate to the group the educational materials that may be borrowed or purchased from the State Board of Health.

Dental health. The nutrition division co-operates with the dental health division in educational programs on dental health. The importance of good nutrition to dental health is a segment of these educational programs.

In-service education programs are used as a method of reaching groups of teachers. These programs are planned jointly by the nutrition, dental health, and health education divisions. In 1963, there were thirteen in-service programs conducted with a total attendance of 775 teachers (12). The student accompanied the dental health educator to one of these programs. Twenty-eight teachers attended this two-hour meeting. Low-calorie snack foods prepared by the home economics teacher were served to the group. A dentist from the dental health division and two dental hygiene students from the Indiana Medical Center conducted the program. The four topics discussed were: diet in relation to teeth, fluoridation, tooth brushing, and methods of teaching dental health in schools. At the conclusion of the meeting, a packet of

pamphlets on dental health was given to each teacher. Usually, the topic on diet in relation to teeth, is discussed by a nutrition consultant.

A committee of dentists, dental educators, public health educators, and teachers of health in the state colleges and universities, has developed a kit which can be used as a dental health teaching aid. This kit contains teaching aids and written information on dental health. The written information consists of dental health teaching concepts, a glossary, and references for resource materials. Teaching aids included in the kit are models of teeth, a toothbrush, slides, and a slide projector. The co-sponsors of this kit are the State Board of Health, the State Dental Association, and the State Department of Public Instruction. College instructors of future elementary and secondary teachers will have access to this kit. It is anticipated that the use of this kit by instructors will provide dental health information for future teachers and create an awareness of the depth and scope of dental health.

School health programs. A nutrition consultant is invited by a school nurse or a public health nurse to participate in special health programs conducted at the schools. The student was asked to talk to parents at a preschool conference on the importance of a "good" breakfast and "good" snacks. This was a group of parents numbering thirty-five. Each parent was given a copy of "Food for Fitness", a United States Department of Agriculture leaflet, and "Smacking Good Snacks," a State Board of Health leaflet.

Weight Control Program

As stated in Chapter I, there are approximately 500,000 overweight persons in Indiana. This indicates the need for weight control programs. Weight control programs are in progress throughout the state. The over-all purpose of the program is to reduce the incidence of health conditions that are most prevalent among overweight and underweight persons. Nutrition consultants often teach the weight control classes. The Heart Association, the State Board of Health, and the Purdue Agricultural Extension Service sponsor these classes. The student observed the first meeting of a series of weight control classes. The teacher for this class was the nutritionist from the Dairy Council. Exercises were directed by a physical education teacher. The classes will be a series of two-hour classes that meet once a week for a six-weeks' period. Each person attending must have a doctor's written permit before enrolling. A record is kept of each person's weight throughout the six-weeks' period. Records of class attendance and weight change are filed in the nutrition division.

In-Service Education and Training Programs

The members of the nutrition staff teach nutrition and dietary information to public health nurses. Nurses integrate this information into their services to the people. Nutrition consultants provide in-service education for nurses in the following areas: basic nutrition facts, nutritional needs in health and disease, menu plans and food budgets, and methods of teaching nutrition. Consultants also

assist the nurses in planning and conducting nutrition classes for expectant parents.

Welfare workers receive assistance in teaching families to plan menus and budget food money. The nutritionists help in programs for recipients of donated foods. Demonstrations on the use of the foods and recipes for the people constitute the major services in this program.

On request from colleges and universities, the nutrition division provides field experiences for graduate students in public health nutrition. Other divisions of the State Board of Health co-operate with the nutrition division in orienting the students to public health programs. Conferences with personnel of the State Board of Health help the students understand services and how nutrition is integrated into the total health program. Observation of and participation in the program of the Division of Nutrition acquaints students with the scope of the services.

The nutrition division provides a week of field training for dietetic interns from the Indiana Medical Center. The interns receive a brief orientation to community nutrition. Field experiences are provided in which interns can observe the consultant executing nutrition services. Twelve dietetic interns will receive this training in 1964.

Clinical Program

The Nutrition Consultant in the Northeastern Branch Office provides nutrition services at the Crippled Children's Clinic. Selected children are given nutrition and dietary instructions.

The nutritionist for Marian County gives dietary instructions to women at prenatal clinics and to mothers of infants at well-child clinics. The student observed this nutritionist at a prenatal clinic giving instructions on diet during pregnancy.

Co-operation with Other State Agencies and Organizations

The nutrition consultants perform services in conjunction with other state agencies and organizations. Some of the agencies and organizations with whom they work are as follows: the State Department of Public Instruction, State Department of Public Welfare, Indiana Heart Association, State Medical and Dental Associations, State Dietetic Association, Community Services Council, Visiting Nurses' Association, Dairy Council, and State Home Economics Association. It has been discussed previously how the Division of Nutrition co-operates with the Department of Public Instruction, the Department of Public Welfare, Heart Association, and Dental Association.

The members of the nutrition staff exercise leadership roles in the Indiana Dietetic and Home Economics Associations. The Institution Nutrition Consultant is president-elect of the dietetic association. Exhibits to be displayed at meetings of these associations are prepared by the nutrition division.

The student attended a meeting of the Nutrition Committee; this is a sub-committee of the Community Services Council. The president of this committee is the nutritionist in Marian County. This committee assists in determining the nutritional needs of the community. The

committee members stimulate the development of necessary services to promote nutrition education. The purpose of the meeting attended by the student was to collect information regarding frozen school lunches that were served to school children. This was an experimental program to learn what the attitudes of the children would be toward the frozen lunches. The members of the Nutrition Committee observed the children eating the lunches and discussed the lunches with a representative of the company that furnished the lunches.

The student spent two days observing the program of the Visiting Nurses' Association, East Chicago. The student was not familiar with the services provided by this agency. Nurses visit in homes to provide nursing care and health education for patients. The difference between the services of these nurses and the public health nurses is that public health nurses do not provide nursing care.

The Dairy Council provides the nutrition staff with many materials to use in nutrition education programs. Among the materials provided are paper food models, posters, pamphlets, and films. The nutritionist from the Dairy Council and the nutrition consultants work closely on education programs.

The consultants rely upon the Indiana Medical Association to support and assist with nutrition education programs. The medical societies co-operate with the weight control programs by sending a doctor to discuss weight control to members of the classes. Referral of patients in clinics for nutrition education requires the co-operation of the doctors. These are only two of the many ways in which the

nutrition consultants and medical doctors work together in nutrition education programs.

