A Report of Nutrition Field Experiences and Observations In Jefferson County, Alabama

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To the Graduate Council:

I am submitting herewith a thesis written by Nancy Jane Brittain entitled "A Report of Nutrition Field Experiences and Observations In Jefferson County, Alabama." 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, John T. Smith

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
August 16, 1966

To the Graduate Council:

I am submitting herewith a thesis written by Nancy Jane Brittain entitled "A Report of Nutrition Field Experiences and Observations In Jefferson County, Alabama." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree Master of Science, with a major in Nutrition.

Mellie T. Trufer
Major Professor

We have read this thesis and recommend its acceptance:

Harold H. Walker
John T. Smith

Accepted for the Council:

Dean of the Graduate School
A REPORT OF NUTRITION FIELD EXPERIENCES AND OBSERVATIONS

IN JEFFERSON COUNTY, ALABAMA

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
Nancy Jane Brittain
August 1966
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CHAPTER I

INTRODUCTION

This report is the student's interpretation of the nutrition program observed in the Jefferson County Department of Public Health, Birmingham, Alabama. Observation was for a seven week period. The field experience was under the guidance and direction of the two nutrition consultants in the agency. As part of the field training they included three days of observation with a state nutritionist in the Bureau of Maternal and Child Health, Alabama Department of Public Health. The student was given the opportunity for some participation in the nutrition program.

The field experience was arranged as a supplement to the student's academic training in Public Health Nutrition at the University of Tennessee. Activities were planned to contribute to her understanding of how the nutrition service is related to the total health program and to provide her with an increased awareness of the importance of nutrition in the public health picture. The student's main objectives were: (1) to study the organization and administration of an official public health agency and in particular that of the nutrition unit, (2) to gain an understanding of how a public health nutrition program is developed to meet the needs of a community, (3) to learn additional teaching skills and techniques for use with various
educational levels, and (4) to develop some ability to function as a nutritionist in a health agency.

To help achieve these objectives, the following experiences were planned. Interviews were scheduled with the Health Officer, the Deputy Health Officer, the Health Administrative Officer, and directors of six of the bureaus to introduce the student to the organization and activities of the health department. Also conferences were planned with directors of voluntary and official agencies who work cooperatively with the health department. These interviews helped in understanding how the health department programs are integrated with programs of other agencies. A large portion of the field experience consisted of observation of the nutrition consultants' activities, but the student was also given the opportunity to gain some participation. In subsequent chapters some of the observations experiences in the field work will be noted.

A daily record of the information gained through observations, meetings, conferences, personal contacts, and actual experiences was kept for the seven week period. The material is presented in five chapters in this report. Chapter II contains some of the historical, geographical, economical, governmental, educational, and health characteristics of Jefferson County which are factors in determining the health problems and programs of the county.

Chapter III provides a brief discussion of the history and organization of the Jefferson County Department of Health and the
factors influencing the placement of nutrition in the Bureau of Public Health Nursing. A detailed description of the nutrition program is included in Chapter IV. The student summarized the field experience in Chapter V and evaluated it in terms of her objectives.
CHAPTER II

JEFFERSON COUNTY

Jefferson County, situated in the north central section of Alabama, has an area of 1,118 square miles. Birmingham is the central city in the county. It was founded by a land company backed by railroad officials in 1871 on the site where the east-west and north-south railroads had met in a cotton field the previous year. It was named for Birmingham, England (1).

The abundance of the three necessities for making steel (coal, iron ore, and limestone) and the laying of two railroads that would cross in the mineral area contributed to the industrial and economic growth of Birmingham. Today Birmingham is the thirty-eighth largest metropolitan area in the nation and the fourth largest metropolitan market in the Southeast. Located in the Jones Valley, the residential area of Birmingham spreads over Shades Mountain and Red Mountain (2).

Several million tons of coal and coke are produced annually in the district with the by-products yielding vast quantities of coal tar and gas. Pig iron and steel have always been the leading products of the city, but the varied industries of the area manufacture more than three thousand different commodities. Among the more important products are cast iron pipe, aircraft, wire, nails, steel cars, rails, stoves, cotton gins, machinery for coal mining, brick,
cement, lumber and lumber products, cottonseed oil and meal, cornmeal, textiles, rubber tires, chemicals, mattresses, meat products, soft wood, and explosives (1). Only 1.3 per cent of the workers are engaged in agricultural pursuit (3).

The development of natural resources and the industrial prosperity of Birmingham have not been without an effect on the health of the community. Air pollution, causing an increase in respiratory diseases, is becoming one of the major health hazards of the community. Since 1955 some 85,000 samples of the air over metropolitan Jefferson County have been collected and analyzed. Statistical analysis of the data compiled from the study of these samples indicates that downtown Birmingham is on the average twice as polluted with inhalable particulate matter as other United States cities. Breathing the present Birmingham air is equivalent to smoking two and a half packs of cigarettes per day. Birmingham air has been extensively studied over the last nine years, but it is still without an air pollution control ordinance (4).

