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Nutrition Field Observations and Experiences in the State of Louisiana

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To the Graduate Council:

I am submitting herewith a thesis written by Marion Elizabeth Brannon entitled "Nutrition Field Observations and Experiences in the State of Louisiana." I have examined the final electronic copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Mary Nelle Traylor, Major Professor

We have read this thesis and recommend its acceptance:

Harold H. Walker, Bernadine Meyer

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)

NUTRITION FIELD OBSERVATIONS AND EXPERIENCES
IN THE STATE OF LOUISIANA

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
Marion Elizabeth Brannon

August 1965

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Special gratitude is due Miss Mary Nelle Traylor, the student's major professor, for her guidance. Appreciation is extended Dr. Harold H. Walker, Department of Public Health Education, The University of Tennessee, and Dr. Bernadine Meyer, Department of Food Science and Institution Management, The University of Tennessee, for their assistance.

M. E. B.

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CHAPTER I

INTRODUCTION

The purpose of this report is to present the student's observations and experiences during seven weeks of field training with the Nutrition Section of the Louisiana State Board of Health. Throughout this period the student had her headquarters with the Chief of the Nutrition Section in the central office of the State Board of Health in New Orleans. Seven days were spent in the central office in orientation to the various divisions and sections of the State Board of Health, in conferences with the Chief of the Nutrition Section, in discussions with the research nutritionists on the dietary-atherosclerosis project, and in writing the April issue of "Confidentially Speaking," the monthly publication of the Nutrition Section. During the seven weeks the student spent some time with each of the five public health nutritionists in the state. Four days were spent with the half-time nutritionist who works only in Tangipahoa Parish with emphasis on a maternal and child health project. Two days were spent with the nutritionist in Jefferson Parish. Four days were spent with the regional nutritionist in the northwest region, and three days were spent with the regional nutritionist in the southwest region, two days of which were with the local nutritionist in Calcasieu Parish. The student spent four days in the dietary department at Ochsner Foundation Hospital for orientation to hospital dietetics since she had had no institutional experience. During the three-day convention of Southern

Branch of the American Public Health Association the student attended the meetings of the nutrition section and had individual conferences with the nutritionists from the Dallas region of both the Children's Bureau and the United States Public Health Service. A two-day Food Service Institute of the Louisiana Dietetic Association was attended by the student. Other experiences included: a day with Dr. Grace Goldsmith and staff at Tulane University School of Medicine; a day with the staff of the school lunch program of Orleans Parish; a day with the research dietitian on Dr. Walter Unglaub's staff at Tulane Medical School; a conference with the teaching dietitian at Hotel Dieu Hospital's School of Nursing; a tour of the Federal Food and Drug Administration's regional facilities in New Orleans; a visit to the Bio-Medical Computing Center of Tulane University; and trips to two nursing homes, the Hammond State School for retarded children, and the United States Public Health Service Leprosarium at Carville.

While much information was gleaned concerning state and local nutrition programs, the information reported here is restricted because of the impossibility of grasping the full extent of the program in this limited amount of time. It is hoped that this report will reflect the progressiveness and the effectiveness of the nutrition program of the Louisiana State Board of Health.

Louisiana was chosen as the location of field experience because the student plans to work in the Southeast. It was also chosen because, in addition to having an excellent nutrition program in the State Board of Health, there were other organizations that offered further observations and experiences in the field of nutrition.

Since the student's background included no public health work, one of her primary objectives for field work was to supplement her academic training with first-hand information gained through observation and participation in public health nutrition programs. Another objective was to obtain an understanding of the work of nutritionists on the state, regional, and local levels. The third objective was to gain some knowledge of hospital dietetics since the student had had no previous dietetic experience.

Information gained in the field experience is discussed and summarized in the following four chapters. In Chapter II Louisiana's geography, culture, and some statistics are given. Chapter III contains a discussion of the history and organization of the Louisiana State Board of Health, the first state board of health in the continental United States. In Chapter IV the history, organization, and functions of the Nutrition Section of the Louisiana State Board of Health are presented. In Chapter V the field experience is summarized and evaluated in terms of stated objectives.

CHAPTER II

THE STATE OF LOUISIANA

In any work with people it is advantageous to know the people well in order to meet their needs most effectively. This is particularly true in the nutrition work of a state health department. A knowledge of the state provides insights into the problems of the people. In order to understand the needs of the people for whom nutrition services are planned, consideration should be given to the state's geography, culture, and health statistics.

A study of the geography of the state reveals some of the assets and liabilities that help to determine the economic capabilities and limitations of the people. The cultural background of the people, as well as the resources with which they have to work, are determining factors in the food that is eaten. Health statistics are a basic consideration in planning and evaluating nutrition programs.

I. GEOGRAPHY

One of the South Central states, Louisiana is bounded on the west by Texas, on the north by Arkansas, on the east by Mississippi and the Gulf of Mexico, and on the south by the Gulf of Mexico. The Mississippi River flows between the states of Mississippi and Louisiana for half the length of Louisiana and then enters the state, creating the rich delta region, center of fertile agricultural lands (1, 2).

From the rolling pine hills of the northern section to the coastal marshes, Louisiana extends southward like a great boot with the toe pointed toward the east. Often called "Sportsman's Paradise," Louisiana attracts thousands of tourists each year with her forests, marshes, lakes, and rivers that are filled with game and fish.

Louisiana covers an area of 48,523 square miles, including 3,417 square miles of inland water. There are more miles of navigable streams within Louisiana than in any other state (3). This state borders the Gulf of Mexico for 366 miles (4). Because of Louisiana's strategic location, her three principal deep-water ports handle millions of tons of freight each year. Ships flying the flags of many nations call at the ports of New Orleans, Baton Rouge, and Lake Charles. New Orleans is America's second largest port in dollar value of foreign trade cargo movements. Here is one of America's Free Trade Zones where foreign products may be warehoused or processed, duty free, pending custom entry into the United States or shipment abroad (1).

The extreme length of Louisiana is 275 miles, and the extreme breadth is 280 miles (3). The mean elevation is one hundred feet above sea level which is the lowest elevation of any state (4). Louisiana has a subtropical climate. Daily temperature variations are determined by distances from the Gulf of Mexico and by differences in elevation. Average annual temperature for the entire state is 67.4 degrees Fahrenheit (2). The annual rainfall varies widely in different parts of the state. Average annual precipitation is 55.11 inches with much of this occurring

in the spring and summer. The growing season is more than ten months long in southeast Louisiana (3).

Due to its climate and rich soil, Louisiana is a great agricultural state leading the nation in the production of sugar cane, strawberries, sweet potatoes, and cane syrup. Other important crops include rice, corn, cotton, potatoes, citrus fruits, truck vegetables, perique tobacco, and pecans. The state ranks high nationally in lumber production (1, 2). Over half of the total land area is in forests. Lumbering and wood products industries are an important part of the economy (3). Louisiana is rapidly becoming one of the South's foremost dairy and livestock producing centers.

This state also boasts a valuable shellfish industry. Louisiana is a principal producer of shrimps, oysters, soft- and hard-shell crabs, and sea turtles. The state leads in the production of crabs, bullfrogs, crayfish, and diamond-back terrapins (3). There are eight thousand commercial fishermen and more than thirty processing plants for seafood (4).

Louisiana's vast, diversified natural resources, unlimited water supply, mild climate, unlimited transportation facilities, and strong labor force have contributed to the tremendous strides it has made in recent years both industrially and commercially (1). There is more mineral wealth per square mile in Louisiana than in any other state (3). Petroleum is Louisiana's most important resource. The state ranks first in the production of salt and second in the production of natural gas, sulphur, and crude oil (1).

II. CULTURE

Louisiana's history dates back more than four centuries. Ten flags have flown over the state including those of Spain, France, and Great Britain. Today rich mementos remain of the pioneering years when Louisiana was a prize sought by every major power in the world (1).

Culturally, Louisiana is divided into two sections. The southern section has the character of the French-speaking people who settled there. The northern section is typically American (3). When the white man arrived in Louisiana, there were remnants of several Indian tribes. The first white settlements were established by French and Spanish colonists, and their descendants are now called Creoles. During the eighteenth century, French exiles from Acadia, now Nova Scotia, settled in the southern part of the state in the bayou country, and these people are called Cajuns. A number of Germans, Italians, and Greeks also settled in the southern section, intermarried with the French, and adapted to their way of life. The northern half of the state was settled by Americans, predominantly Anglo-Saxon in origin (3).

In the bayou country there is a pattern of life found in no other part of the United States. For centuries the bayous were the only thoroughfares. The bayou folk speak a dialect that is a combination of English, French, and Indian with variations that include Spanish, German, and Slavic influences. These people, for generations, have depended on farming, fishing, and trapping for their livelihood (1).

Louisiana is characterized by hospitality mingled with a cosmopolitan flavor. Basically French in origin, Louisiana's Creole cuisine is recognized throughout the world. It is a combination of classical French, Spanish, and Anglo-Saxon cuisines influenced by the ingenuity of the Choctaw and Chickasaw Indians, the Negro cook, and the refugee Acadians in the use of seasonings. Two outstanding features of the Creole cuisine are the generous use of seafoods and the expert use of piquant herbs (5).

Local governmental units, known elsewhere as counties, are called parishes in Louisiana. They were originally church units and many are named for saints. Roman Catholics continue to make up the largest single religious group in the state. Each of the sixty-four parishes in the state is administered by an elected governing body and is sub-divided into wards (4).

Louisiana has a compulsory education law. The public school system is extensive, and there are some three hundred fifty private and parochial elementary and secondary schools (6). Louisiana boasts many outstanding institutions of higher learning including ten which are publicly supported. There are also ten privately owned colleges and universities, among them Tulane University, Loyola University of the South, and Centenary College, the oldest institution of higher learning west of the Mississippi River (1).

The state maintains nine charity hospitals in different areas of the state. Charity Hospital of Louisiana in New Orleans, located between

the medical schools of Tulane University and Louisiana State University, is the largest of its kind in the South and the second largest in the United States. The state also supports three hospitals for the mentally ill, two institutions for the mentally defective, and four tuberculosis hospitals (4).

III. POPULATION AND HEALTH STATISTICS

The estimate of Louisiana's population for 1963 was 3,432,246, including 2,317,192 whites and 1,115,054 non-whites. The urban population has increased in percentage of total population since 1950. In 1960, 63.3 per cent was classified as urban and 36.7 per cent as rural. A breakdown of the population by selected age groups in 1960 showed 13 per cent preschool (under five years), 31.6 per cent school (five through twenty years), 48 per cent work (twenty-one through sixty-four years), and 7.4 per cent retirement (sixty-five years and over) (7). Compared to the national average Louisiana has proportionately more people under twenty-five years of age (8).