Mass Communication

The nutrition division selects and provides nutrition educational materials for professional and lay use. Educational materials, both commercial and non-commercial, are selected from the standpoint of suitability, availability, and cost. The nutrition division loans educational materials. Wax food models, films, slides, posters, and books may be borrowed by educators. The central office stock room fills orders for literary materials. A supply of limited and unlimited printed materials is provided through this office.

The nutrition staff prefers to use available educational aids if these meet the need. If aids do not meet the need, the staff prepares appropriate nutrition materials. The information writer and health educators assist the staff in preparing pamphlets and leaflets on nutrition education. The artists in the Division of Health and Physical Education assist nutrition consultants in illustrations for posters and exhibits. The nutrition exhibit displayed at the Indiana Home Economics Association meeting was prepared by the Division of Nutrition and the Division of Health and Physical Education.

The film library at the State Board of Health maintains and supplies films and filmstrips for educational programs. The nutrition consultants often help agencies and organizations select the appropriate film or filmstrip.

The nutrition staff assumes the responsibility for nutrition articles to be published in the publication, "The Monthly Bulletin", at the State Board of Health. The members of the staff participate in radio and television programs throughout the state. It is usually on request from a given agency that a nutrition consultant participates in a radio or a television program.

Planning and Evaluation of the Nutrition Program

The staff of the nutrition division plans the nutrition program on the basis of the Division's major objective. As stated previously, this objective is to improve the health status of the people through the development of good food habits. Health statistics and dietary surveys indicate to the staff what segment of the population needs help and what type of nutrition program needs to be planned. The nutrition consultants must select the activities which will be most effective in promoting the nutrition education program. Many nutrition services are provided through programs of official and non-official health agencies. Co-operation in planning and evaluating the nutrition program from other members of public health and allied agencies are invaluable.

Much of the program planning for the nutrition division is built around the licensing program for institutions. Since the State Board of Health is administratively responsible for the licensure of hospitals and health facilities within the state, the nutrition staff assist divisions in surveys of dietary departments in institutions. Consultation services regarding food service to these institutions constitutes

approximately 44 per cent of the nutrition staff's time.

Another service which receives priority in program planning is that of the school lunch. The consultants do administrative reviews of the school lunch programs and consult with lunchroom managers on improving these programs. The nutrition division believes the school lunch program should educate the children in practical nutrition as well as to provide them with a nutritionally adequate lunch.

It has been recognized that the evaluation of nutrition education programs is a difficult process. Measurable results from changes of food habits may be years in the making; however, the staff can measure the results of many of their services. Re-surveys of hospital and health facility dietary departments indicate the effectiveness of their education program. Improvements in menus planned, food preparation, clean-up procedure and department organization are easily detected. The staff believes that training programs held periodically for hospital personnel and for school lunch personnel have increased the dietary personnel's knowledge of basic nutrition. The increasing number of requests for nutrition services indicates a growth of the program. This increase may be an indication of more extensive use of nutrition services or it may illustrate an increased awareness of the importance of nutrition education.

Periodical evaluation of previous and current programs is essential in planning a nutrition program to meet the nutritional needs of the people. Activities must be adapted to new programs.

SUMMARY AND EVALUATION

The student has reported selected experiences and observations during her seven weeks' period of field training with the Indiana State Board of Health. The training program was planned to acquaint the student with a state-wide nutrition program and to increase her understanding of the functions of the Division of Nutrition. Field experiences were planned so the student could learn how the nutrition program is an integral part of the total health program.

Through participation, observation, and conferences with the nutrition consultants, the student gained an understanding of the nutrition program. The student spent approximately two weeks in orientation to health services for institutions. Surveys of health facilities and a hospital were observed. The public health staff surveying the health facilities and hospital discussed the findings with the administrators. The student read the narrative reports of surveys written by a nutrition consultant, a sanitarian, or an advisory nurse. Conferences with public health personnel and institutes for operators of health facilities provided the student with information on services to institutions. Field experiences which provide opportunity to observe institution services and to participate in school lunch programs were particularly valuable to the student. The methods and techniques used by the nutrition consultants were observed. The student became aware that the consultants must have skill in presenting nutrition information as well as a thorough knowledge of basic nutrition

facts. The consultants must have the ability to co-operate fully with the staff of health agencies in executing nutrition programs. The nutrition consultants help administrators of institutions understand that a desirable improvement in service is the basis for recommended changes, not the compliance to regulations. The observations made by the student will help her in the future to offer consultation services to food service managers of institutions and school lunches.

The student became better acquainted with the over-all health program through conferences with division directors and staff personnel. The student increased her appreciation and knowledge of the work of public health personnel. She understands how nutrition activities are correlated with other activities of the official health agency.

The student became aware of how the nutrition consultants and staff members of agencies concerned with nutrition education co-operate within a community. The student had conferences with personnel from the Community Service Council, the Department of Public Welfare, the Dairy Council, and the Trustee's Office to learn their role in nutrition education. The student attended meetings of the Nutrition Committee and the Dental Health Committee to observe how members exchange ideas and plan nutrition education activities and programs. The student spent two days with the Visiting Nurses' Association, East Chicago, observing their program.

Due to the excellent planning of the field experience by the Director of the Division of Nutrition, the student was able to meet

her objectives for this field training. The program of activities planned for the student has supplemented her four years of experience with a local health department in Kentucky and her academic studies at the University of Tennessee. Training has helped prepare the student to accept the responsibilities of planning, executing, and evaluating a nutrition education program.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Indiana State Chamber of Commerce 1963-64 Here is Your Indiana Government. Indianapolis, Indiana. p. 97.
2. Indiana Writers' Project 1941 A Guide to the Hoosier State. Oxford University Press, New York, New York.
3. Indiana State Government 1962-63 Indiana Almanac and Governmental Guide. Indianapolis, Indiana.
4. Indiana State Board of Health 1962-63 Annual Report. Indianapolis, Indiana.
5. Indiana State Board of Health 1962 Indiana Vital Statistics. Indianapolis, Indiana. p. 1.
6. Indiana State Board of Health February 1964 The Monthly Bulletin. Indianapolis, Indiana. p. 10.
7. Indiana State Board of Health March 1964 The Monthly Bulletin. Indianapolis, Indiana. p. 14.
8. Indiana State Board of Health 1959 A Guide to Public Health Nursing in Indiana. Indianapolis, Indiana. p. 1.
9. Rice, Thurman B. 1947 The Hoosier Health Officer. Indianapolis, Indiana.
10. Indiana State Board of Health 1962 The Health and Life of the Citizens of this State. Indianapolis, Indiana. p. 14; 23.
11. Indiana University 1963 Final Report, School and Community Health Workshop. Bloomington, Indiana. p. 12.
12. Indiana State Board of Health January 1964 The Monthly Bulletin. Indianapolis, Indiana. p. 4; 13.
13. Indiana State Board of Health 1964 Health Facilities Regulations, State of Indiana. Indianapolis, Indiana. p. 4.