In October of 1964 a United States Public Health Service grant was approved for the purpose of developing an air pollution control program in Jefferson County. Up to the present time the laws necessary for controlling air pollution have not been passed. Until these laws are enacted, the health department is hampered in its attempt to decrease the air pollution in Jefferson County.
In 1910 the city adopted a commission form of government and retained it for fifty-two years. The city government was changed to a mayor-council form in 1962 (1). The city of Birmingham and Jefferson County contribute a sizeable sum to the support of the health department. Justification of the health department budget to the Birmingham and the Jefferson County governments to obtain their appropriations is the responsibility of the Health Officer and the Health Administrative Officer.

Birmingham has eight colleges offering advanced degrees including the University of Alabama Medical School and School of Dentistry (2). The medical school has a research program ranked in the top one-third in the nation. Located near the medical center are the Crippled Children’s Clinic, the Eye Clinic, the Veteran’s Hospital, the Public Health Building, the University of Alabama Center where evening undergraduate courses are offered, and the Southern Research Institute (1). The health department works closely with the University of Alabama in training for a variety of health professions, and in turn the medical center provides resources for the health department personnel. Some health department employees serve on the medical school staff, and others are sometimes requested to conduct special classes or to serve on special committees.

The population of Jefferson County increased 13.6 per cent from 1950 to 1960, and the estimated population as of July 1, 1964, was 667,138. Less than 20 per cent of the population live in the
rural areas, and the average population per square mile is 568 (5). The increase in population has resulted in a growing health department program to help meet the health needs of the community.

Even though only 33.7 per cent of the population is Negro, more Negroes than whites are seen in the public health clinics because of the economic status of the Negro population. Some of the health problems which are more prevalent in the non-white population will be noted in this report.

Approximately 12 per cent of the population is under five years of age, and 7.7 per cent of the population is sixty-five years and over (5). Even though citizens sixty-five years of age and over comprise only a small portion of the population, more than one-fourth of the nurses' home visits are made to this group. This indicates health problems are more prevalent in the older age groups. Child health is also a particular concern of the health department, and approximately seventeen well-child clinics are held weekly for children between birth and eighteen years of age.

The resident infant mortality rate in 1964 of 26.3 deaths per 1,000 live births, a decrease of 20.1 per cent since 1950, was the lowest rate for Jefferson County in fourteen years. The white population had an infant mortality rate of 18.5 deaths per 1,000 live births as compared to 37.9 for the non-white population. Since 1950 the percentage decrease in the infant mortality rate of the white population has been almost three times the percentage decrease of
the non-white population. The non-white population also shows a significantly smaller decline in the neonatal death rate. Both the white and non-white infant mortality rates in Jefferson County are higher than the national white and non-white infant mortality rates (6).

The 249 still births to resident mothers in 1964 represented a slight decrease from the year 1963. The fetal death rate for the non-white population is twice the rate for the white population. There has been a 25 per cent decrease in the rate of fetal deaths in Jefferson County since 1950 (6).

The maternal mortality rate for the white population in 1964 was 4.0 per 10,000 live births, and the maternal mortality rate for the non-white population was 11.9 per 10,000 live births. There has been an irregular decrease in the maternal mortality rate since 1950 (6).

Birmingham contains 52 per cent of the county's total population. There are thirty other incorporated cities and towns in the county, four of which have populations over 10,000 and three of which have populations between 5,000 and 10,000 (6). All of the five health centers are located in the city limits of Birmingham with the exception of one in Bessemer. Two subcenters are located in Morris and Tarrant.

The median income in 1959 of families in Jefferson County was $5,103 as compared to $3,937 for the state of Alabama. Approximately
25.8 per cent of the population had incomes under $3,000, and 12.4 per cent had incomes of $10,000 and over. The respective figures for the state are 39.1 per cent and 8.0 per cent (5). Since there are no free clinic services available to the people, the health department does provide clinic services for indigent patients.

In Jefferson County the median school years completed by the age group twenty-five years old and over was 10.2 in 1960. This is slightly higher than the 9.1 years for the same age group in the state. Only 36.8 per cent of this age group completed high school or more, and 12.6 per cent completed less than five years of school. In the state 30.8 per cent completed high school or more, and 16.3 per cent completed less than five years of school (5). Jefferson County compares favorably, both economically and educationally with the state, but economic deprivation and a lack of formal education are still problems which influence the nature of the health program in Jefferson County.

Illegitimacy is a growing public health problem in Jefferson County, and the figures seem to indicate this is largely a big city problem. Birmingham had 1,007 of the 1,646 live illegitimate births in Jefferson County (7). The illegitimacy rate of 308.0 per 1,000 births for the non-white population is almost fifteen times the rate of 20.0 for the white population. In 1964, 44.6 per cent of the
illegitimate births were to mothers nineteen years of age and under, and 25.9 per cent were to mothers in the age group twenty to twenty-four years of age (6).

The four leading causes of death in Jefferson County, diseases of the heart, malignant neoplasms, vascular lesions affecting the central nervous system, and accidents, follow the same order as the four leading causes of death in the United States. Other diseases of the circulatory system, which is the ninth leading cause in the United States, does not appear in the ten leading causes of death in Jefferson County. Homicide is the seventh leading cause of death in Jefferson County but is not one of the ten leading causes of death for the United States. The other leading causes of death in Jefferson County are certain diseases of early infancy, influenza and pneumonia (excluding pneumonia of newborn), other bronchopulmonic diseases, general arteriosclerosis, and diabetes mellitus. The resident crude death rate for Jefferson County of 9.0 per 1,000 population is slightly lower than the Alabama rate of 9.3 per 1,000 population and the United States rate of 9.4 per 1,000 population (8). The rate for the non-white population is 11.5, and the rate for the white population is 7.8 (6).