The median number of school years completed by persons twenty-five years of age and over in Louisiana is 8.8. More than half of the state's employed workers are in blue-collar occupations. One-third of the families in Louisiana have incomes less than three thousand dollars a year (8).

In 1963 the total number of live births to resident mothers was 85,334, a birth rate of 24.9 for each thousand of the estimated population. A physician attended 97.5 per cent of the total 1963 resident

live births. Of the total live births occurring in hospitals, 31.5 per cent were in Louisiana's charity hospitals. This represented 7.8 per cent of the white and 71.2 per cent of the non-white total births occurring in hospitals. Approximately 10.2 per cent of the total resident live births were to unmarried mothers (7).

There were 2,590 infant deaths among Louisiana's residents during 1963 making the infant death rate 30.4 per thousand live births (7) as compared to the national rate of 25.2 in 1963 (9). Since 1948 the white infant death rate has been reduced from 28.7 to 20.4 while the non-white rate has been reduced from 52.4 to 45.7 (7).

In 1963 the maternal mortality rate was 4.8 per ten thousand live births. This was the highest rate since 1959. A comparison between United States and Louisiana maternal mortality rates shows the Louisiana rate to be above the United States average (7).

The crude death rate in 1963 was 9.0 for every thousand of the estimated population. The percentage of deaths in all age groups decreased except for citizens sixty-five years of age and older which has increased 91.7 per cent since 1940. The ten leading causes of death in order of prevalence were: diseases of the heart, malignant neoplasms, vascular lesions affecting the central nervous system, accidents, certain diseases of early infancy, influenza and pneumonia (excluding pneumonia of the newborn), diabetes mellitus, diseases of the respiratory system (excluding influenza and pneumonia), general arteriosclerosis, and congenital malformations (7).

CHAPTER III

THE LOUISIANA STATE BOARD OF HEALTH

I. HISTORY

During the early history of public health in Louisiana the New Orleans area was the major site of activity. New Orleans had become one of the largest cities in North America by the middle of the eighteenth century. Yellow fever epidemics began occurring in New Orleans at the end of the eighteenth century, and by 1905, sixty-five such epidemics had cost thousands of lives. The constant state of epidemic crisis was a source of concern and dismay to the government and the medical profession of Louisiana (10).

The State Legislature passed an act creating the New Orleans Board of Health in 1817. This law was repealed in 1819. This began a series of actions creating and dissolving the New Orleans Board of Health which continued for thirty-eight years. It was not until 1853 that a permanent board of health for Orleans Parish was established (10).

One of the primary reasons which prevented New Orleans from maintaining a continuous board of health was the lack of exact knowledge concerning the mode of spread of yellow fever. Physicians were divided into two factions. One group thought yellow fever was imported from Central America and the West Indies and favored quarantine laws. The other group considered yellow fever indigenous to New Orleans and favored general

sanitation laws. The people and the lawmakers reflected this division of thinking (10).

The first state board of health in the continental United States was established in Louisiana in 1855. Several important factors forced the state to remove the responsibility for the protection of the public health of New Orleans from the hands of local government and to take over public health administration. One factor was the long exhibited apathy of the New Orleans City Council toward the public health of its people. Another factor was the recurrences of yellow fever epidemics causing increasing devastation and spreading beyond New Orleans into other parts of the state (10).

II. ORGANIZATION

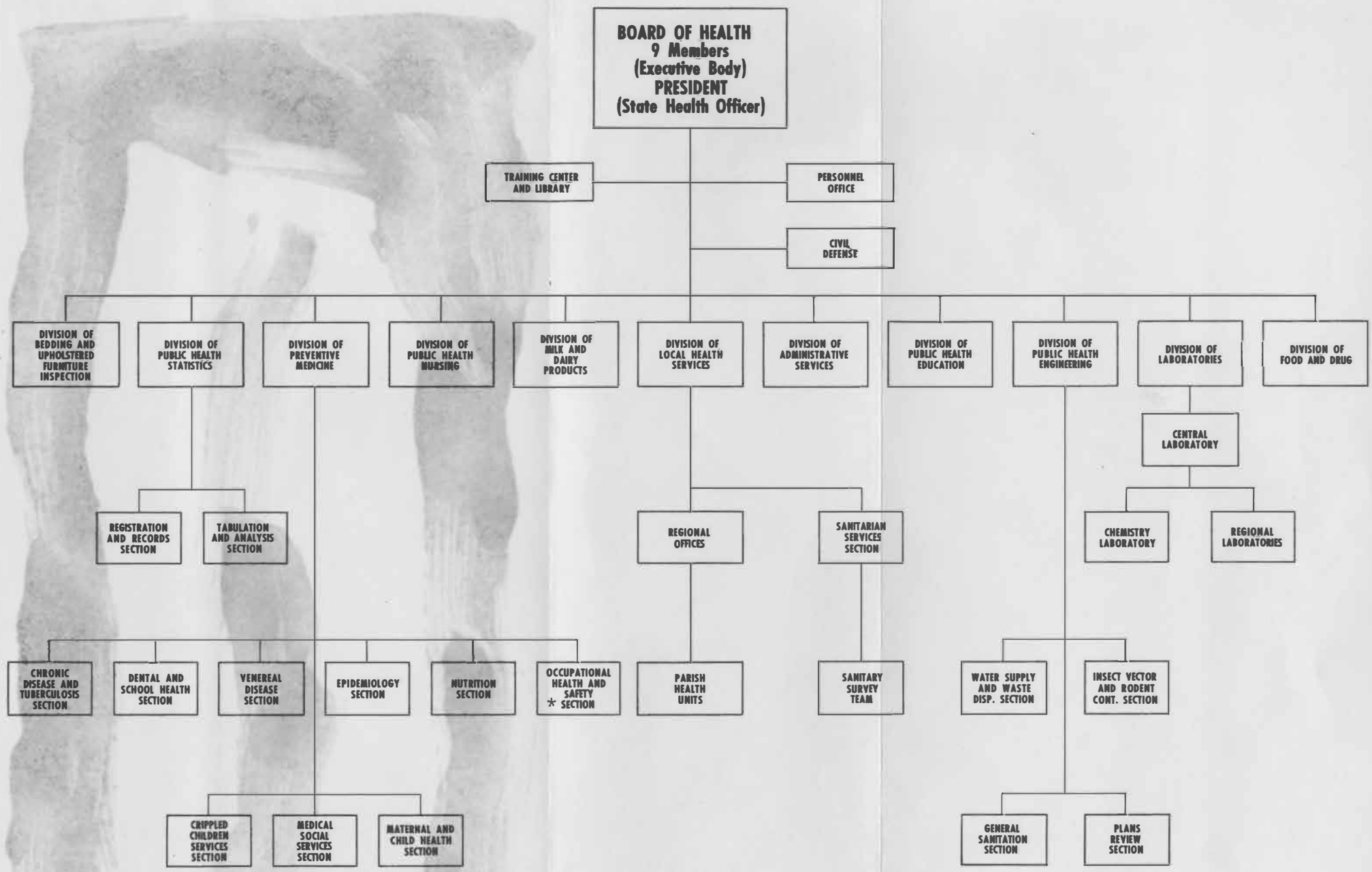
The Louisiana State Board of Health is the major public health agency in the state. It operates through its president, the State Health Officer, and the operational State Board of Health. The president and eight members of the executive board, one from each Congressional district, are appointed by the Governor with the advice and consent of the state senate for four-year terms (10).

Constituents of the executive board are five physicians, one dentist, one pharmacist, and one educator from the state public school system. A secretary-treasurer is elected by the board but is not a member. The board meets every three months or at the request of the president (11).

The Louisiana State Board of Health is charged with protecting the health of the state's population and has powerful authority. It is a policy-making body, not an advisory group. The executive board has legislative responsibility for a sanitary code which has the effect of state law. Specified matters covered by the sanitary code include: quarantine, water supplies, waste disposal, vital statistics, communicable diseases, immunization, transport of dead bodies, and foods, drugs, and other articles affecting public health and safety. The State Board of Health is also responsible for assisting local boards of health financially (10).

The operational State Board of Health located in New Orleans is divided into eleven divisions (Figure 1). Each division has a director. Some divisions are subdivided into sections with a chief as their head.

In 1882 an act was passed giving town councils and police juries authority to organize themselves into local boards of health. For the creation of a local board of health the local governing body negotiates with the executive body of the State Board of Health. Local boards of health are composed of three physicians, one educator, and one layman appointed by the parish governing body. These boards, in turn, appoint the local health officer who must be approved by the executive State Board of Health. A local board of health has the same authority on the local level that the executive State Board of Health has on the state level. A local board must use the state sanitary code for its minimum standards. The local board of health is not synonymous with the local



*Now in the Division of Public Health Engineering.

ORGANIZATIONAL PLAN
Louisiana State Board of Health
July 1, 1962

Figure 1. Organizational Chart of the Louisiana State Board of Health, 1965.

health unit (10). Since 1960 Louisiana has had full-time public health services in all sixty-four parishes (12).

The Division of Local Health Services maintains liaison between the State Board of Health and all local units except the New Orleans Health Department which is administratively separate from the State Board of Health. Liaison is maintained through a system of four regional offices. The parish health units constitute the service level of most public health programs to communities and individuals. Other divisions and sections at the state level render services or consultation to the local units (10).

Today the Louisiana State Board of Health employs some 1,200 persons and has a budget of ten million dollars. Total per capita expenditure for public health in Louisiana amounted to \$2.13 for fiscal 1962-63. Direct expenditures of parish health units represented a per capita expenditure of \$1.37 with \$0.91 from local funds and \$0.46, or 33.95 per cent, from state and federal aid (12).

CHAPTER IV

THE NUTRITION SECTION OF THE LOUISIANA STATE BOARD OF HEALTH

I. PHILOSOPHY AND HISTORY

The underlying philosophy of the Nutrition Section in Louisiana has been illustrated by saying, "Give a man a fish, and he eats it; teach him to fish, and he may eat fish the rest of his life." Direct services are not usually a part of the nutrition program, but, if rendered, are a demonstration to some professional person who may use this example hundreds of times in his everyday work. The Nutrition Section feels a responsibility to keep abreast of new knowledge and to pass its essentials on to other health workers and professional persons who work with the public (12).

Full time nutrition services began in Louisiana in July, 1937. Louisiana had had a part-time consultant for two years. Miss Margaret C. Moore, a biochemist who worked in the Laboratory Division of the Louisiana State Board of Health, helped to plan and organize the Nutrition Section and served as its chief until her retirement in June, 1964. In 1944 a second staff member was employed to work entirely with non-white groups. As the program expanded a regional team of nutrition consultants was developed to serve the four regions of the state. In June, 1955 the fourth regional nutritionist was employed to complete the team.