APPENDIX

APPENDIX CONTENTS

	PAGE
Specifications for Nutrition Consultant Positions,	
Indiana State Personnel Division.	48
Monthly Activity Report, Division of Nutrition.	53
Food Service Program for Children's Homes	57
Food Service Program for Day Nurseries.	62
Inspection Form for Health Facilities, State Board of Health. . . .	66
Menu Planning Check List, State Board of Health	67

SPECIFICATIONS FOR NUTRITION CONSULTANT POSITIONS
INDIANA STATE PERSONNEL DIVISION

PUBLIC HEALTH TRAINEE VIII
August 1957

KIND OF WORK

This is beginning level work on a division of State Board of Health. Trainees are selected on a competitive basis and are assigned to one of the divisions for training and assimilation of public health practices and theories. Assignments are made on basis of appropriate college training. Work is performed under close supervision and guidance. Trainees work in central office and field as required. Work performed is of a responsible kind and incumbents must demonstrate ability to assimilate instruction given. Employees will be retained on trainee level for a minimum period of one year up to a maximum period of two years.

EXAMPLES OF WORK (Illustrative only)

Beginning level work in division to which assigned.

REQUIREMENTS FOR WORK

Fundamental knowledge of a chosen field as evidenced by completion of college training.

Ability to receive instruction pertaining to public health, and to assimilate and apply such instruction.

MINIMUM EDUCATIONAL REQUIREMENTS

FOR POSITIONS NOT REQUIRING A STATE LICENSE:

Graduation from an accredited four-year college with specialization in one of the following fields: chemistry, a biological science, dairy technology, engineering, or foods and nutrition.

FOR POSITIONS REQUIRING A STATE LICENSE:

For health educators: license to teach health education, physical education, home economics, or biology in state; or license to teach social sciences provided minor course work has been in one of above mentioned fields.

A degree in public health education may be substituted for license requirement.

Formal training required will be identical to that preparatory for licensing in above fields.

NUTRITIONIST XIII
June 1963

KIND OF WORK

This work involves planning, promoting, supervising and participating in a program of education in foods and nutrition at branch or

state level. Consultative service is given to public health nurses, teachers, social workers, administrators of child-care institutions and homes for aged and interested community groups. Supervision of work plans and policies is received from the Director of the Division of Nutrition.

EXAMPLES OF WORK (Illustrative only)

Supervises lower level nutritionists and assists in planning and implementing nutrition education programs.

Supervises field training experience in community nutrition programs for dietetic interns and for graduate students in public health.

Assists in in-service training programs in nutrition for public health nurses, teachers and social workers.

Cooperates with school administrators and community leaders in organizing and holding school lunch institutes for nutritional improvement of the school lunch program.

Consults with architects and school officials on efficient food service layouts for school lunch programs.

Makes surveys of food service in children's institutions and homes for aged as requested.

Provides consultation to agencies and professional or lay groups in regard to nutrition programs.

Prepares nutrition education publications.

Performs related work as assigned.

REQUIREMENTS FOR WORK

Extensive knowledge of principles and practices of nutrition as applied to public health programs.

Working knowledge of problems and operation of food service in schools and small institutions.

Working knowledge of methods and techniques of disseminating nutrition information to the public.

Ability to determine nutrition problems and to help solve them.

Ability to prepare articles and give effective talks, and to use visual material such as motion pictures, exhibits and demonstrations.

Ability to drive an automobile as evidenced by possession of a valid Indiana automobile operator's permit.

MINIMUM EXPERIENCE AND EDUCATIONAL REQUIREMENTS

Three years of full-time paid experience in the field of nutrition.

Graduation from an accredited four-year college with a degree in home economics with a major in foods and nutrition.

Completion of one year of graduate training in nutrition or public health nutrition or the completion of a one year dietetic internship may be substituted for one year of the required experience.

Two years of full-time paid experience in public health nutrition may be substituted for the required three years of experience as a nutritionist.

NUTRITIONIST XVI
August 1962

KIND OF WORK

This work involves planning, promoting and directing a state-wide program of dietary assistance to hospitals, nursing homes and other small institutions on a state-wide basis. Employee plans, organizes, supervises and participates in institution nutrition activities. Work is planned and carried out subject to general direction and approval of the Nutrition Division Director.

EXAMPLES OF WORK (illustrative only)

Supervises lower level nutritionists.

Makes surveys of food service in hospitals or other institutions, prepares reports of surveys and field trips, and makes recommendations for improvement of food service.

Cooperates with State Dietetic Association, Hospital Association, Home Economics Association, and other agencies in organizing and carrying out training institutes and other forms of in-service training for institution food handling personnel.

Organizes and carries out in-service training for institution administrators and food handlers, such training to include interpretations of Recommended Food Allowances of National Committee on Foods and Nutrition of the National Research Council, meal planning, food buying, food storage, food preparation, food serving, record keeping, and work organization.

Interprets efficient food service requirements to local hospitals and committees.

Consults with architects, state and private, on efficient food service layouts for hospitals.

Cooperates with various divisions and other agencies.

Supervises field training experience regarding institutional phases of nutrition program for graduate students in public health.

Performs related work as assigned.

REQUIREMENTS FOR WORK

Extensive knowledge of principles and practices of nutrition and institutional food service which will give a basis for understanding situations met in public health programs.

Extensive knowledge of problems and operation of small and large hospitals pertaining to nutrition and food service.

Ability to analyze situations and recommend practical solutions.

Ability to develop educational material needed to improve food service in institutions.

Ability to gain confidence of and cooperate with hospital administrators, and food handlers, and professional and lay groups.

MINIMUM EXPERIENCE AND EDUCATIONAL REQUIREMENTS

Five years of full-time paid experience in the field of nutrition, two years of which shall have been in a public health department.

Graduation from an accredited four-year college or university with a degree in home economics with a major in foods and nutrition; completion of an approved dietetic internship, and one year of graduate study leading to a Master's degree in nutrition or dietetics.

NUTRITION DIVISION DIRECTOR XIX

August 1962

KIND OF WORK

This work is of an advanced advisory and technical character in developing and carrying out a nutrition program in the state. The position carries responsibility for recruitment, selection, training and supervision of a staff of nutritionists. Work involves maintaining working relationships with professional and lay groups interested in health. Work plans and policies are subject to administrative review.