The number of chronic diseases appearing in the ten leading causes of death indicates the seriousness of chronic disease problems in Jefferson County. There is difficulty in combating this problem since the indigent patient may not be able to afford even clinic fees for treatment when the disease is detected.
CHAPTER III

THE JEFFERSON COUNTY DEPARTMENT OF HEALTH

Orientation to the Jefferson County Department of Health was provided via tours and personal interviews with public health personnel. During the seven week field experience the student talked with the directors of six bureaus to learn about their programs and services. The activities and functions of the bureaus are multiple and diversified making it impossible to study each in detail. A brief description of the bureaus is included in this chapter. Nutrition services available to the bureaus will be discussed in a later chapter. An organization chart is shown in Figure 1.

I. HISTORY AND ORGANIZATION

About 1916 some of the leading citizens of Jefferson County, two of whom were physicians, recognized the need for organized public health services in the community. At this time Jefferson County was considered to be one of the most disease stricken areas in the country.

A request was made by these citizens for the Public Health Service to send a committee to study the community and its health needs. A report, including forty or fifty recommendations, was
Figure 1. Organization of the Jefferson County Department of Health.
made by the committee. One suggestion was the establishment of a health department with a full time physician as director. On the basis of this recommendation, the Jefferson County Department of Health was established in 1916. The original department had two divisions, one serving Birmingham and one serving the county and municipalities outside of Birmingham. The first Health Officer served until 1941. When a new Health Officer was appointed, the two divisions were combined into one unit serving the entire area.

Today approximately 275 people are employed by the Jefferson County Department of Health. Five health centers and two subcenters, located strategically throughout the county, provide health services for the communities. These centers facilitate giving direct service to all people in the county. They provide the nurse with an office in close proximity to her district, and they provide a place to hold prenatal, child health, and other clinics in the vicinity of the people needing the service. The director of nursing is responsible for the supervision of these centers. Figure 2 shows the location of the centers.

According to Alabama law the organized medical society of the county is directly responsible for the administration of the public health program. The Board of Censors of the county medical society serves as the Jefferson County Board of Health. The county board of health, composed of five physicians elected by the county medical society and the President of the County Commission, heads the
Figure 2. Location of Jefferson County Health Centers.
Jefferson County Department of Health. One of the physicians is elected each year for a five year term (3).

All programs of the department have to be approved by the county board of health. This is advantageous in that the physicians of the community work closely with the health department. A disadvantage is that dentists and other health professions are excluded from the county board of health. To compensate for this an advisory committee representing different professional medical disciplines and trade organizations is appointed to advise the county board of health.

The Citizens Advisory Committee to the Jefferson County Board of Health was organized in 1958. This committee consists of sixteen agency representatives. Each agency submits a list of three names from which one representative is chosen by the county board of health to serve on the committee. The essential purpose of this committee is to clarify for the board items with which they might be directly involved and to serve as a liaison between the board and the public in interpretation of policy.

The county health officer is elected by the county board of health and approved by the State Committee of Public Health for a period of not less than three years. Alabama has no municipal boards of health or health officers (3).

The four main sources of funds for the Jefferson County Department of Health are the city of Birmingham, Jefferson County, the state of Alabama, and the United States Government. The thirty other
municipalities are asked to contribute on a per capita basis. Some money is also received for service contracted to the municipalities. For the 1965-1966 fiscal year the approximate expenditure of the health department was two and one-half million dollars compared to one and three-fourths million dollars for the 1964-1965 fiscal years.

II. ADMINISTRATIVE UNITS

Nine bureaus execute the policies of the health department, and the head of each bureau is called a director. The Nutrition Consultants are situated in the Bureau of Public Health Nursing. Figure 3 shows the present assignment of the nutritionist within the bureau.

Bureau of Administration. The Bureau of Administration is concerned with the formulation of broad executive and administrative policies for the execution of an effective public health program. Public relations, inter-departmental relations, the determination of financial matters, accounting, purchasing, and similar activities are a direct responsibility of this bureau (3).

Bureau of Records and Vital Statistics. The Bureau of Records and Vital Statistics keeps complete and detailed records of diseases, births, and deaths for the county and for all larger municipalities within the county. It makes available certified copies of birth and death records. The IBM data-processing equipment under the supervision
Figure 3. Organization of the Bureau of Public Health Nursing.
of the Bureau of Records and Vital Statistics is operated primarily as a service for all bureaus (3).

Bureau of Dental Health. The activities of the Bureau of Dental Health fall into four main categories: dental health education, prevention of dental disease, dental treatment, and research. The professional staff of the dental clinics located in the four health centers provide dental services for indigent persons. Dental treatment is given in the public schools of Jefferson County with two well-equipped dental trailers, and portable equipment is being used to provide dental care for nursing home patients. Dental students gain practical experience through assignments to the dental trailers and clinics (3).