II. STAFF

Organization. The Nutrition Section is administratively placed in the Division of Preventive Medicine in the central organization of the State Board of Health. The head, or chief, of the Nutrition Section is domiciled in the state office. The chief is responsible for planning and implementing the state's nutrition program and for coordinating nutrition work with that of other state and voluntary agencies.

The budget provides for a regional nutritionist in each of the four regional offices (Figure 2). When the student began her field work, there was only one regional nutritionist who worked in both the northeast and northwest regions. During the student's field training a nutritionist who had formerly worked in the southwest region returned to fill that vacancy. Another nutritionist was employed and began work in the northeast region, and a third nutritionist was engaged to work in the southeast region beginning in June. There is a position for a Negro nutritionist in the state, but it is vacant at the present time.

There are three local nutritionists in Louisiana. One is employed in Calcasieu Parish to work part-time. One is employed by Jefferson Parish but is paid partially by state funds to work in four surrounding parishes. The nutritionist in Tangipahoa Parish, employed half-time to work primarily on a special maternal and child health project, resigned in March but is continuing to work temporarily on an hourly basis. In July a new position will be created for a nutritionist to work in a four-parish area including Tangipahoa Parish.

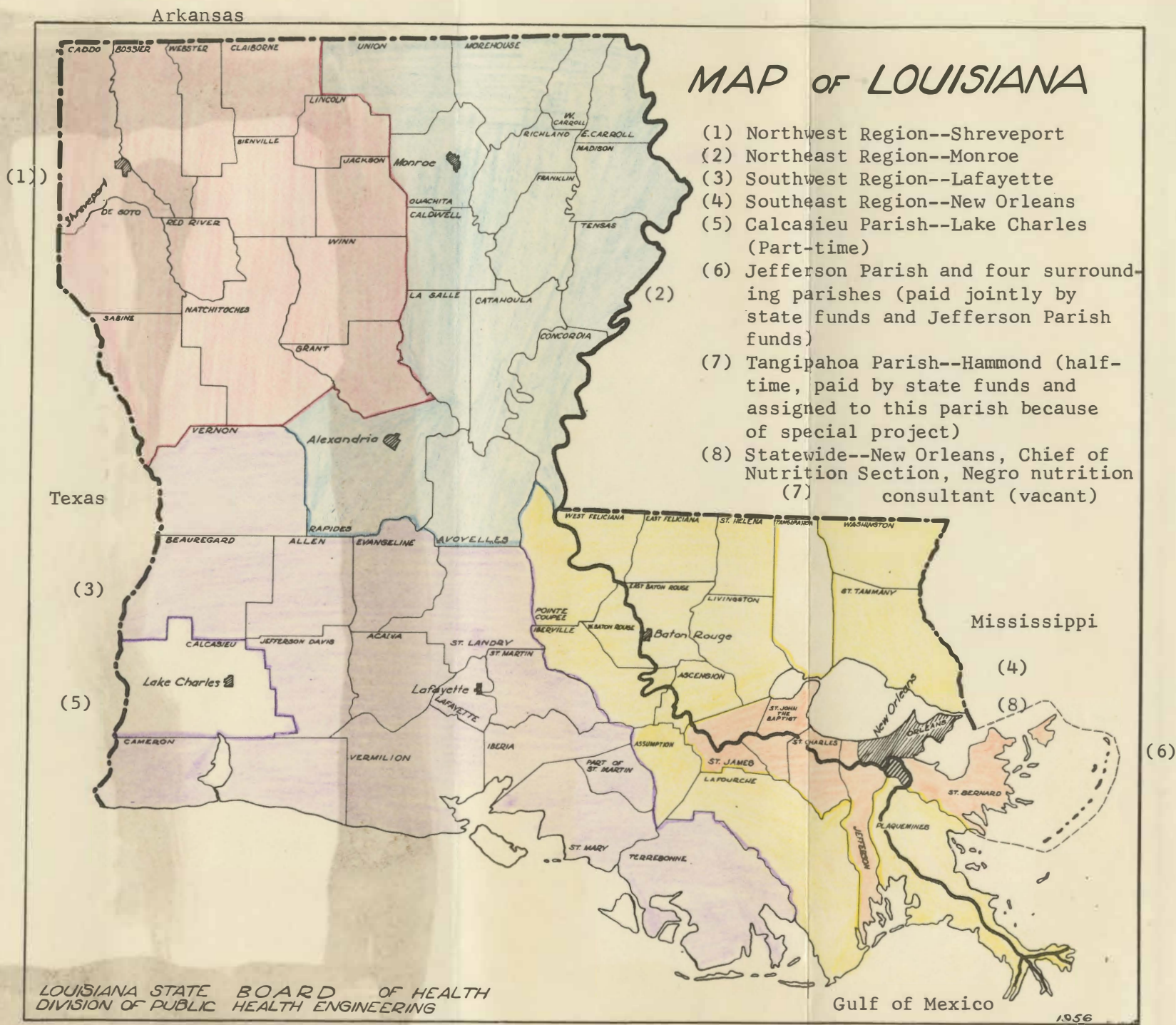


Figure 2. Nutrition Positions and Geographical Assignments in Louisiana, 1965.

In addition there are three nutritionists who work on the dietary-atherosclerosis research project. This project is financed by a grant from the National Institutes of Health. These research nutritionists are employed for the period of the study, and they are headquartered in the state office.

Qualifications. All nutrition personnel are classified according to state civil service specifications (see Appendix A, page 45). Local positions can be filled with Public Health Nutritionists I or II, and regional positions can be filled with Public Health Nutritionists III or IV. The Chief of the Nutrition Section is classified as Public Health Nutritionist V. During the student's field experience she had the opportunity of observing the process of reviewing and revising the job specifications. Specifications were also drawn up for a proposed new position of Dietary Consultant which is classified as Public Health Nutritionist IV.

The revised specifications were approved by the Director of the Division of Preventive Medicine and by the nutritionists in the Dallas region of both the Children's Bureau and the United States Public Health Service. These new specifications were to be sent to the State Civil Service Commission for final approval in May. The proposed new specifications are contained in Appendix B, page 53.

Dietary consultant. The Department of Hospitals and the Department of Institutions are state agencies like the State Board of Health.

They are responsible for licensing hospitals, nursing homes, and other institutions. The Department of Public Welfare is the licensing agency for day care centers, but the Nutrition Section of the State Board of Health is responsible for setting up nutritional standards for day care centers. The only dietary assistance that the State Board of Health has given directly to institutions in the past has been at the request of the licensing agency. Many requests from institutions for dietary help have not been filled because the Nutrition Section is not staffed to give this service. The student had an opportunity to tour the facilities of two nursing homes during her field training.

The new job specifications that are pending approval by the State Civil Service Commission include a job description for a dietary consultant (see Appendix B, page 58). The primary responsibilities of the dietary consultant include: consultation to homes for unwed mothers, small hospitals, and other institutions that do not have a dietitian; development of teaching aids for work with institutions; work with day care centers; and cooperation with other agencies toward expanding programs for feeding the aged, including such programs as portable meals.

Provision for professional advancement and growth. A period of orientation is provided for newly employed nutritionists. This orientation usually includes visiting different regions to observe the work of other nutritionists, getting acquainted with their own areas with the assistance of the former nutritionist in that area or the Chief of the Nutrition Section, and going to the state office for orientation to the central organization.

Nutritionists send their itineraries to the chief every two weeks. These are kept in the chief's office in the folder that is maintained on each staff member. Each nutritionist keeps a daily report. These reports are sent to the chief weekly, bi-monthly, or monthly as they are typed. Each group of daily reports is accompanied by a summary of work by programs and parishes. The chief combines the information from the daily reports of all staff members into a monthly report that is due to the Director of the Division of Preventive Medicine on the tenth of each month. Each public health nutritionist gets a copy of this monthly report to keep her informed of program activities throughout the state.

Nutrition staff members are encouraged to participate actively in various professional organizations. There is no set policy at this time regarding attendance at meetings. The chief has her expenses paid by the section to attend the national convention of either the American Dietetic Association or the American Public Health Association. Various workshops are held throughout the country for which federal traineeships are available paying tuition and per diem but not travel expenses. The budget provides for the travel expenses of one person to such workshops. In some instances where federal traineeships are not available, funds are furnished by the Maternal and Child Health Section for attendance at special meetings.

Meetings. Due to staff shortages there have been no scheduled staff meetings recently. The chief sees each staff member at least once

a month. Correspondence and telephone conversations are also frequently employed.

Beginning in June plans have been made to hold staff meetings every other month. Since there are several new staff members, on alternate months, when there is no staff meeting, there will be some type of planned orientation for the new staff members. After six months these staff meetings will be changed to a quarterly basis. These meetings will be planned to coincide with the three-day semi-annual staff meetings of the regional personnel of the Division of Local Health Services. At this meeting various division and section heads are invited to introduce their new programs. Then the various disciplines hold their separate staff conferences.

III. ACTIVITIES

Overall program. Each year the Chief of the Nutrition Section writes a State Plan of Operation which is included with the plans of other divisions and sections and sent to the Children's Bureau and the United States Public Health Service for review. The state plan substantiates the need for requested federal funds. As stated previously the overall nutrition program includes: consultation to professional personnel; interpretation and dissemination of significant research findings; and coordination of the nutrition program with the programs of other organizations and agencies.

Each nutritionist in the state develops her program to fit her aptitude and the needs of her area. The nutritionists work by invitation

only. There are a few standing invitations such as those to some crippled children's clinics. Requests for service are made verbally or in writing by health department personnel, usually public health nurses, to the local or regional nutritionist. If a request is sent to the state office it is forwarded to the nutritionist who serves the area in which the request originated. Follow-up activities vary with different situations. Public health nurses do some follow-up. In some cases letters are written to the local health unit involved.

Teaching materials. The Nutrition Section's monthly publication, "Confidentially Speaking," is a channel through which significant research findings are interpreted for professional people. Designed mainly for the inservice education of public health personnel, "Confidentially Speaking" has a circulation of about two thousand. Besides health department personnel other professional people receive this publication upon request. An issue is occasionally prepared as handout material. The student wrote the April, 1965 issue of "Confidentially Speaking" during her field training (see Appendix C, page 63).

In teaching, the handbook on nutrition, What Shall I Eat and Why, written by Miss Margaret C. Moore, is used. Infant feeding cards and publications dealing with prenatal and lactating diets, infant feeding and formula preparation, and modified diets are extensively used throughout the state by the section and local health units. The diabetic exchange lists, regular and low-sodium, are widely distributed on the request of physicians by the nutritionists and by Charity Hospital in

New Orleans. Educational material prepared by the Nutrition Section is cleared and approved by committees of the Medical Society of New Orleans and the Medical Society of Louisiana. Specialized information is sent to specific departments at the medical schools of Tulane University and Louisiana State University for approval. Dental information is edited by a member of the Dental Society. Materials available from the federal government and some commercial companies are also distributed. State material is not prepared when, in the judgement of the Nutrition Section, adequate material can be obtained from any other source (12).