EXAMPLES OF WORK (Illustrative only)

Develops policies and nutrition program, subject to administrative review. Defines the types of positions, duties and responsibilities of nutritionists needed, and formulates job descriptions.

Supervises all nutritionists in the Division of Preventive Medicine and administers an in-service training program.

Gives consultant service in nutrition to all sections of the Division of Preventive Medicine and other agencies and organizations.

Correlates public health nutrition service with other nutrition services in the state.

Cooperates with universities and colleges in the planning and operation of workshops for personnel, such as school lunch and elementary teachers.

Cooperates with universities and colleges in providing field training experience for graduate students in public health nutrition.

Develops plans for institutes on feeding problems for personnel of such institutions as hospitals, children's homes, day nurseries, and county homes.

Gives talks and lectures on nutrition to professional, school, and lay groups.

Prepares nutrition subject material as needed.

Performs related work as assigned.

REQUIREMENTS FOR WORK

Extensive knowledge of principles and practices of nutrition, and ability to apply them to public health, individual, and family food problems.

Extensive knowledge of developments in the field of public health work as related to nutrition.

Extensive knowledge of nutrition programs of other governmental, health and welfare agencies.

Ability to select, train, and supervise personnel.

Ability to prepare and deliver effective talks to professional and

lay groups and present material through use of such media as motion pictures, exhibits, and demonstrations.

Ability to work with professional and community leaders.

Ability to drive an automobile as evidenced by possession of a valid Indiana automobile operator's permit.

MINIMUM EXPERIENCE AND EDUCATIONAL REQUIREMENTS

Six years of full-time paid experience in the field of nutrition, three years of which shall have been in a public health department including one year in a responsible supervisory capacity.

Graduation from an accredited four-year college with a degree in home economics, with a major in foods and nutrition; completion of one year of graduate work in nutrition or dietetics leading to a Master's degree; and completion of an approved dietetic internship.

MONTHLY ACTIVITY REPORT, DIVISION OF NUTRITION

(Month Reporting) (Year)

Name _____ Position _____

Days Worked _____ Days Vacation _____ Sick Leave _____ Travel and Per Diem _____

Days in Office _____ In Field _____

Report (by days or half days) time spent in both General Areas and Specific Divisions. Days reported in each column should total official time on duty.

SPECIFIC DIVISIONS

_____ Administration
 _____ Environmental Sanitation
 _____ Food and Drug
 _____ Public Health Nursing
 _____ In-Service Training
 _____ Dental
 _____ Dental Health Programs
 _____ Chronic Disease & Gerontology
 _____ Heart
 _____ Diabetes
 _____ Rehabilitation
 _____ Tuberculosis
 _____ Programs for Aging
 _____ County Homes for Aged
 _____ Surveys
 _____ Consultant Service

_____ Institutions
 _____ Hospitals
 _____ Surveys
 _____ Consultant Service
 _____ Institutes
 _____ Children's Institutions
 _____ Surveys
 _____ Consultant Service
 _____ Institutes
 _____ Maternal and Child Health
 _____ Expectant Parents' Classes
 _____ Crippled Children's Clinic
 _____ Adult Education Programs
 _____ School Health
 _____ Preschool Conferences
 _____ Nutrition Education Programs

(1) Telephone ___ Interoffice ___ Local ___ Long Distance ___
 CONFERENCES (number) (2) Personal: With staff members ___ Non-staff members ___
 Visitors to office ___ Field Contacts ___

Schools Visited: Elementary ___ Secondary ___ College ___
 SCHOOLS (number) Conferences with School Personnel: School Administrators ___
 Home Economics Teachers ___ Classroom Teachers ___
 School Lunch Managers ___ School Lunch Cooks ___ School Nurses ___

Letters and memorandum ___ Reports ___
 MATERIALS (number) Circular Letters: Written (number) ___ Circulation ___
 Pamphlets ___ Flyers ___ Posters ___ Exhibits ___
 Other _____

List Special Materials Prepared (attach sample copies)

Professional Meetings Attended

(As Program Participant list activity) (As Non-Participant)

Non-Professional Meetings Attended

(As Program Participant list activity) (As Non-Participant)

Special Committee Meetings

Committee

Purpose

Special Activities

Special activities such as tours, film showings, etc. (List group & number attending)

Cooperation given other official agencies, voluntary health agencies, health councils or health associations.

Agency, Council or Association	Days Spent	Type of Assistance

ATTACH NARRATIVE REPORT

(Report pertinent points of activities which fit into long-range objectives or those which have greater health education implications than the routine.)

FOOD SERVICE PROGRAM FOR CHILDREN'S HOMES

Date _____

Name of Home _____

Location _____

To the Indiana State Department of Public Welfare:

The authorities of the children's home named above certify that the completed form presented hereinafter represents the food service program for this institution. They submit this program in pursuance of licensure of the named home as a demonstration of their intent to satisfy all items which relate to health requirements in "Rules and Regulations, Title 3, Chapter 3," issued under Chapter 185, Acts of 1945.

The governing authority and their administrator, in charge of the food service program of this institution hereby declare it to be their intent to carry out the provisions of this program.

GENERAL INFORMATION

Number of children for whom care is contemplated _____

Age range of children _____

Name and position of person responsible for coordinating the food service
_____A. Provisions for Planning Menus (Reg. 3-314):

1. Name and position of person responsible for planning menus:

Previous work experience:

2. Menus will be planned daily, weekly, or monthly. (Underline answer which applies.)
3. Dated menus will be posted (where) _____

Past menus will be kept in a file (where) _____

Past menus will be kept for (period of time) _____

4. Proposed meal pattern to be followed daily: (Check the type of food to be served.)

BREAKFAST Time of Service _____

Fruit or juice	_____
Cereal with milk	_____
and/or egg	_____
Toast and butter	_____
Milk	_____

MIDMORNING SNACK Time of Service _____

Fruit	_____
Milk	_____
Other (explain)	_____

LUNCH Time of Service _____

Meat, fish, cheese, eggs or	
dried beans	_____
Vegetable (raw or cooked)	_____
Bread and butter	_____
Fruit or simple dessert	_____
Milk	_____

MIDAFTERNOON SNACK Time of Service _____

Fruit	_____
Milk	_____
Other (explain)	_____

DINNER OR SUPPER Time of Service _____

Meat or fish	_____
Potato or substitute	_____
Vegetable	_____
Salad	_____
Bread and butter	_____
Fruit or simple dessert	_____
Milk	_____