A teacher's guide for dental health developed by the Bureau of Dental Hygiene, Alabama Department of Health, has been distributed to the 246 metropolitan area public schools, the private and parochial schools, and the rural schools for use in grades one through six. Additional copies have been placed in all kindergartens, day nurseries, public libraries, school libraries, and college libraries.

Bureau of Communicable Disease. The Bureau of Communicable Disease is concerned with the control of contagious diseases in the community. When a disease does occur, immediate steps are taken to prevent its spreading. At present the bureau is largely concerned with venereal disease and tuberculosis control (3).
Even though tuberculosis does not appear as one of the ten leading causes of death, it is still a major public health problem in Jefferson County and Birmingham. In 1964 Jefferson County had 364 cases of tuberculosis and fifty-four deaths. At present only three-fourths of the total known active cases are under treatment (7).

Accidents, the fourth leading cause of death, are a noteworthy problem in Jefferson County. An accident prevention program is under the direction of this bureau.

**Bureau of Sanitation.** The Bureau of Sanitation's aim is to provide a sanitary environment for human existence. The proper disposal of human excreta and of the various wastes involved in manufacturing, meat slaughtering, farming, and other such activities necessary for everyday living are of particular concern to this bureau. Investigations are made in relation to problems of sewage treatment and disposal, mosquito and rat control, garbage disposal, swimming pool sanitation, industrial wastes, and related areas (3).

Consultation service is available for all problems of sanitary engineering. Sanitary control of the public water supplies and insuring a safe supply of milk are two important aspects of sanitation.

Food service training courses for food service personnel are offered by the Bureau of Sanitation with the cooperation of owners
and managers of eating establishments in the county (3). While on public health affiliation, the dietetic interns spend one day with a sanitarian. The Nutrition Consultants use this bureau as a resource on food sanitation problems.

**Bureau of Laboratories.** The Bureau of Laboratories contributes to scientific knowledge for the curtailment of illness and early death. Bacteriological, microscopic, serological, and animal inoculation procedures are used in diagnosing and controlling diseases. Samples of milk, water, beverages, and other foods are examined for food value, adulteration, sanitary quality, and harmful ingredients to insure sanitary and safe food and water (3).

Biological supplies are also distributed by the bureau to physicians and clinics. Most of these materials are supplied free of charge (3).

**Bureau of Health Education.** The Bureau of Health Education works cooperatively with the other bureaus in program planning and evaluation of health education activities. Individuals and groups are involved in the promotion of health education activities in an effort to help the population recognize their health problems and to motivate them in seeking solutions through desirable changes in habits related to health (3).

Throughout the year health educators and other health department personnel give talks on health to schools, colleges, clubs, and
civic groups. A film loan service is maintained by this bureau, and pamphlets, leaflets, folders, booklets, and posters on the subject of health are available for distribution (3).

**Bureau of Mental Health.** The Bureau of Mental Health provides clinical services, offers educational programs and materials, gives consultation services, and provides training placement for mental health personnel. The major clinical services are for children who present emotional problems. Up until seven years ago the majority of their services were for the adults. The emphasis of services was altered to provide psychiatric service for children. Much of the service involves evaluation of the problem and recommendation for treatment since there is a shortage of time for long-term treatment. Fees are charged according to the patient's ability to pay.

A drug clinic is maintained for people who need psychiatric supervision along with drug therapy. The drugs are made available for the indigent patients.

Consultation is given to social agencies, other organizations, and individuals who have contact with persons having emotional problems. Training placement is provided for psychiatric residents, psychology interns, and social work students. The bureau also participates in research in the mental health field (3).
Bureau of Public Health Nursing. Two major services provided by the Bureau of Public Health Nursing are home visits and clinic services. Health supervision in the home is available for everyone regardless of financial status. Children and persons sixty-five years of age and over receive a large portion of the nurses' home health services.

The public health nurses function in the maternal welfare clinics and the well-child clinics for indigent patients. Services provided by these clinics have contributed to a decreased infant mortality rate and to improved maternal and infant care in the county.

Since the prenatal and well-child clinics are largely preventive, no treatment is given. If complications are detected, the patient is referred to a private physician or to the clinics at the University of Alabama Medical Center. Follow-up treatment is difficult if the patient is unable to pay since fees are charged by the clinics. However, the nurse may provide some help through home visits.

The public health nurses function in approximately eight prenatal clinics a week in the various centers. These patients may also have a difficult time arranging for delivery if they are unable to pay. Delivery fees are charged in all of the hospitals, and many indigent patients are unable to pay them. For this reason midwife deliveries are on the increase in Jefferson County. Physicians attended 98 per cent of the births in the county in 1964. Physicians attended 3.8 per cent of the deliveries occurring in the home, and midwives attended 2.0 per cent (6).
The Bureau of Public Health Nursing has been given the responsibility of registering, teaching, and supervising the activities of midwives. This program was initiated in June of 1964. It is anticipated that this will be only a temporary program, but before it can be eliminated better provisions must be made for indigent patients (7).

During the year several clinics are sponsored by the Bureau of Public Health Nursing to carry on immunization programs and health counseling in communities that do not receive the health service they need because of poor transportation or social and economic factors. The Nutrition Consultants have never functioned in these clinics because there is limited time for dietary counseling in them.