The nutritionists use the visual aids with which they can work most comfortably. Food models, flannel boards, films, demonstrations, and posters are used. One group of charts that has been developed is especially effective. The National Research Council's Recommended Daily Allowances for different age groups are charted as a bar graph using colored plastic tape. The nutrient content of a food is charted on washed x-ray film with tape. By superimposing the x-ray film on the charts, the contribution of the food to the total daily nutrient requirement can be illustrated.

Shortage of personnel has prevented the extensive use of easily available educational services through press, radio, and television. Some work in each field is done, but lack of staff has ruled out expanding this type of service (12).

Current studies upon which to base future programs. Several studies are now being made in Louisiana, and their findings will be used

in planning future nutrition programs. One is the study of the diets of high-risk pregnant girls in Tangipahoa Parish. The nutritionist obtains a diet history from prenatal patients sixteen years of age and under who attend the prenatal clinic at Lallie Kemp Charity Hospital. The pregnant girl is asked to recall what she ate for breakfast before coming to clinic and all the food she ate the previous day. Questions are also asked concerning special cravings, food sources, and eating habits. The student observed the nutritionist administer two of these questionnaires and administered the questionnaire to one girl.

Another study is being made in southwestern Louisiana on teenage nutrition. The questionnaire being used is entitled "Teenagers' Attitudes Toward Nutrition" reprinted from the Journal of the American Dietetic Association. A twenty-four hour recall diet is included in this questionnaire.

The third study is being conducted with a grant from the National Institutes of Health. Dr. Walter Unglaub of Tulane University School of Medicine is conducting this survey on the nutritional status of Louisiana school children. Over one thousand students have been examined thus far. The results will provide much information which may be used in planning nutrition education. The student spent one day observing the research dietitian process data from a recent school survey.

Three nutritionists are employed by the Nutrition Section to work on a special project supported by a grant from the National Institutes of Health. This dietary-atherosclerosis project is a collaborative research

project of the Louisiana State University School of Medicine and the Louisiana State Board of Health. Studies are being made of the eating habits of families of certain deceased individuals brought to autopsy in the New Orleans Metropolitan Area. The student went with one of the research nutritionists to gather dietary information from a family. She also discussed and observed the processing of dietary data.

IV. COORDINATION OF NUTRITION SERVICES WITH OTHER HEALTH DEPARTMENT PROGRAMS

Orientation. A conference in the Nutrition Section is on the schedule of all staff members who have orientation in the state office. Included in this group are local health officers, health educators, social workers, audiologists, and other professional staff members. The Chief of the Nutrition Section attends the bimonthly staff meetings of the Division of Preventive Medicine where members of the various disciplines represented exchange ideas and knowledge.

On the local level newly employed public health nurses and sanitarians have an orientation conference with the nutritionist who serves the parish. Nutritionists are often invited to participate in regional nurses' meetings held every two months and local staff meetings which include all local health unit staff members.

Division of Public Health Education. The Nutrition Section and the Division of Public Health Education often work together. This division distributes films and literature dealing with all aspects of health,

including nutrition. The nutrition consultant and the health educator often consult each other when selecting nutrition materials.

The Nutrition Section contributes to two publications of the health education division: the Louisiana State Board of Health Biennial Report and the monthly "Louisiana Public Health Newsletter." News releases may originate anywhere in the State Board of Health but must have the approval of the State Health Officer before being published.

Division of Public Health Nursing. While all public health nurses are professionally responsible to the Division of Public Health Nursing, most nurses are administratively responsible to the Division of Local Health Services. A number of specialized nurses are assigned in such areas as orthopedics, phenylketonuria, and tuberculosis.

The public health nurse is largely responsible for direct nutrition teaching as she makes home visits and holds clinics. The nutritionists' responsibility is to provide technical guidance and consultation to the local nurses who render a generalized nursing service to their communities. Inservice training for local nurses comprises the bulk of the nutritionists' services to the parishes. These services include orientation work with new public health nurses and participation in staff meetings as well as individual consultation on special problems. When problems arise with which the nurse needs additional help, office conferences or home visits with the individual or family involved are arranged with the nutritionist.

Maternal and Child Health Section. The Maternal and Child Health Section, like the Nutrition Section, is administratively placed in the Division of Preventive Medicine. The nutritionists cooperate with other health department staff in maternal and child health programs. Nutrition information is included in prenatal counseling, child health conferences, preschool programs, and work with phenylketonuric patients.

Maternity medical conferences and maternity nursing conferences are held throughout Louisiana for prenatal and postpartum care. Dietary counseling is available to expectant mothers through the public health nurses. Nutritionists attend these clinics as their services are requested and their schedules allow.

A pediatrician at Tulane University School of Medicine initiated a demonstration project with the Louisiana State Board of Health and the Lallie Kemp Charity Hospital in Tangipahoa Parish in 1963. The aims of the program are to provide continuity of care to mothers and children served by the hospital and the health units of the parish, to develop more effective coordination of hospital and public health services, and to maintain a mutual referral system between the hospital and the public health units.

The Maternal and Child Health Section provided funds for a nurse to act as liaison between the hospital and the local health unit staff as well as the services of a medical social consultant. A secretary and a half-time nutritionist were added to assist in this project, and the number of public health nurses in the parish more than doubled. Maternal

and child health funds financed these additional staff members to work with referrals from the hospital.

It is anticipated that with this service there will be a decrease in the maternal and infant mortality and morbidity rates. Sufficient time has not elapsed to evaluate the results of this project statistically.

The student spent four days in Tangipahoa Parish where this project is in progress. She observed and participated in a prenatal clinic held at Lallie Kemp Charity Hospital and two child health medical conferences, and accompanied a public health nurse on several home visits.

Child health medical conferences and child health nursing conferences are held regularly in all parts of Louisiana. The nutritionists do not regularly attend these conferences, but any child with a nutritional problem may be referred to the nutritionist for dietary consultation. The infant and child feeding cards developed by the Nutrition Section are frequently distributed at these clinics.

The student observed and participated in four medical conferences in different parts of the state. In one of the clinics the nutritionist discussed the nutritional needs of children with the group, and in the three other clinics individual instruction was given. The student also attended the state's only medical sick-child conference in Ruston. A local pediatrician began this clinic and another pediatrician has joined him. Both doctors contribute their time free of charge for this weekly clinic. The nutritionist talked with all the mothers in a group about

child nutrition and then held individual conferences with those mothers referred by the nurse as having special problems.

Many preschool roundups are held each spring in Louisiana for children who will start to school the following fall. At this time the child's school health record is begun, Heights and weights are taken, immunizations may be given, and medical inspections are made of children who do not go to their family doctor for their preschool examination. The student and a regional nutritionist attended a preschool roundup. They talked to the mothers and children about the importance of a good breakfast, lunches at school, and special problems in child feeding that the mothers suggested.

A legislative act passed in 1964 requires all newborn infants in Louisiana to be tested for phenylketonuria in the first four weeks of life. Nutrition supervision is offered to all children with phenylketonuria. Lofenalac is provided without cost for medically indigent children. Two nurses are employed by the Maternal and Child Health Section to work exclusively with phenylketonuria patients. A central register is kept on all phenylketonuria cases. The register now records forty-eight cases. There are four additional cases pending definite diagnosis. There are fifteen patients on dietary management, six of whom were begun as infants. A genetic study of affected families, begun in 1962, is a long-range project designed to prevent the occurrence of the clinical effects of phenylketonuria through the location and identification of all carriers.

The student accompanied a nutritionist to visit a child with phenylketonuria at the Hammond State School for the mentally defective. The nutritionist has been assisting the food service supervisor at this institution on the diets for two children with phenylketonuria.

Chronic Disease and Tuberculosis Section. The Chronic Disease and Tuberculosis Section of the Division of Preventive Medicine has as its principal assignment the prevention and control of tuberculosis. Regional chest clinics are held regularly at eight strategic locations in the state. In addition to supplying diagnostic and curative medical services, regional clinics are designed to meet the complete needs of the patients through medical-social and nutrition services. The student attended a regional chest clinic in Jefferson Parish. The local nutritionist discussed general nutrition with the group and had individual conferences with patients referred by the nurse.

The four tuberculosis hospitals in Louisiana are under the direction of the Department of Hospitals. A public health nutritionist holds monthly nutrition classes at Greenwell Springs Tuberculosis Hospital for patients who are about to be released. The purpose of these meetings is to discuss nutritional needs of the patients after they get home and to inform them of the services of the local health units that are available to them in their local communities. The student attended one of these nutrition classes and toured the hospital facilities with the dietitian.

Dietary recommendations are often given to tubercular patients on home visits with public health nurses in an attempt to help the nurses

interpret dietary recommendations into foods acceptable to the individual and within his economic means. The student accompanied a local nutritionist, a regional nutritionist, and a public health nurse on a visit to a tubercular suspect who was pregnant.

The nutritionists also work with diabetics and heart patients on referral. These referrals are often made by the welfare department and by private physicians. The services rendered to these people deal mainly with helping patients adhere to their prescribed diets and helping those who are obese to reduce. Individual counseling is done by mail, telephone, office visit, and home visit. Organized classes have been held for persons interested in weight reduction. The student went on a home visit with a local nutritionist to see an obese woman referred by the welfare department.

Dental and School Health Section. The Dental and School Health Section of the Division of Preventive Medicine is another section with which the nutritionists cooperate. It is anticipated that work with schools will be increased since the Louisiana Department of Education now requires a definite unit on health education as a part of the required physical education courses.

Nutrition services are given on request to individual teachers, groups of teachers, and to student groups. Inservice and preservice training of teachers are the primary channels through which work with schools is done.

The nutrition consultant and the dental consultant often collaborate on projects of mutual concern. The most recent joint effort is an issue of the Nutrition Section's publication "Confidentially Speaking" on nutrition and dental health.

Medical Social Services Section. Medical social services are given through other programs: crippled children, tuberculosis, and maternal and child health. Medical social workers are an integral part of the patient evaluation team. They are concerned with all of the child's needs: physical, emotional, economic, educational, vocational, and recreational. The public health nutritionist is also a member of the evaluation team. Her consultation with the medical social worker and with the families of clinic patients is most often directed toward assisting families in using their economic resources for maximum nutritional well-being.