EVENING SNACK Time of Service _____

Fruit	_____
Milk	_____
Other (explain)	_____

Will one good or two fair sources of vitamin C-rich foods be served daily? _____

Will four servings of dark green or deep yellow vegetables or fruits be served every week? _____

Will eggs be served at least four times a week? _____

5. Will a child needing a therapeutic diet be admitted to the home? _____

Will therapeutic diets be served when ordered by a physician? _____

Name and position of person who will be responsible for planning therapeutic diets _____

B. Provision for Food Preparation (Reg. 3-314)

1. Name and position of person responsible for supervising the cook(s)

2. List name(s) of cooks, days and hours to be worked, and previous work experience for each person(s) responsible for food preparation:

Name	Days and Hours
------	----------------

Previous Experience

Name	Days and Hours
------	----------------

Previous Experience

Name	Days and Hours
------	----------------

Previous Experience

3. Outline the duties of the cook(s):

4. List source(s) of recipes to be used:

5. Will food donations be accepted? _____

If answer is yes list the kinds of foods which will be considered acceptable:

6. Will any food be canned or frozen in the home? _____

If answer is yes indicate the following:

Kind of Food

Method of Preservation

C. Provisions for Dining Room and Kitchen Furnishings (Reg. 3-312)

1. Will the dining room tables and chairs be of suitable height and construction to enable the children to be seated comfortably? _____

2. Number of children to be seated per table: _____

3. Position of person who will be responsible for seeing that small equipment supply is adequate and replacements are made as needed: _____

4. Position of person who will be responsible for checking the working order of kitchen equipment and contacting the appropriate person for repair service: _____

D. Provisions for Serving Food (Reg. 3-314)

1. The food will be served family, cafeteria or other style.
(Underline answer which applies)

Other (explain) _____

Will second servings be available to the children? _____

2. Will milk be served from the original container? _____

Other (explain) _____

3. Will an adult be assigned to eat at each table? _____

4. How will good eating habits be encouraged? _____

E. Provisions for Clean Facilities (Reg. 3-314)

1. Will cleaning procedures and cleaning schedules be written and posted? _____
2. Position of person responsible for planning and writing cleaning procedures and cleaning schedules: _____

3. Position of persons responsible for supervising cleaning procedures: _____

Position of persons responsible for cleaning kitchen and dining areas _____

F. Provisions for an Adequate Diet for Children Under Two Years of Age (Reg. 3-324)

1. What arrangements will be made to provide each child under two years of age with an adequate diet?

Approval Dates:

President of Governing Board

Administrator

Indiana State Board of Health
Nutrition Division
April 1964

FOOD SERVICE PROGRAM FOR DAY NURSERIES

Date _____

Name of Nursery _____

Location _____

To the Indiana State Department of Public Welfare:

The authorities of the day nursery named above certify that the completed form presented hereinafter represents the food service program for this institution. They submit this program in pursuance of licensure of the named day nursery as a demonstration of their intent to satisfy all items which relate to food service requirements in "Rules and Regulations, Title 3, Chapter 4," issued under Chapter 185, Acts of 1945, Amended January 8, 1964.

The governing authority and their administrator, in charge of the food service program of this institution, hereby declare it to be their intent to carry out the provisions of this program.

GENERAL INFORMATION

Number of children for whom care is contemplated _____

Age range of children _____

List hours the nursery will operate _____

Name and position of person responsible for coordinating the food service _____

A. Provisions for Planning Menus (Reg. 3-440)

1. Name and position of person responsible for planning menus:

Previous work experience related to food service:

2. Menus will be planned weekly, monthly, or on a cycle. (Underline answer which applies.)

3. Dated menus will be posted (where) _____

Past menus will be kept in a file (where) _____

Past menus will be kept for (period of time) _____

Will copies of the menus be sent to parents? _____

4. Proposed meal pattern to be followed daily: (Check the type of food to be served.)

BREAKFAST Time of Service _____

Cereal _____
 Toast, butter or margarine _____
 Milk _____
 Other (explain) _____

MIDMORNING SNACK Time of Service _____

Citrus juice or fruit _____
 Other (explain) _____

LUNCH Time of Service _____

Meat, poultry, fish, or eggs, etc. _____
 Vegetable (two or more servings per week of dark green or deep yellow vegetables). _____
 Another vegetable and/or salad _____
 Bread, butter or margarine _____
 Fruit or simple dessert _____
 Milk _____

MIDAFTERNOON SNACK Time of Service _____

Milk _____
 Cracker or toast stick _____
 Other (explain) _____

B. Provision for Food Preparation (Regulation 3-440)

1. Name and position of person responsible for supervising the cook(s)

2. List name(s) of cooks, days to be worked, and previous work experience for each person(s) responsible for food preparation:

_____	_____
Name	Days

previous experience

Name

Days

previous experience

3. Outline the duties of the cook(s):

4. List source(s) of recipes to be used:

C. Provision for Serving Food (Regulation 3-440)

1. Will an adult be assigned to eat at each table? _____
2. Number of children to be seated per table? _____
3. Will the dining room tables and chairs be of suitable height and construction to enable the children to be seated comfortably? _____
4. Which of the following will be provided? (Check answer which applies.)

_____ glass	(indicate size) _____
_____ napkins	
_____ spoons	
_____ forks	(indicate size) _____
_____ knives	

5. The food will be served family, cafeteria, or other style.
(Underline answer which applies.)

Other (explain) _____

Will second servings be available to the children? _____

6. How will good eating habits be encouraged? _____

D. Provisions for Clean Facilities (Regulation 3-440)

1. Will cleaning procedures and cleaning schedules be written and posted? _____
2. Position of person responsible for planning and writing cleaning procedures and cleaning schedules:

3. Position of person responsible for supervising cleaning procedures:

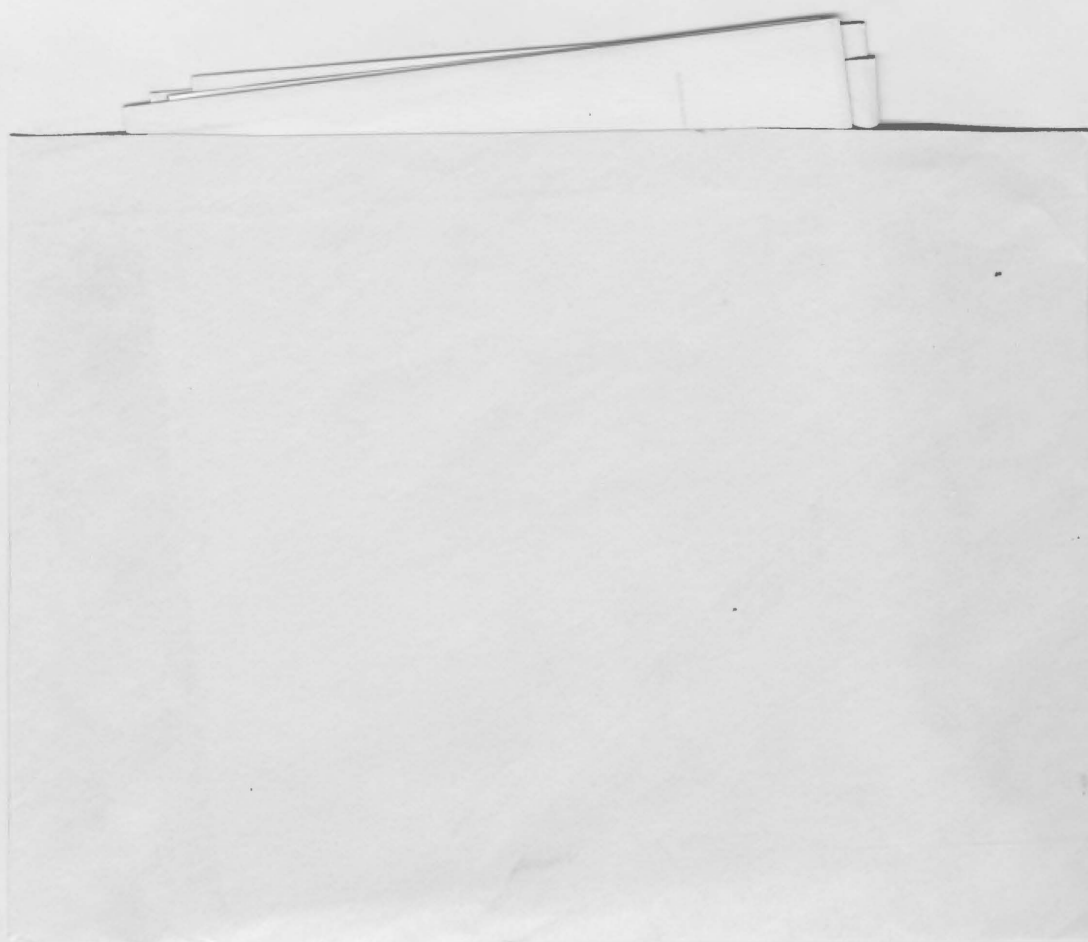
Position of person(s) responsible for cleaning kitchen and dining areas:

Approval Dates:

President of Governing Board
or Owner

Administrator in Charge

4/64



INSPECTION FORM FOR HEALTH FACILITIES
STATE BOARD OF HEALTH

INDIANA STATE BOARD OF HEALTH
1330 WEST MICHIGAN STREET
INDIANAPOLIS, INDIANA 46207

NUMBER OF PATIENTS _____

NUMBER OF RESIDENTS _____

INSPECTION FORM FOR HEALTH FACILITIES

NAME OF FACILITY _____ OPERATED BY _____

ADDRESS _____ CLASSIFICATION _____

STREET

CITY

COUNTY

A SURVEY OF YOUR FACILITY HAS BEEN MADE THIS DATE AND YOU ARE HEREBY NOTIFIED OF THE NONCOMPLIANCES MARKED WITH AN X. YOU ARE REQUESTED TO NOTIFY THE STATE BOARD OF HEALTH WITHIN 30 DAYS OF THE DEFICIENCIES YOU HAVE CORRECTED AND YOUR PLANS FOR CORRECTING THOSE WHICH CANNOT BE COMPLETED AT ONCE.

ITEM NO.