A unique association in the Bureau of Public Health Nursing is the Public Health Nursing Council. Each of the health centers and the two subcenters have an organized group of women from the community who are interested in the health of the community. The purpose of the organization is to interpret to the community the services of the health department and in turn to bring to the health department the health needs of the community. The interest the group has in the health of the community has kept it alive because it has no official status in the health department.
CHAPTER IV

THE NUTRITION PROGRAM

I. HISTORY AND PHILOSOPHY

In 1958, as a result of increased interest in chronic diseases and the realization of the need for nutrition service in this area, the position for a Nutritionist in the Jefferson County Department of Health was created. This position was funded by the Chronic Disease Program. In the initial limited program the Nutritionist visited nursing homes and homes for the aged, gave dietary instruction in the chronic disease clinics, provided consultation and in-service education to public health nurses, and gave some service in the maternal and child health clinics. For two years she functioned mostly in these areas. The program has now expanded into a varied community-wide program.

By the end of 1965 the Nutritionist's activities included clinical services, consultation to public health nurses and to the Visiting Nurse Association, involvement in community programs, visits to nursing homes, visits to parochial school lunchrooms, follow-up of referrals from various hospitals and clinics, and talks and presentations to groups upon request. With such an expanded program the employment of a second Nutritionist was justifiable, and this position was filled in June of 1965.

Up to the present time the nutrition program has developed to meet needs identified through the observations of nutritional problems
by the public health nurses and other public health workers in the field. community interest, and consultation given by regional and state nutritionists. Some of the programs are the results of the nutritionists' own insight into the nutritional needs of the community and their determination to meet these needs.

The Nutritionist was originally placed in the Bureau of Public Health Nursing because her services were concentrated in the area of chronic disease and because she worked more closely with this bureau. The placement has not been changed.

In 1964 the activities for the Nutritionist's position were evaluated by the Personnel Board of Jefferson County. At that time the title of the position was changed from Nutritionist to Nutrition Consultant.

II. STAFF

Staff organization. Only two Nutrition Consultants are employed by the Jefferson County Department of Health. Both have the same job title, and theoretically neither is administratively higher than the other even though the one with the most experience does accept more of the responsibility for planning and coordinating the program. Both Nutrition Consultants are administratively responsible to the Director of the Bureau of Public Health Nursing.

Recognizing that the placement of the Nutritionists in the Bureau of Public Health Nursing could delimit the program, efforts
are being made by the regional and local Nutrition Consultants to have the placement changed. The preferred placement would be in a public health service division, under the direction of a physician, where the nutrition services would be equally available to all bureaus. Fortunately the present Director of the Bureau of Public Health Nursing feels that nutrition is an important aspect of the total health picture, and she allows the Nutrition Consultants to develop a broad program.

It would also be more desirable not to have the two Nutrition Consultants on the same administrative level. In the present situation any person hired as a Nutrition Consultant, regardless of previous experience and training, automatically has the same authority as a more experienced Nutrition Consultant. This arrangement could present administrative problems interfering with the effectiveness of the program. To correct this problem the job specifications are being rewritten to include a position for a Chief Nutrition Consultant and a Nutritionist.

Qualifications. To qualify for the position of Nutrition Consultant in the Jefferson County Department of Health one must have completed a dietetic internship. Two years of full time professional experience in nutrition or dietetics are required, one year of which must have been as a nutritionist in a public health agency. Completion of a year of graduate study in nutrition is not a requirement, but an applicant must have some graduate courses in nutrition.
The Nutrition Consultants are employed under the Jefferson County Merit System. Applicants for the position apply to and are screened by the Jefferson County Personnel Board. Those certified as meeting the minimum requirements for the position are referred to the Director of the Bureau of Public Health Nursing. Applicants are interviewed by the senior nutritionist on the staff and by the director of nursing. Following the interview a decision is made jointly by the nutritionist and the director of nursing.

The salary range for the nutritionist is from $526 to $639 per month. An automatic increment in salary occurs at the end of the first, second, and fourth year of employment. At the end of the sixth year the maximum salary is reached. Periodically the personnel board has an outside company evaluate the position. On the basis of their report, a decision is made whether to increase the salary range, decrease it, or allow it to remain the same.

Professional advancement and nutrition education. Since there are only two local nutritionists in the health department, no formal in-service education classes are held. Neither do the state nutritionists have formal in-service education classes. The nutritionists are urged to attend in-service training classes for the nurses and other educational programs within the health department. Release work time is allowed by the health department for graduate study.

Provisions are made for the nutritionists to attend the local, state, and national dietetic association meetings. Attendance at
other local, state, and national nutrition meetings is encouraged, and the health department provides money for the nutritionists to attend some of these meetings. If money is not supplied by the health department, arrangements for funds through a grant may at times be possible. These meetings may be attended on health department time since they are a means of professional growth. The student and a nutritionist attended a Nutrition Symposium at the medical center in honor of Dr. Tom Spies.

Dr. Spies is well known for his nutritional research. He came to Birmingham, Alabama, to help combat the high incidence of pellagra, and he remained to conduct research in the Nutrition Clinic of Hillman Hospital until his untimely death in 1960. Other nutritional work for which he is well known is the first successful treatment of tropical sprue which folic acid and the use of vitamin B₁₂ in the treatment of macrocytic anemia(9).