Crippled Children Services Section. The purpose of the Crippled Children Services Section of the Division of Preventive Medicine is to locate the state's handicapped children and direct them toward appropriate resources for diagnostic, therapeutic, and rehabilitative services. The crippled children's program includes services for children with non-orthopedic conditions, but 80 per cent of the cases are orthopedic.

Louisiana is divided into eight orthopedic clinic districts. Each district has an orthopedic clinic and a crippled children's nurse. The clinic team at an orthopedic clinic is composed of a pediatrician,

orthopedists, orthopedic brace experts, a medical social worker, a nutritionist, the crippled children's nurse, and other nurses and volunteers.

Usually the nutritionist has an evaluation conference with patients on their second visit to the clinic, and thereafter attempts to see them annually unless they are referred with a special problem. The student observed and participated in two orthopedic clinics. One was held in the charity hospital and the other was held in a parish health unit.

Other clinics that are a part of crippled children's services include: urological, otological, heart, cleft lip-cleft palate, cerebral palsy, and plastic surgery. These specialized clinics are usually held once a month at one location in the state. The nutritionists attend these clinics as their schedules permit.

V. COORDINATION OF NUTRITION SERVICES WITH OTHER

OFFICIAL AGENCIES

The Nutrition Section attempts to coordinate its services with the programs of other official agencies. The Interdepartmental Committee, the Food Stamp Program, the Department of Public Welfare, and the Department of Education are among the agencies with which the Nutrition Section cooperates closely. Other official agencies with which the Nutrition Section works cooperatively are: the Department of Institutions, Louisiana State University Agricultural Experiment Station, and the Louisiana Civil Defense Agency.

Interdepartmental Committee. One unique feature of the state organization in Louisiana is the Interdepartmental Committee which is made up of representatives of all state agencies. This committee was the first of its kind, and the Interdepartmental Committee on Nutrition for National Defense was patterned after this committee. The purpose of this committee is to keep each agency informed of the programs of all other state agencies in order to prevent overlap and to improve services. The Chief of the Nutrition Section serves as one of the three representatives of the Louisiana State Board of Health on this committee.

Food Stamp Program. The Food Stamp Program is administered by the parish government, but applicants are reviewed and certified by the Department of Public Welfare. In Louisiana nine parishes utilize food stamps and thirty parishes distribute surplus commodities. As more money is appropriated for the Food Stamp Program more parishes will begin using them.

The United States Department of Agriculture is coordinating the Food Stamp Program in Louisiana. The Nutrition Section is represented on the Nutrition Education Committee of the Food Stamp Program. This advisory committee consists of a nutrition representative from the Department of Public Welfare, the Louisiana State University Agricultural Extension Service, the School Lunch Section and the Home Economics Section of the State Department of Education as well as the Nutrition Section of the State Board of Health.

Department of Public Welfare. The Department of Public Welfare often refers clients with nutritional problems to the local or regional public health nutritionists in the area involved. The nutritionists frequently take part in inservice meetings for the staff of the Department of Public Welfare. One of the cooperative programs between the Nutrition Section and this agency has been a series of weight reduction classes for welfare clients.

Department of Education. The Nutrition Section works with various branches of the Department of Education: school lunch, vocational home economics, trade schools, adult education, and classroom teachers.. A great deal of the work done in cooperation with the Department of Education is participating in inservice training for teachers and school lunch employees. The Nutrition Section is always represented on the program of the School Lunch Workshop each summer. The student spent a day with a school lunch supervisor in Orleans Parish. She toured a training center for new employees, the central kitchen facilities for two schools, and the preparation and serving facilities of an elementary, a junior high, and a senior high school.

VI. COORDINATION OF NUTRITION SERVICES WITH INSTITUTIONS AND ORGANIZATIONS

Tulane University School of Medicine. Dr. Grace Goldsmith and a public health nutritionist cooperatively teach a course in applied nutrition which is offered to graduate students in the Department of

Public Health of the Tulane University School of Medicine. The student audited one of Dr. Goldsmith's lectures, attended the weekly meeting of her staff, and observed her rounds in the metabolic ward of Charity Hospital.

The Nutrition Section also cooperates with Dr. Walter Unglaub of the Tulane University School of Medicine in his research project on the nutritional status of Louisiana school children. When each survey is made, the public health nutritionists throughout the state travel to the school to take part in completing the "Child's Diet History Form."

Louisiana State University School of Medicine. The Nutrition Section contributes to the preservice training of students in the School of Medicine at Louisiana State University. This training is done by participating in their courses or by the students observing the nutritionist at work.

The dietary-atherosclerosis project in which the Nutrition Section is engaged is a cooperative effort with the Louisiana State University School of Medicine. This research project is part of a continuing study of atherosclerosis that is being done at medical centers across the United States.

Charity Hospital. The Nutrition Section and the dietary staff at Charity Hospital in New Orleans cooperate in developing identical literature and teaching methods. One example is the diabetic exchange lists, regular and low-sodium, which were a combined project.

Colleges and universities. Many of the state and private institutions of higher learning in Louisiana request the services of the public health nutritionists for the preservice training of their students in education, health and physical education, home economics, social work, and nursing. Lectures and demonstrations are given by the nutritionists and, in some cases, students go on field trips to observe the nutritionists at work. The student observed both of the regional nutritionists discussing public health nutrition with student nurses. This was done in class meetings in the local health units where the students were getting six weeks of public health field experience. The student and a regional nutritionist made a home visit with a student nurse to discuss adequate nutrition with a family of limited income.

Professional organizations and voluntary agencies. The programs planned by the Louisiana Dietetic Association are supported by the Nutrition Section. The chief and several other members of the section are active members of this organization. The student attended the two-day Graduate Food Administration Institute conducted by the Louisiana Dietetic Association with the Louisiana Hospital Association and the Southeastern Hospital Conference. This institute was held in the auditorium of the State Board of Health, and the Chief of the Nutrition Section was on the planning and coordinating committee. The theme for this institute was "Effectiveness Through Training."

Other organizations and voluntary agencies with which the Nutrition Section cooperates include the Tuberculosis Association, the Red Cross, the Heart Association, the Louisiana Parent-Teacher Association, and the Louisiana Home Economics Association. Meetings and conferences are the most often employed methods of communication with these groups.

CHAPTER V

SUMMARY AND EVALUATION

The student has presented her observations and experiences during seven weeks of field training with the Nutrition Section of the Louisiana State Board of Health. The training schedule was planned to familiarize the student with nutrition work on the state, regional, and local levels.

The student had conferences with the heads of many of the divisions and sections with which the Nutrition Section works closely on the state level. She had opportunities to observe the state nutrition consultant in her administrative work. The time spent with the regional nutritionists gave the student an insight into the implementation of nutrition programs in wide geographical areas. In Tangipahoa Parish the trainee became acquainted with the work of the public health staff by working with a public health nurse and a sanitarian in addition to the nutritionist.

The student spent some time observing and participating in the programs of all of the public health nutritionists in Louisiana. Each nutritionist explained her program to the student and gave her opportunities to assist the nutritionist in her activities. As a result of these experiences with three nutritionists on a local level, two regional nutritionists, and the state nutritionist, the trainee gained an understanding of the nutrition programs at all levels of application.

The student spent four days observing in the dietetic department at Ochsner Foundation Hospital. By observing the work of administrative, therapeutic, and clinical dietitians the student feels that her knowledge of hospital dietetics has been increased.

The student feels that the field experience substantially supplemented her academic training by providing first-hand knowledge of public health nutrition in action. The observations and participations in nutrition activities helped the student to increase her confidence as well as to realize some of her weaknesses.

After evaluating her total field training the student feels that her objectives were accomplished. She has been made aware of some of the many challenges of public health nutrition and has observed the effective ways developed by the nutrition staff in Louisiana to meet these challenges. The student feels that her field experiences have been invaluable in preparing her for public health nutrition work.

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APPENDIXES

APPENDIX A

CURRENT JOB SPECIFICATIONS FOR PUBLIC HEALTH NUTRITIONISTS

I. PUBLIC HEALTH NUTRITIONIST I

Distinguishing Features or Characteristics of Work

This is advisory professional work in assisting health units and related public and private agencies in a local program of education in food selection and nutrition. The work involves responsibility for assisting and participating in the planning, promotion and execution of local health and nutrition programs; coordination of the programs with other projects in the health units; and the collection of original data for nutritional research studies. Incumbents of positions allocated to this class develop local health and nutrition programs and give in-service training to local health unit personnel. Technical supervision is received from a Public Health Nutritionist of higher level with administrative direction being rendered by a local health officer.

This class differs from that of Public Health Nutritionist II in the lack of supervisory responsibility and in the smaller geographical area to which assigned.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.)

Serves as consultant to personnel of parish health units in program planning and to regional public health personnel in integrating public health nutrition into the total public health program.

Participates in planning and promotion of local nutrition programs, such as school lunch program.

Conducts community surveys and performs assigned research to determine community needs.

Prepares materials and teaches professional, school and lay groups on topics pertaining to nutrition.

Prepares and distributes educational materials pertaining to nutrition.

Consults on food practices, problems, and teaching methods.

Gives technical advice on diets.

Cooperates with personnel of related public and private agencies at the local level.

Qualification Requirements

Graduation from an accredited four year college or university with specialization in foods and nutrition.

II. PUBLIC HEALTH NUTRITIONIST II

Distinguishing Features or Characteristics of Work

This is professional work of a consultative nature in public health nutritional programs in an assigned district of the state. A district is composed of several parishes with boundaries defined by the director of the division. The work involves adapting and implementing state-wide nutrition programs to the parish or regional level, and responsibility for supervision of the execution of these programs in the assigned areas. Incumbents participate in in-service training programs and in the collection of original data for nutritional research projects. Employees are expected to exercise judgment and initiative with technical and professional assistance being received from a Public Health Nutritionist of higher rank. Administrative supervision is received from the local health officer of the unit which serves as headquarters for this position.

This class differs from that of Public Health Nutritionist I in the responsibility for supervisory duties and for the larger geographical area composed of several parishes and local health nutritional programs involved. The class is exceeded in level accountability by that of Public Health Nutritionist III. Incumbents in the latter class receive a minimum of supervision and participate in the planning and execution of a state-wide nutritional program.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.)

Renders consultant services pertaining to nutrition to public health groups and other related agencies.

Supervises Public Health Nutritionists of lower level.

Prepares articles, talks, radio and news articles pertaining to health nutrition.

Cooperates on investigations and compilations of data over research projects.

Sponsors and participates in local nutrition committee meetings.

Attends professional and lay meetings and conferences.

Cooperates and assists personnel of the Board of Health and related agencies at the regional level.

Prepares materials and teaches in-service groups.

Compiles data and participates in special projects related to the field of nutrition.

Qualification Requirements

Graduation from an accredited four year college or university with specialization in foods and nutrition followed by one year of experience in nutrition work.