COMMENTS

- (1) HHF 2 IN-SERVICE TRAINING PROGRAM FOR PATIENT-CARE PERSONNEL(); AUXILIARY, SOCIAL, MEDICAL AND REHABILITATION SERVICES().
- (2) HHF 4 STAFF QUALIFIED(); STAFF SUFFICIENT(); CURRENT HEALTH CERTIFICATE FOR EACH EMPLOYEE(); NURSING STAFF PERFORM NURSING DUTIES ONLY().
- (3) HHF 6 WRITTEN STATEMENT FROM PHYSICIAN ON HEALTH CONDITION OF AND PRESCRIBED CARE FOR EACH PATIENT WITHIN 48 HOURS OF ADMISSION(); EACH PATIENT EXAMINED ANNUALLY BY PHYSICIAN(); ALL MEDICATION AND THERAPY PRESCRIBED BY PHYSICIAN(); MEDICAL, DENTAL AND NURSING CARE GIVEN AS NEEDED(); MEANS FOR EACH PATIENT TO SUMMON ATTENDANT(); TELEPHONE AVAILABLE(); CHILDREN IN HOME ONLY WITH APPROVAL OF BOARD WHERE ADULTS ARE HOUSED().
- (4) HHF 7 RESTRAINT AND/OR SECLUSION USED ONLY WITH PHYSICIAN'S SIGNED ORDER AND OBTAINED WITHIN 24 HOURS(); COMPLETE DAILY RECORD KEPT OF RESTRAINT AND/OR SECLUSION().
- (5) HHF 8 FACILITY IS SIGHTLY(); NOT NEAR HEALTH HAZARDS OR NUISANCE CONDITIONS(); ADEQUATE, SEPARATE AND EASILY ACCESSIBLE LOUNGE-DINING AREA(); ALL EXTERIOR OPENINGS EXCEPT FIRE EXITS SCREENED(); ADEQUATE FACILITIES FOR ISOLATION OF PATIENT WHEN NECESSARY(); NATURAL LIGHTING AUGMENTED WHEN NECESSARY(); ROOM ARRANGEMENT ADEQUATE(); ROOMS NOT BELOW GRADE LEVEL(); ROOMS HAVE SUFFICIENT WINDOW AREA(); ADEQUATE FURNITURE FOR EACH PATIENT(); BED SPACING AND EGRESS AISLE SATISFACTORY(); 500 CUBIC FEET AIR SPACE FOR EACH BED(); FLAMEPROOFED SCREENS(); OXYGEN CONTAINERS SUITABLY ANCHORED AND PROPERLY STORED(); PATIENT ROOMS NOT LESS THAN 8 x 10 x 8().
- (6) HHF 9 ADEQUATE, WELL-LIGHTED AND CONVENIENTLY-LOCATED WATER CLOSET, BATHING AND LAVATORY FACILITIES(); RUBBER MATS, GRAB BARS, ETC., SUITABLY INSTALLED AND USED(); PROVISIONS FOR SUITABLE AND SANITARY CARE OF BEDPANS AND DISPOSAL OF CONTENTS(); APPROVED ANTISCALD DEVICE FOR ALL BATHING FACILITIES AND LAVATORIES(); COMMON TOWELS, WASHCLOTHS AND TOILET ARTICLES NOT IN USE().
- (7) HHF 10 APPROVED WATER SUPPLY(); PUBLIC(); PRIVATE(); SAMPLE TAKEN().
- (8) HHF 11 ALL PLANS SUBMITTED BEFORE CONSTRUCTION IS STARTED TO THE SFM, SBH, AND ABC(); FACILITY LOCATED ON ALL-WEATHER ROAD WITH FIRE, MEDICAL AND PUBLIC UTILITIES READILY AVAILABLE().
- (9) HHF 12 ADEQUATE DIETS SERVED(); QUALITY, QUANTITY AND PREPARATION OF FOOD MEETS PATIENTS' NEEDS(); MENUS PLANNED A WEEK IN ADVANCE, DATED AND FILED(); CURRENT GENERAL AND THERAPEUTIC MENUS POSTED IN KITCHEN AND FOLLOWED(); RECIPES USED(); DIET PRESCRIPTIONS ARE CURRENT(); THERAPEUTIC DIETS SERVED AS ORDERED(); APPROVED DIET MANUAL USED(); SUITABLE TRAY STAND PROVIDED(); FOOD SERVED ATTRACTIVELY AND AT PROPER TEMPERATURES WITH APPROPRIATE FLATWARE(); TRAYS PROPERLY IDENTIFIED(); PATIENTS' FOOD PREFERENCES RECORDED(); SUPPER AND SUCCEEDING BREAKFAST SERVED WITHIN 14 HOURS(); 24-HOUR PERISHABLE AND 3-DAY NON-PERISHABLE FOOD SUPPLY AVAILABLE().
- (10) HHF 13 KITCHEN AND DINING ROOM FACILITIES, EQUIPMENT AND UTENSILS MEET SBH REGULATIONS HFD 17(); FROZEN FOODS KEPT AT 0° F. OR BELOW(); ACCURATE INDICATING THERMOMETERS FOR COLD FOOD STORAGE FACILITY(); FOOD STORAGE AREA ADEQUATE AND WELL-VENTILATED(); FOOD STORED OFF FLOOR(); FOOD PROTECTED FROM CONTAMINATION(); EATING, DRINKING AND COOKING UTENSILS WASHED AND SANITIZED IN APPROVED MANNER(); ADEQUATE AND CONVENIENT HANDWASHING FACILITY FOR KITCHEN HELP(); GARBAGE AND TRASH KEPT AND DISPOSED OF IN APPROVED MANNER(); INSECT AND RODENT CONTROL SATISFACTORY(); POISONOUS COMPOUNDS PROPERLY LABELED AND STORED SEPARATELY FROM ALL FOODS(); MILK AND MILK PRODUCTS FROM APPROVED SOURCE(); CENTRALLY LOCATED AND WELL-LIGHTED NURSES' STATION(); ADEQUATE, LOCKED, AND WELL-LIGHTED MEDICINE CABINET ADJACENT TO NURSES' STATION(); ADEQUATE SOILED AND CLEAN UTILITY AREAS(); SUITABLE STORAGE FOR SOILED LINEN(); LAUNDRY AREA SEPARATED FROM FOOD SERVICE AREA(); CONVENIENTLY LOCATED JANITOR'S CLOSET WITH UTILITY SINK(); STORAGE AREA CONVENIENTLY LOCATED FOR NURSING EQUIPMENT().

ITEM NO.

COMMENTS

(11) HHF 14 DRUG CABINET CLEAN, ORDERLY AND USED ONLY FOR STORAGE OF DRUGS AND FIRST AID SUPPLIES(); DRUGS AND FIRST AID SUPPLIES STORED IN CABINET WHEN NOT IN USE(); DRUG CABINET KEY ACCESSIBLE ONLY TO AUTHORIZED PERSONS WHO HANDLE, DISPENSE OR ADMINISTER DRUGS AND/OR THERAPY(); EMERGENCY FIRST AID SUPPLIES AUTHORIZED BY ATTENDING PHYSICIAN(); ALL MEDICATIONS PURCHASED, STORED AND DISPENSED HAVE BEEN PRESCRIBED FOR INDIVIDUAL PATIENTS BY ATTENDING PHYSICIAN(); REFRIGERATED AND INDIVIDUAL PRESCRIPTION MEDICATIONS PROPERLY LABELED AND STORED(); NARCOTICS UNDER DOUBLE LOCK(); COMPLETE RECORDS KEPT OF ALL MEDICATIONS AND/OR THERAPY GIVEN(); UNUSED PRESCRIPTION MEDICINES DESTROYED OR RETURNED TO PATIENT BY PHYSICIAN'S ORDER(); PROPER NOTATION ON PATIENT'S RECORD OF DESTROYED OR RETURNED MEDICATIONS(); UNUSED NARCOTICS DESTROYED() .

(12) HHF 15 PATIENTS KEPT IN AREAS NOT APPROVED BY SFM(); AT LEAST ONE RESPONSIBLE ATTENDANT AT ALL TIMES FOR EACH 20 PATIENTS OR FRACTION THEREOF ON EACH FLOOR WHERE PATIENTS ARE HOUSED(); ADEQUATE CENTRAL HEATING SYSTEM(); ADEQUATELY LIGHTED 4' AISLE KEPT CLEAR TO ALL EXITS(); FLAMMABLE LIQUIDS STORED ON PREMISES(); STAIRWAYS PROVIDED WITH HANDRAILS AND NON-SLIP TREADS(); WRITTEN EMERGENCY EVACUATION PLAN AVAILABLE(); APPROVED FIRE EXTINGUISHERS() .

(13) HHF 16 PATIENT AND EMPLOYEE RECORDS KEPT AS PRESCRIBED(); EMPLOYEES' WEEKLY TIME SCHEDULE WRITTEN, DATED AND POSTED() .