III. COMMUNICATIONS AND PUBLIC RELATIONS

Intradepartmental communications. To keep abreast of the activities in the Bureau of Public Health Nursing, the nutritionists are required to attend the Nursing Supervisors Conferences. Recently they initiated a newsletter containing helpful nutrition information for nurses. These are distributed to the public health nurses several times throughout the year. This newsletter keeps the nurses reminded of nutrition services available as well as providing
information on nutritionally related problems. In the biennial report of the health department the activities of the nutritionists are included in the section on the Bureau of Public Health Nursing. This kind of report limits coverage of the nutrition program.

Each month the Nutrition Consultants and the Nursing Supervisors prepare a report of their monthly activities. These reports are compiled by the director of the nursing bureau and circulated throughout the bureau. In reading these reports the nutritionists look for situations where their services could have been helpful.

The reports from the other bureaus are also circulated throughout the health department. If in reading these reports the senior nutritionist learns of a project which lacks a nutrition component, but would be more meaningful with one, she may contact the director of the project and offer her services.

**Printed materials and visual aids.** Pamphlets are used in large numbers by the Nutrition Consultants. The three pamphlets in Appendix A, page 55, were developed by the present Nutrition Consultants for use mainly in the clinics and for individual diet instructions. Two of the pamphlets "Before the Baby Comes" and "When Your Doctor Says: Cut Down on Salt" are for the prenatal patients. These were developed to meet the particular needs of the patients in Jefferson County and to comply with the orders of the clinic physicians in the county. "When Your Doctor Says: Cut Down on
Salt" succeeded another pamphlet which was more complicated and strict. The nurses had requested that a simpler leaflet be devised. "Before the Baby Comes" is a compilation of several pamphlets about prenatal care, delivery plans, and proper diet during pregnancy that were being given to the prenatal clinic patients. "A Meal Plan for You" was designed for use with patients on a low calorie, a high calorie, a diabetic, or a low sodium diet. For the most part the other materials distributed by the nutritionists come from the National Dairy Council.

Before developing a pamphlet the nutritionists get the approval of the Director of the Bureau of Public Health Nursing and of the medical director of the clinic where the pamphlet will be used. A rough draft of the pamphlet is made. People who are interested in the pamphlet or who might be using the pamphlet are consulted for their advice and opinion. A final copy of the material is sent to the print shop in the health department where it is printed.

A newsletter for nursing homes is published several times throughout the year. The contents are based on needs observed by the nutritionists in visiting the nursing homes. The student observed on her visits to the nursing homes that several of the kitchen supervisors needed more organized buying procedures. On the basis of this observation, she developed the original draft for the newsletter found in Appendix B, page 58, on improving buying procedures.
Either Nutrition Consultant may develop flip charts, posters, exhibits, and other visual aids for a specific program. The magnetic board and the National Dairy Council food models are used often in group teaching by the nutritionists. A variety of projectors are available for use from the Bureau of Public Health Education.

IV. ANNUAL PROGRAM PLANNING

In developing an annual plan, objectives are written by the Nutrition Consultants and sent to the Nutrition Consultant in Chronic Disease Region IV, Public Health Service, and the Nutrition Consultant in the Children's Bureau Region IV. These objectives are based on the nutrition needs of the people in the community. To plan a program to meet these needs a continued compilation of information regarding nutritionally related health problems is required. Various methods are employed by the Nutrition Consultants for obtaining the information.

A study of existing nursing home records is a means of determining those homes in need of nutrition services. Observing and evaluating nutrition teaching in clinics and reviewing prenatal records helps to determine nutrition related problems and to assist the Nutrition Consultants in planning on-going nutrition services in the Maternal Health Program. The observation of teaching methods used by nurses in the homes as related to diabetes is an aid to the nutritionist in developing materials for patient education. The current nutrition
program which the student observed is an outgrowth of recognized nutrition needs in the community. Some of the priority problems are reflected in the following discussion of activities.

V. CURRENT PRIORITIES

Consultation to nursing homes. To provide services in the area of chronic disease was the original reason for creating a position for a nutritionist in the Jefferson County Department of Health. One of her main duties was to advise the nursing homes in any area of food service. A letter was written to the Nursing Home Association informing them of the nutrition services available. Then the nutritionist made an appointment with the nursing home administrators to talk with them about the program.

Visits are made to the nursing homes both on request and at regular intervals. The goal is to have a minimum of one visit a month to each nursing home in the county. Priority is given to nursing homes requesting service, and more frequent visits are made to a nursing home with a special problem. If a large number of requests for service are received, the nutritionists may be unable to visit all homes each month.

While on her field experience the student made several nursing home visits with the Nutrition Consultants. The training and skill of those who supervise kitchen personnel varies greatly from one home to another as does the ability of the administrators. In some homes the services of a nutritionist are more greatly needed than in
others. Some homes are very receptive to help whereas others are uncooperative. It is quite a challenge for the nutritionist to sell herself and her services to some of the nursing home administrators. From the student's observations, it seems to be more difficult to get the administrators' cooperation than that of the food service supervisors.