A Master's Degree in foods and nutrition or completion of a one year dietary internship in an institution approved by the American Dietetic Association may be substituted for the one year of experience.

III. PUBLIC HEALTH NUTRITIONIST III

Distinguishing Features or Characteristics of Work

This is advanced professional work of a consultative or supervisory nature in nutritional programs and related fields. Incumbents assist in planning and directing a State-wide program in foods and nutrition as they pertain to public health activities. They also assist in planning nutritional surveys and other research projects; supervise the functions and work of associated personnel; and have a high degree of accountability for results achieved. Technical supervision is received from a Public Health Nutritionist IV and usually consists of periodic conferences to plan programs and procedures and to evaluate progress and results of phases of the programs. Employees in this class receive administrative supervision from the local health officer of the health unit which serves as the headquarters of the specific position.

Work in this class exceeds that of the class of Public Health Nutritionist II by the responsibility for participating in the planning and execution of nutritional programs on a State-wide basis. It differs from that of Public Health Nutritionists IV in that positions in the higher level serve as principal advisors and assistants to the chief of the nutrition section of the agency on all phases of the total programs of the section.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.)

Coordinates nutrition programs with other public health programs such as nursing.

Renders consultant services to public health groups and other related public and private agencies.

Initiates and supervises surveys of districts with respect to nutrition problems.

Plans and participates in in-service and preservice training of agency personnel.

Plans and participates in public information and education projects.

Secures and uses charts, posters, motion pictures, etc., in presenting the nutrition program.

Cooperates with personnel of related agencies at the state level in planning and coordinating programs.

Represents the agency at meetings and conferences.

Collects, evaluates, reports findings and makes recommendations in research projects on nutritional problems.

Qualification Requirements

Graduation from an accredited four year college or university with specialization in foods and nutrition followed by two years of experience in nutrition work.

Substitutions

Completion of a one year dietary internship in an institution approved by the American Dietetic Association may be substituted for one year of the required experience.

A Master's Degree in foods and nutrition may be substituted for one year of the required experience.

Thirty semester hours of graduate credits in foods and nutrition in excess of a Master's Degree may be substituted for all of the required experience.

IV. PUBLIC HEALTH NUTRITIONIST IV

Distinguishing Features or Characteristics of Work

This is highly responsible professional work in planning, directing and supervising a comprehensive nutritional program in a large region of the State. Assignments also involve serving as high level assistants to the chief of the nutrition section in the formulation, implementation and direction of state-wide programs and policies; evaluation of activities, materials and personnel to assess progress; in budgetary preparation; and in the development and direction of research projects. Incum-

bents actively participate in planning sessions at the highest level of their section and are held accountable for the augmentation and results achieved in the projects under their jurisdiction and of all subordinate personnel concerned. Assignments are made by the chief of the nutrition section in broad outline. Administrative and technical supervision from the chief of the section is usually in form of conferences to review all phases of nutrition projects and to promote overall plans.

Responsibilities inherent in positions in this class exceed those of the class of Public Health Nutritionist III in that incumbents at the higher level serve as advisors to the chief of the nutrition section, direct operations in a large geographical region, and supervise and serve as consultants to employees in positions allocated in the class of Public Health Nutritionist III. They are exceeded in scope only by those assigned to the position in the class of Public Health Nutritionist V. The incumbent in the latter class serves as the State-wide chief of the nutrition section.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.)

Assists the chief of the section in planning for the inclusion of nutrition projects in the State health program.

Confers with the chief of the section on administrative matters which affect the entire section, such as recommendations on policies and programs, budgetary matters, and the overall assessment of programs and personnel.

Helps implement and administer nutrition programs within a large geographical region.

Supervises Public Health Nutritionists of lower levels.

Participates in planning in-service and pre-service programs.

Holds or helps hold staff meetings and conferences in the region.

Helps plan research projects and nutritional surveys and evaluate the results of the studies.

Cooperates in the production and utilization of visual aids for in-service training and public informational sessions.

Prepares comprehensive reports on all phases of activities in the nutritional programs.

Helps plan and prepare literature and visual aids for professional journals and training manuals.

Represents the agency at conventions and meetings.

Helps in the recruitment and training of personnel.

Qualification Requirements

Graduation from an accredited four year college or university with specialization in foods and nutrition followed by four years of experience in nutrition work, two years of which must have been in a supervisory or advanced consultative capacity in the public health nutrition program.

Substitutions

Completion of a one year dietary internship in an institution approved by the American Dietetic Association may be substituted for one year of the required general experience.

A Master's Degree in foods and nutrition may be substituted for one year of the required general experience.

Thirty semester hours of graduate credits in foods and nutrition in excess of a Master's Degree may be substituted for one year of the required general experience.

A Ph. D. Degree with specialization in foods and nutrition may be substituted for all of the required experience.

V. PUBLIC HEALTH NUTRITIONIST V

Distinguishing Features or Characteristics of Work

This is highly responsible administrative and professional work in serving as the chief of the nutrition section of the Board of Health. The incumbent is responsible for planning, organizing and directing all activities of the section, and for cooperation and coordination of programs and research projects with those conducted by other agencies in Louisiana, other states and national agencies and organizations. The work involves conferring with officials of the Board of Health and authorities in all governmental jurisdictions, serving as high level consultant on all problems pertaining to nutrition to the agency director and other officials, and participation in staff meetings to assist in the formulation of policies and procedures for the agency. The employee in the position prepares and submits budgets, evaluates and changes programs, institutes special projects, and establishes broad policies and operating procedures for the nutrition section with full accountability for results achieved. The activities of the nutrition section are subject to review only by the State Health Officer and are performed under the policies established by the Board of Health. Virtually complete independence is afforded on technical aspects of the assignments.

The work of this class differs from that of all other classes in the Public Health Nutritionist series in that the incumbent serves as the chief of the nutrition section of the Board of Health.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Serves as consultant to State Health Officer, other division and section directors in the Board of Health, and officials in other governmental agencies and organizations.

Recommends nutrition programs and devises plans for implementation and execution.

Supervises Public Health Nutritionists of lower level and all personnel of the nutrition section.

Plans in-service and pre-service programs.

Conducts staff meetings and conferences for program discussion and professional enlargement.

Formulates plans, policies, and procedures for operation of the section.

Plans research projects and special surveys pertaining to nutritional work.

Confers and cooperates with the heads of other agencies on projects of mutual interest at all governmental levels.

Represents the agency at conventions and meetings.

Recruits and trains personnel.

Qualification Requirements

Graduation from an accredited four year college or university with specialization in foods and nutrition followed by five years of experience in nutrition work, three years of which must have been in a supervisory or advanced consultative capacity in a public health education program.

Substitutions

Completion of a one year dietary internship in an institution approved by the American Dietetic Association may be substituted for one year of the required general experience.

A master's degree in foods and nutrition may be substituted for one year of the required general experience.

Thirty semester hours of graduate credits in foods and nutrition in excess of a master's degree may be substituted for one year of the required general experience.

A Ph. D. degree with specialization in foods and nutrition may be substituted for all of the required experience.

APPENDIX B

PROPOSED NEW JOB SPECIFICATIONS FOR PUBLIC HEALTH NUTRITIONISTS

I. PUBLIC HEALTH NUTRITIONIST I

Distinguishing Features or Characteristics of Work

This is advisory professional work in foods and nutrition carried out under the technical supervision of a higher level public health nutritionist and the administrative direction of the health officer of the unit which serves as the headquarters for this position. The work involves assisting in the planning, promotion and execution of activities in the nutrition programs, in coordination of these program activities with the other programs in the health units; in the collection of data for nutritional research studies. Incumbents of positions allocated to this class assist in developing services in food selection and nutrition for individuals and families; participate in inservice education programs in the local health units and in programs of education in nutrition carried out with other public and private agencies.

This class differs from that of Public Health Nutritionist II in that the incumbent works only where close technical supervision of a Public Health Nutritionist III or higher level can be provided and performs assigned duties requiring less technical experience.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Under technical guidance, assists personnel of health units in program planning.

Participates in planning and promotion of local nutrition programs.

Participates in community surveys to determine community needs for nutrition services and performs assigned duties in research of the nutrition section.

Assists in preparation of materials and in nutrition education programs for professional and lay groups.

Assists in preparation and distribution of educational materials for use in various communication media.

Maintains cooperative relationships with personnel of related public and private agencies at the local level.

Assists in developing and carrying out demonstrations and teaching in areas such as food selection, preparation and budgeting for individuals and groups.

Prepares reports of activities as required.

Qualification Requirements

Graduation from an accredited four year college or university including or supplemented by course work required for a major in foods and nutrition plus one year of experience in foods and nutrition work.

One year of graduate work in foods and nutrition or completion of a dietetic internship in an institution approved by the American Dietetic Association may be substituted for the one year of required experience.

II. PUBLIC HEALTH NUTRITIONIST II

Distinguishing Features or Characteristics of Work

This is professional work in public health nutrition in an assigned parish health unit or district of the state which includes consultative services. The work involves adapting and implementing state wide nutrition programs to the parish or district level, and responsibility for the execution of these programs in the assigned areas. Incumbents participate in inservice training programs and in the collection of data for nutritional research projects and studies. Employees are expected to exercise judgment and initiative but work under the technical and professional supervision of a public health nutritionist of higher rank. If employed by a local health unit, the administrative direction is received from the local health officer.

This class differs from that of Public Health Nutritionist I in the higher level of the technical responsibility for the nutrition services performed in the local or district health programs. The class is exceeded in level accountability by that of Public Health Nutritionist III. Incumbents in the latter class receive a minimum of supervision and participate in the planning and execution of a state wide nutrition program.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Provides consultant services in nutrition to public health staff as part of the public health program and provides direct services to individuals and families when indicated.

Assists in the research activities and special projects of the nutrition section as assigned.

Conducts classes which demonstrate use and preparation of foods for families at various economic levels based on community needs.

Interprets public health nutrition services and maintains cooperative relationship with civic, governmental and educational groups in the parish or district.

Prepares articles, talks, radio and news articles pertaining to foods and nutrition for use in various communication media.

Attends professional and lay meetings and conferences.

Cooperates with and assists personnel of the State Board of Health and related agencies at the local, district and regional level.

Reports and summarizes activities at regular intervals.

Qualification Requirements

Graduation from an accredited four year college or university including or supplemented by course work required for a major in foods and nutrition plus two years of experience in foods and nutrition work.

Substitutions

Completion of a dietetic internship in an institution approved by the American Dietetic Association may be substituted for one year of the required experience, or

A Master's degree with a major in foods and nutrition may be substituted for one year of the required experience.