MISCELLANEOUS

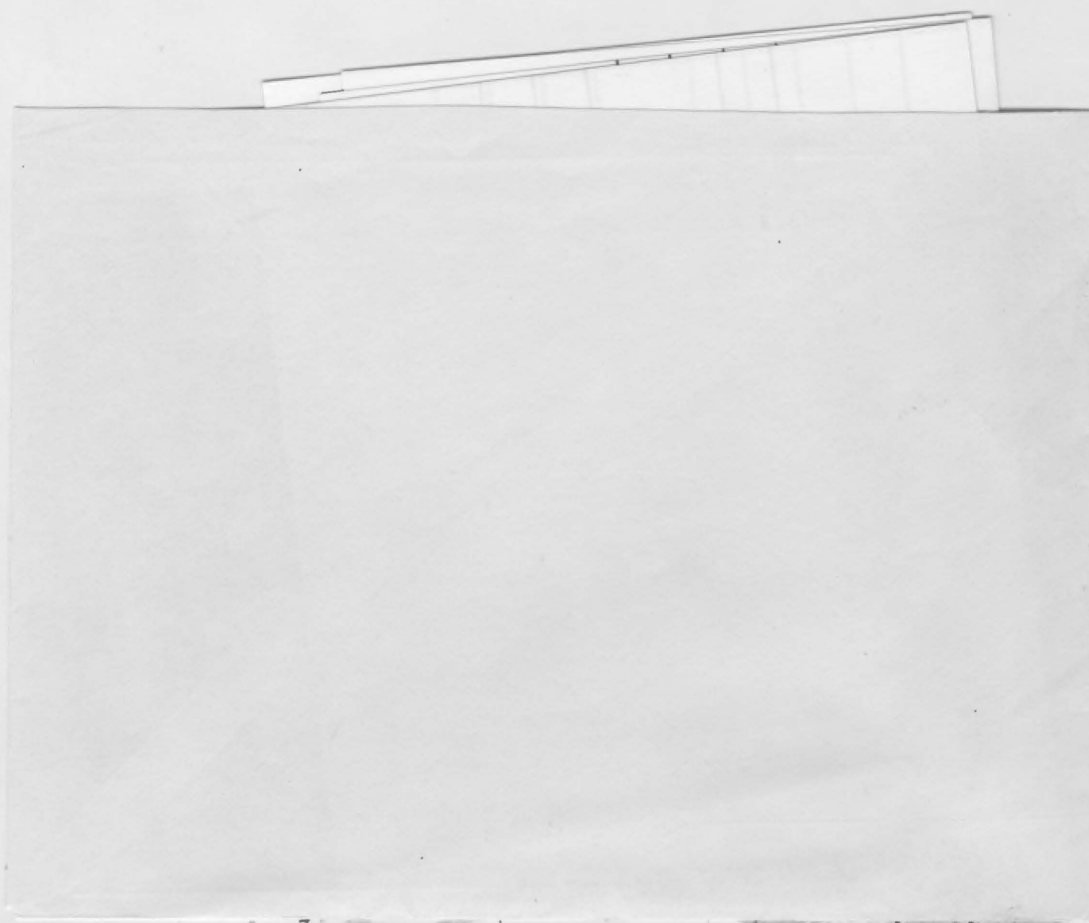
APPROVED CAPACITY OF FACILITY EXCEEDED(); OTHER() .

DATE _____

TIME _____

SIGNATURE OF HEALTH FACILITY OPERATOR OR MANAGER _____

SIGNATURE OF PERSON MAKING SURVEY _____



MENU PLANNING CHECK LIST
STATE BOARD OF HEALTH



Institution _____

Dates of Menus _____

Date Checked _____

Checked by _____

MENU PLANNING CHECK LIST

FOOD GROUP	M	T	W	T	F	S	S	Total
VEGETABLES AND FRUITS Dark green or deep yellow vegetable or fruit or equivalent sources of vitamin A — 4 or more servings per week. <i>1 serving is equivalent to 1/2 cup broccoli, chard, collards, cress, kale, spinach, turnip greens, or other dark green leaves, carrots, pumpkin, sweet potato, winter squash or five apricot halves or 1/2 medium cantaloupe.</i>								
Citrus fruit or equivalent sources of vitamin C — 1 serving per day. <i>1 serving is equivalent to 1/2 grapefruit, 1 medium orange, 1/2 cantaloupe, 1/2 cup strawberries or 1/2 cup orange, grapefruit or blended orange and grapefruit juice.</i> <i>1/2 serving is equivalent to 1 wedge honeydew, 1 tangerine or 1/2 cup tangerine juice, 1/2 cup tomato juice or cooked tomato, 1 medium raw tomato, 1/2 cup broccoli, Brussels sprouts, raw cabbage, collards, kale, mustard greens, spinach or turnip greens.</i>								
Potato and other vegetables and fruits — 2 to 3 servings daily to make a total of four servings. With the above fruits and vegetables, should be distributed throughout the three meals. <i>1 serving is equivalent to 1/2 cup of vegetable or fruit, or a usual serving such as one medium apple, banana, peach or potato.</i>								
MILK Milk, fluid whole, skim, buttermilk or equivalent — 2 cups daily for adults, 4 cups daily for children. <i>1/2 cup milk is equivalent to 1/4 cup undiluted evaporated milk, 2 tablespoons non-fat dry milk, *1 thick slice cheddar cheese, 1/2 cup custard or milk pudding, 1 serving cream soup made with milk, 1 serving milk used on cereal.</i> <i>1/4 cup milk is equivalent to 1/2 cup ice cream, *1 thin slice cheddar cheese, *1/2 cup cottage cheese.</i>								
MEAT AND OTHER PROTEIN FOODS Meat, poultry, fish or protein equivalent — 5 ounces per day used in the dinner and supper. <i>1 ounce is equivalent to 1 ounce of lean beef, veal, lamb, pork, poultry, fish, sea food or variety meats such as liver, heart or kidney, 1 frankfurter, 1 thick slice luncheon meat, *1 thick slice of cheese, *1/4 cup cottage cheese, 1 egg, 1/2 cup dried beans or dried peas, 2 tablespoons peanut butter.</i>								
Egg — 4 or more per week.								
BREAD AND CEREALS Bread and cereals, whole grain or enriched — 4 or more servings per day. <i>1 serving is equivalent to 1 slice of bread, 1 roll, muffin or biscuit, 1 ounce ready to eat cereal, 1/2 to 3/4 cup cooked cereal, cornmeal, grits, rice, macaroni, noodles or spaghetti.</i>								
OTHER FOODS Butter or fortified margarine — 3 or more teaspoons per day used as a spread or in cooking.								
IS there meat or another protein food (above) in each dinner and supper?								
IS there at least one serving of a fruit and/or vegetable in each meal?								

*If serving of cheddar or cottage cheese is being counted as a milk equivalent, it should not also be counted as a meat equivalent.