The student was assigned responsibility for Cottage Hills Nursing Home during the seven week period. Until two months before the student came, a cook was in charge of the kitchen in this eighty-nine bed nursing home. A step toward improvement was the hiring of a food service supervisor. This supervisor had some school-lunch experience, but she had never been in a supervisory position. It was evident that she needed guidance and direction in organizing her kitchen and in serving modified diets.

Since the senior nutritionist felt that little could be done with modified diets until the kitchen was better organized, the student was concerned mainly with work simplification and organization. After observing meal service, when the trays were spread over the kitchen cabinets and the food was carried to them, an assembly plan was suggested for serving the trays. This suggestion was received with apprehension as to whether it would work. It was difficult to get the supervisor to realize that it would take practice before she could see a decrease in serving time. Also she did not follow through on instructing the employees, and they were confused about their
specific responsibilities. Fearing that the food service supervisor would become discouraged before she could carry through with the assembly line plan, the student went to the nursing home three mornings to help serve breakfast. With concessions on the student's part and the supervisor's, a workable assembly line was established.

The next suggestion was to make and post work schedules. A great deal of time was being spent each day by the supervisor in assigning duties to the individual employees. Work schedules would help to eliminate this problem. The student took the responsibility for making the work schedules, realizing that this perhaps was not the most desirable solution. These work schedules were not put into effect until after the student left because there was no opportunity for her to have them approved by the administrator of the nursing home. The work schedules were based on seven employees working eight hours a day instead of ten hours a day, as they are now doing. Other areas for suggested improvement in the future are: (1) preparing and serving modified diets, (2) buying procedures, (3) menu planning, and (4) storing of foods.

**Clinic services.** In 1962 the Nutrition Consultant began to attend regularly the maternal and child health clinics. Her services included group teaching, material development, and diet instruction in the prenatal and child health clinics. The consultants also assist the public health nurses and the clinic physicians in finding sources of help for patients with special needs.
Follow-up of clinic patients is difficult since the nutritionist does not see all patients in the clinic, and the patients she has previously instructed are not referred to her again. No surveys have been conducted to determine if there has been any improvement in the nutritional status of the clinic patients.

Observations in the clinics indicate that teenage obesity and anemia of pregnancy are problems. Hemoglobins are not done routinely in the child health clinics so it is not known if anemia is a serious problem in this group.

The student was able to do some group teaching and individual diet instructions in the clinic. The group teaching was a well-child clinic, and the subject was "Introducing Food to Your Child." The student observed in the clinics that doctors tell mothers when to introduce foods, but they fail to tell them how to introduce foods. A discussion of a nutritionally adequate diet for pre-school and school children, in terms of the basic four food groups, was also included. Visual aids were developed and used by the student for teaching this specific group.

Individual diet instructions were given to prenatal patients who were gaining weight too rapidly or who needed to decrease sodium intake. The student was among the first to use the new pamphlet, "When Your Doctor Says: Cut Down on Salt," and it seemed to be adequate for this group of patients. In a child health clinic the student talked with mothers who were have problems getting their
children to eat certain foods and with a mother whose child would eat only sweets. The student observed diet counseling by the two consultants.

The clinic patients in need of diet counseling are referred to the nutritionist by the public health nurses. The use of the nutritionists by the doctor varies. Some of them refer patients readily whereas others do not seem to attach the same importance to nutrition.

The Food Preference Sheet in Appendix C, page 59, was developed by the student in her field experience for use in interviewing pregnant teenagers in the clinics. Her objectives were to design a simple questionnaire on eating habits which the patients could answer themselves with limited instruction from the nutritionist. The information will be used by the nutritionists to develop a program for this particular age group since diet does seem to be related to some of the complications of pregnancy in teenagers.

**Follow-up of referrals.** Following up of referrals for dietary counseling is a relatively new addition to the nutrition program. Referrals of patients needing dietary counseling come from Vocational Rehabilitation for the Blind, University Hospital, and the Mental Health Clinic. The nutritionist may or may not ask
a public health nurse to visit with her depending on the situation. If the nurse is familiar with the family situation, it may be beneficial to have her go on the visit. Home visits are made to the majority of the patients, but some are able to come to the health department for assistance.

The student observed the nutritionist in several home visits, and she participated in instructing one juvenile diabetic. The patient seemed to resent her diet, and she refused to follow the pattern even though she seemed to understand it. Most of the referrals are for patients on diabetic diets and weight-reduction diets. Evaluation of home visits is difficult, but one method is to read the nurses' reports for any comments on changes or improvements in the patient's dietary habits.

Parochial school visits. In the fall of 1962, the senior nutritionist saw a need for consultant services in the parochial schools since the food managers of the lunchrooms were under no direct supervision except for an occasional visit by a home economist from the United States Department of Agriculture. A letter was written to the Superintendent of Parochial Schools asking if he would be interested in this type of service. Since then the nutritionists have tried to visit the twelve parochial schools with lunchrooms monthly. At the John Carroll School the senior nutritionist teaches classes on food sanitation to student helpers in the school cafeteria.
A visit was made to the John Carroll School, a Catholic School in Birmingham, by the student and one Nutrition Consultant. This was a brief visit, and no particular help was given. One accomplishment at this school was teaching the manager of the cafeteria how to use the steam table properly. Observation of improvements resulting from the suggestions by the nutritionists aids them in evaluating the program in the parochial schools.