III. PUBLIC HEALTH NUTRITIONIST III

Distinguishing Features or Characteristics of Work

This is advanced professional work of a consultative and supervisory nature in public health nutrition programs. Incumbents assist in planning and developing and are responsible for carrying out programs in foods and nutrition as they pertain to public health activities at state, regional, district or parish level. They assist in planning and conducting nutrition surveys and research projects; in supervising the work of subordinate nutrition personnel; and have a high degree of accountability for results achieved. Technical supervision is received from a Public Health Nutritionist IV and usually consists of periodic conferences to plan programs and procedures and to evaluate progress and results of the programs. If employed by a local unit, employees in this class receive administrative direction from the local health officer.

Work in this class exceeds that of the class of Public Health Nutritionist II by the responsibility for participating in the planning and execution of state wide nutrition programs where assigned. It differs from that of Public Health Nutritionists IV in that positions in the higher level serve as principal advisors and assistants to the chief of the nutrition section of the agency on all phases of the total programs of the section.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Renders consultant services in foods and nutrition to professional public health staff as a part of the public health programs and provides direct service to individuals and families when indicated.

Supervises public health nutritionists of lower level (I and II) in the assigned area.

Coordinates nutrition programs with other public health programs in the assigned area.

Initiates and conducts studies and surveys to assess nutrition problems in assigned districts of the state as a basis for program development.

Participates as assigned in research projects of the nutrition section.

Maintains cooperative relationships with personnel of related agencies in the assigned area for purpose of coordinating program activities.

Plans and participates in inservice and preservice educational programs of the agency.

Plans and participates in public information and educational activities on nutrition.

Provides nutrition education materials for use in nutrition programs.

Represents the agency at professional meetings and conferences.

Reports and summarizes progress and activities at regular intervals.

Qualification Requirements

Graduation from an accredited four year college or university including or supplemented by course work required for a major in foods and nutrition plus three years of experience in foods and nutrition work.

Substitutions

Completion of a dietetic internship in an institution approved by the American Dietetic Association may be substituted for one year of the required experience, or

A Master's degree with a major in foods and nutrition may be substituted for one year of the required experience.

IV. PUBLIC HEALTH NUTRITIONIST IV

Distinguishing Features or Characteristics of Work

This is highly responsible professional work in planning, directing and supervising comprehensive nutrition programs for a large region of the state or in the development and direction of nutrition services in assigned program areas at the state level. Responsibilities include: serving as high level assistants to the chief of the nutrition section in the formulation of programs and policies, in budgetary preparation and in the implementation, direction and evaluation of state wide nutrition programs. Incumbents in this position are responsible for the augmentation of the nutrition programs and projects for supervision of work of subordinate nutrition personnel within their jurisdiction; assisting in the development and direction of nutrition research projects and studies. Assignments are made by the chief of the nutrition section in broad outline. Administrative and technical supervision from the chief of the section is usually in the form of conferences to review all phases of nutrition programs and to promote over-all plans.

Responsibilities inherent in positions in this class exceed those of the class of Public Health Nutritionist III in that incumbents at the higher level serve as advisors to the chief of the nutrition section, and supervise and serve as consultants to employees in positions allocated in the class of public health nutritionist I, II and III. They are exceeded in scope only by the incumbent in the position in the class of Public Health Nutritionist V who serves as the chief of the nutrition section.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Directs nutrition programs within a large geographical region or in an assigned program area state wide.

Assists the chief of the section in planning for the inclusion of nutrition in programs of the State Board of Health.

Confers with the chief of the nutrition section on administrative matters which affect the entire section; makes recommendations on policies, budgetary matters, program needs and participates in the evaluation of the nutrition programs and personnel.

Provides consultation in nutrition for professional staff such as physicians, nurses, social workers, teachers and others of the public health and allied agencies and, when indicated, gives direct service for complex clinical dietetic and nutrition problems.

Assists in planning nutrition research and surveys and in evaluating the results.

Supervises public health nutritionists of lower levels.

Participates in inservice and preservice educational programs.

Participates in public health field experience for graduate students such as nutritionists, dietitians and other professional health workers in the field of nutrition.

Assists in the recruitment and training of nutrition personnel.

Conducts or participates in staff meetings and conferences.

Prepares, reviews and selects nutrition education materials for use in the programs and for public information.

Prepares comprehensive reports and evaluates activities in the nutrition programs.

Participates in preparation of materials for publication in professional journals and for use in training manuals.

Represents the agency at professional and other meetings.

Qualification Requirements

A Master's degree in foods and nutrition, preferably in public health nutrition, and three years of experience in foods and nutrition work, one of which must have been as a nutritionist in a public health agency.

Substitutions

Completion of a dietetic internship in an institution approved by the American Dietetic Association may be substituted for the Master's degree or one year of the required general experience.

Thirty semester hours of graduate credits in foods and nutrition and related fields beyond a Master's degree may be substituted for one year of the required general experience.

V. DIETARY CONSULTANT (P. H. NUTRITIONIST IV)

(A Proposed New Position)

Distinguishing Features or Characteristics of Work

This is highly responsible professional work, with responsibility for development, direction, integration and administration of a program

of consultation on nutrition and food service to group care facilities throughout the state. The incumbents work under the general direction of the chief of the nutrition section.

Incumbents in this position are specialists on normal nutrition, therapeutic and administrative dietetics in group care facilities and have the responsibility of providing technical information on this phase of the nutrition program to the chief of the section and other nutrition staff members.

Responsibilities inherent in this position are comparable to Public Health Nutritionist IV and exceed those of lower level public health nutritionists in that incumbents serve as principal advisors to the chief of the section and have high level responsibility for program development and operation. Incumbents in this position do not supervise employees in class of public health nutritionist I, II and III, but do serve as consultant to these staff members.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in positions allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related, or a logical assignment of the position.

Plans, develops and conducts a program to improve standards in nutrition and food service as they relate to group care facilities.

Serves as the specialist on nutrition and food service in group care facilities for the public health agency and coordinates the program with other operating programs in the agency.

Provides consultation to administrators and staff of group care facilities on menu planning, food purchasing, storage, preparation and service, budgeting and cost control, modified diets, work organization, recruitment of staff, training of employees and other activities that relate to food service.

Provides consultation to the nutrition staff and other professional staffs such as physicians, nurses, social workers and dietitians on nutrition and food service in group care facilities.

Interprets available services and provides consultation to agencies and professional organizations concerned with group care, establishes and maintains cooperative relationships with such agencies and organizations.

Plans and participates in educational activities such as inservice training and staff development programs.

Develops, evaluates and selects educational materials.

Participates in making studies and surveys related to nutrition and food service in group care facilities.

Provides consultation to building committees, administrators, architects, engineers, equipment specialists and others in planning and evaluating food service departments.

Participates in public health field experience for graduate students such as nutritionists, dietitians and other professional health workers in the field of nutrition as it relates to group care.

Reports, summarizes and evaluates progress and activities at regular intervals.

Qualification Requirements

Graduation from an accredited college or university including or supplemented by course work required for a major in foods, nutrition and food service management and successful completion of a hospital dietetic internship approved by the American Dietetic Association. In addition, three years of full-time professional experience as a dietitian in a group feeding facility of which at least one year must have been in a health care facility and one year must have been in an administrative capacity are required. These requirements (one year in a health care facility and one year in an administrative capacity) may have been done concurrently.

Substitutions

One year of graduate study with a major in foods and nutrition, food service management or public health nutrition may be substituted for one year of the general experience. No substitution will be permitted for the experience as a dietitian in a health care facility or for the administrative experience requirement.

Three additional years of full-time successful experience in dietetic work that is needed to qualify for membership in the American Dietetic Association, may be substituted for the hospital dietetic internship.

VI. PUBLIC HEALTH NUTRITIONIST V

Distinguishing Features or Characteristics of Work

This is highly responsible administrative and professional work with the responsibility of serving as the chief of the nutrition section of the State Board of Health. Under general administrative direction, the incumbent is responsible for all activities of the section including planning, organizing and directing the agency's state wide nutrition program, and for cooperation in and coordination of programs and research projects in nutrition with those conducted by other agencies in Louisiana, other states and national agencies and organizations. The incumbent serves as the chief specialist in nutrition for the agency and makes independent decisions and judgments on technical aspects of the programs of the section. The work involves conferring with officials of the State

Board of Health and authorities in all governmental jurisdictions. The chief of the nutrition section participates in administrative staff meetings to assist in the formulation of policies and procedures for the agency. The activities of the nutrition section are performed within the policies established by the State Board of Health. The employee in the position prepares and submits budgets, evaluates and changes programs, institutes special projects, and establishes broad policies and operating procedures for the nutrition section with full accountability for results achieved.

The work of this class differs from that of all other classes in the public health nutritionist series in that the incumbent serves as the chief of the nutrition section of the State Board of Health.

Examples of Work. (Note: These examples are intended only as illustrations of the various types of work performed in the position allocated to this class. The absence of specific statements of duties does not exclude those tasks from the position if the work is similar, related or a logical assignment of the position.)

Directs activities of the section and provides state wide leadership in the field of public health nutrition.

Serves as consultant on nutrition to the State Health Officer, other division and section directors in the State Board of Health, and officials in other governmental agencies and organizations.

Formulates plans, policies and procedures for operation of the section.

Develops nutrition programs and devises plans for implementation and execution.

Plans research projects and special surveys pertaining to nutrition work.

Supervises other public health nutritionists and other personnel of the nutrition section.

Confers and cooperates with the heads of other agencies at all governmental levels on projects of mutual interest.

Represents the agency at professional meetings.

Conducts nutrition staff meetings and conferences for program discussion and professional staff development.

Plans inservice and preservice educational programs.

Directs recruitment and training of nutrition personnel.

Directs the agency's public health field experience for graduate students such as nutritionists, dietitians and other professional health workers in the field of nutrition.

Qualification Requirements

A Master's degree in foods and nutrition, preferably in public health nutrition, and five years of experience in foods and nutrition work, three years of which must have been at a supervisory or advanced consultative capacity in a public health agency nutrition program.

Substitutions

Completion of a dietetic internship in an institution approved by the American Dietetic Association may be substituted for one year of the required general experience.

Thirty semester hours of graduate credits in foods and nutrition and related fields beyond a Master's degree may be substituted for one year of the required general experience.

APPENDIX C

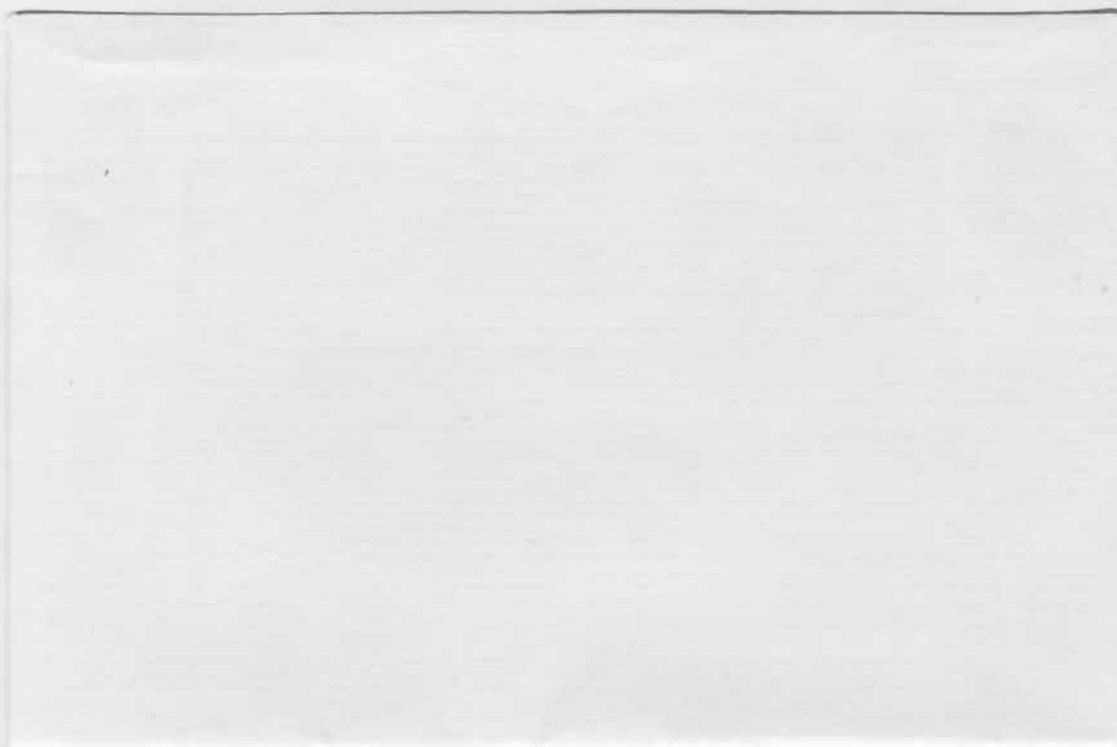


Figure 3. "Confidentially Speaking"

- confidentially **speaking**

Louisiana State Board of Health



NUTRITION SECTION

APRIL, 1965

THIS IS RATHER PERSONAL, BUT HAVE YOU GIVEN SERIOUS THOUGHT TO THE SIGNIFICANCE OF EATING TO THE AGED?

Aging is a growing problem in our society as the percentage of older citizens continues to show a steady trend upward. About 15% of our total population are 65 years old or older. In some countries of the world prestige accompanies age. In the youth-centered society of the United States, however, aging is often looked upon with dread as an affliction.

Aging is a continuous process of change covering the entire life span. Every individual needs to develop a personal attitude of acceptance toward growing old. Then elderly persons can be accepted as changing physical beings. Psychological needs of the aged are no different from those of earlier years. These needs as well as the physical needs must be taken into account in discussing food for the aged.

The nutritional needs of senior citizens are practically the same as those of other adults except for calories. Reduced physical activity and lowered metabolic rate result in reduced caloric needs. Without skilful planning it is very difficult to get an adequate diet when the food energy value is less than 1800 calories. Food rich in required nutrients must be given first place in the day's menus. Empty calories present in such things as fat and sweets must be decreased. Lean

meats, fish, milk, fruits, and leafy vegetables furnish excellent protein, minerals and vitamins and are low in calories per serving.

Continuing to eat a variety of foods requires conscious effort in old age due to loss of teeth, economic stress, loss of appetite, gastric upsets, laziness, illness and certain special diseases. A study of the daily food intakes of 1,087 Iowa women 30 - 90 plus years of age revealed that aging women (70 - 93 years of age) continue to eat the same foods as young women (30 - 39 years old) but in smaller quantities. There were shifts, however, in the relative contributions of various food groups to total calories in the daily diet of the elderly persons. Bread and cereals furnish more calories in their diets while meat, fish and poultry furnish fewer calories in the diets of the older group than of those of the young. All other food groups continued to make the same relative contributions to the total energy of the diets of the elderly as they did in the young. Sweets and desserts were found to furnish 20 per cent of the day's calories in both age groups.

Because of the decrease in the total quantity of food eaten by the older group, the calorie value of the diet is considerably lowered. In the Iowa study

it was found that the mean value for all diets in the women 70 years old and above was 1,425 calories while their requirement is about 1,600 calories per day. Calories play a role in optimum protein utilization. When the diet is deficient in calories, protein may be used as a source of energy instead of being used for the nourishment and maintenance of body cells.

According to a United States Department of Agriculture survey, thiamine, calcium and ascorbic acid are nutrients most likely to be inadequate in the diets of older people. This reflects their consumption of large amounts of high carbohydrate foods which are cheaper and easier to prepare and consume. Meals may be skipped by some aged people simply because they do not remember to eat. For others who live alone, mealtime is lonely and not enjoyed and meals become irregular and casual rather than well-planned to include adequate nutrients.

While undernutrition is quite common among elderly people who are hospitalized, overnutrition resulting in obesity is far more widespread among the 95% of Americans 65 years old and over who live at home. Obesity is usually acquired prior to old age, but may result from continued intake of high calories and decreased caloric expenditure due to reduced physical activity.

"Emotional poverty" of some old people results in overeating. Eating sometimes becomes the primary source of satisfaction and compensation to the elderly people whose days often contain little of interest or value.

Some aged people cannot plan for their own emotional needs. Most are used to living independently, having financial security, running a house, enjoying a position of status in their family and community, and playing a constructive and socially worthwhile role. Now they

find themselves increasingly dependent on others for financial security and emotional satisfaction. They may be filled with despair at the living out of empty days.

Behavior toward food is a result of how food is symbolized within the individual. Food means many different things subconsciously to people. This helps explain their being unaware of why they reject certain foods even though it is prescribed by a doctor or is "good for them." Milk, for instance, may symbolize security and comfort for babies, but to older people dependency and helplessness. Craving for sweets may be to compensate aspects of their life which are not sweet or satisfying.

Many of the aged have little appetite and poor food habits. Some of the conditions that affect appetite are: lack of interest in living; need for attention; no teeth or dentures or dentures that do not fit; inability to swallow well; difficulty in feeding oneself; belief that certain foods do not agree with the individual; and failure of past food habits to include the essential foods.

In order to understand an older person's current acceptance or rejection of food, consideration must be given to the environment that influenced his food habits. Choice of food is determined by economic, social, physiologic and psychologic factors. Food habits represent an accumulation of attitudes and practices over a period of time in a changing environment. Income, residence, dental status, long established eating habits, dietary fads and prejudices and educational achievement are all involved.

Hunger reflects a basic need and its gratification is culturally associated with pleasant experiences of life. More than satisfying a physiologic need, eating comes to have social significance. A thwarted person may reject food to punish

himself or others. When people lose interest in food it is serious because it may mean they are directing their hostility inward and wish to destroy themselves.

G. W. Blumenthal suggests that the phrase "the way to a man's heart is through his stomach" should perhaps read "the way to a man's stomach is through his heart." When one complains about food it may be a plea for more attention.

Food has the attributes of being therapeutic and love-giving. It is a form of affection one bestows on people. Food carelessly prepared and served indicates lack of interest.

When reality becomes painful, elderly people sometimes regress to the past. What one ate when he was young and strong and came home tired from work was good and satisfying. Men, particularly, identify food with the way it tasted when the wife cooked it at home. Good meals can be anticipated as the high point in a dull, ordinary day. Giving an old person good, attractive, tasty food means "I care about you. I want you to live, and you are very important to me."

Persons who are responsible for feeding the aged need to realize that food service is far more than just serving groceries. It involves looking beyond food itself to the emotional aspects of eating. What are some requirements for the successful feeding of the aged?

The first requirement is an awareness of the right of each individual to be different. If one appreciates his own feelings about food, he should also appreciate the feelings of others. Since food preferences and eating habits are the result of many factors, a search should be made for clues which explain a person's attitudes toward food.

Make mealtime a satisfying

experience. If a person can be out of bed at mealtime it facilitates eating and improves the appetite. Companionship is important during meals as is an unhurried atmosphere. Foods should be arranged attractively and in small portions. Utensils should be easy to handle. Soup may be served in a cup to be drunk, and desserts may be served in flat dessert dishes instead of in stemmed compotes.

Meals should be served at regular hours. Extra feedings may prevent adequate eating at mealtime since the aged person has a slower digestive process. Liquid intake is important since it aids in combating dryness of mouth which is a common complaint at this age. A person may dislike water but drink other beverages in sufficient quantities. Liquids fed between meals should be low in calories and easily digestible.

For the person with a poor appetite, ways must be found to pack nutrients into as few bites as possible. For instance, bread may be served in soup and ice cream may be served in milk. Something from home, specially prepared and suitable for the diet, may be an excellent stimulus to a failing appetite.

The idea that old people must have soft and bland foods rather than foods they enjoy and with which they are familiar is absurd. A person does not suddenly find foods impossible to digest just because he is called old. The morale factor must be considered. Although finely divided foods contain all the nutrients, is this enough? The simple act of being able to chew and taste familiar foods is one of the few pleasures remaining for the aged. If finely divided foods are called for, regular foods slightly adapted by an electric blender may be better received than baby food.

Whenever possible cater to individual likes and dislikes. A choice of

bread or beverage or the way an egg is cooked makes a person feel his wishes are important and have some value to someone. It is not enough that the meals planned be nutritious. What is important is that the food be accepted, ingested and absorbed by the person.

Special diets are a great problem for some persons. Old people who are used to eating their own way for many years may want to continue eating their favorite foods regardless of medical advice. Trying to impose unfamiliar foods on old-timers may cause developments of tensions that may interfere with their digestion or hamper their food intake. Diets should be controlled in a flexible manner. Since lifelong patterns are not easily broken, change should be introduced with the principle of minimal interference. Aged persons, however, can learn if circumstances make it expedient for them to adopt new eating habits.

An aged person may show his rejection of his state of dependency by refusing food. This calls for tolerance, understanding and appreciation that frustrations may be displaced on food. Some people cannot express appreciation in acceptable terms and find it painful to be recipients. As immobility and dependency progress, food often takes on greater importance as a manipulative tool.

Families should continue to include older persons in their planning. Permanent family ties and companionship are most important to the aged. People cared for by others sense when they are wanted or rejected.

Dr. Edward L. Bortz says that "man's fight for time is his greatest battle. In that battle, his emotional life - the surplus of hope over despair, love over indifference, of motive over resignation - is highly important."

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