Group talks. The nutritionists accept invitations to talk to various community groups. These requests may be made directly to the Nutrition Consultants, or they may come through the Bureau of Public Health Education. In some instances, the Bureau of Public Health Education requests that the nutritionists participate on panel presentations on health.

The student observed a talk given by a Nutrition Consultant to a P. T. A. group. Packing a nutritionally adequate and appealing lunch was stressed since this was a school without a school lunchroom.

VI. COORDINATION OF NUTRITION SERVICES WITH OTHER HEALTH DEPARTMENT PROGRAMS

Most of the nutrition activities within the health department are related to the work of the Bureau of Public Health Nursing. Referrals for counseling are made by the Bureau of Mental Health. The
senior nutritionist is planning to work more closely with the Bureau of Public Health Education and the Bureau of Sanitation.

**Bureau of Public Health Nursing.** Since the Nutrition Consultants are located in the Bureau of Public Health Nursing, much of the nutrition program still revolves around the work and requests of the public health nurses. Requests are made by the nurses for the nutritionists to visit patients whom they know are having dietary or budgeting problems. Both the nurse and the nutritionist usually make the visit. According to the director of the nursing bureau, the Nutrition Consultants might be more effective if more consultation replaced some direct services. With only two nutritionists to serve Jefferson County, their direct services should be limited, and home visits should be to demonstrate dietary interviewing and counseling to nurses.

Four hours of the orientation program for the public health nurse is planned and presented by the senior nutritionist. Subjects for the class are normal nutrition, areas of family health service requiring nutrition adaptation, and dietary treatment of chronic diseases.

The student accompanied a nurse and a nutritionist on several home visits. Some of the patients had encountered problems following diets ordered by physicians. Some of the patients were overweight and wanted advice on how to lose weight. Since there are no physician's
orders for a modified diet only general suggestions could be made. The nutritionist sometimes felt that she had helped more than a nurse could in a particular situation. Sometimes a nurse could have handled the problem as effectively with consultation from a nutritionist.

The Public Health Nursing Councils have programs in their respective health centers, and they usually invite personnel from the health department to speak. The Nutrition Consultants have talked to the group about the nutritionist's function in the nursing home, diet and heart disease, feeding of low-income families, and food fads.

Bureau of Mental Health. Mental patients are referred from the mental health clinics to the nutritionist. Most of the patients in the drug clinics are receiving a tranquilizer which in some cases causes a weight control problem. Some of the patients are seen by the nutritionist in her office. A nutritionist attends the clinic once a month.

A diet instruction for one of these patients was observed by the student. Dietary counseling is perhaps a little more difficult with these patients because of their emotional problems.

VII. COOPERATION WITH PROFESSIONAL GROUPS

Alabama Dietetic Association. The nutritionist of the health department, realizing the value and importance of active participation
in professional organizations, are active in the Alabama Dietetic Association and the Birmingham Dietetic Association. One nutritionist is president-elect of the Alabama Dietetic Association and president of the Birmingham Dietetic Association.

In cooperation with the Alabama Dietetic Association, the senior nutritionist of Jefferson County developed a diet manual especially for use by nursing homes in Alabama. These manuals may be purchased by nursing homes outside the state of Alabama.

A recent project in Jefferson County of the Alabama Dietetic Association is "Dial-A-Dietitian." This service provides the public with an authoritative source of normal nutrition information. The nutritionists were extensively involved with the publicity for this project. They both agreed to serve as resource persons for questions asked.

The field student arrived on the eve of the Alabama Dietetic Association meeting in Birmingham. She attended two complete days of the meeting and the dinner honoring Dr. Neige Todhunter, the retiring Dean of the School of Home Economics at the University of Alabama. Dr. Merrill Read of the National Dairy Council spoke on Weight Control.

VIII. COOPERATION WITH VOLUNTARY HEALTH AGENCIES

Visiting Nurse Association. The Visiting Nurse Association is housed in the health department building, and it works cooperatively
with the Jefferson County Department of Public Health. Shortly after
the nutritionist came to the health department, she offered her serv­
ice to this group. The majority of her services are on a one to one
basis with the nurses. Individually the nurses request consultation
with the nutritionist or ask her to make a home visit with them. A
visiting nurse may request that the public health nutritionist calcu­
late a diet ordered by a physician for a patient. The visiting nurses
have attended the orientation classes taught by the nutritionist for
the public health nurses, but the nutritionists do not participate in
orientation for the visiting nurses.

Homemaker Service, sponsored by the Visiting Nurse Association,
sends a homemaker into the homes of the aged or chronically ill to
help with tasks the patient cannot manage alone. A fee is charged
for this service, but it is based on the person's ability to pay.
Orientation classes for homemakers on correct food preparation and
basic food needs are taught by the Nutrition Consultant.

**Dairy Council of Greater Birmingham.** Previously the student
mentioned that the nutritionists use a large number of the dairy
council's materials in teaching. The public health nutritionists
and the nutritionist from the dairy council work together on a num­
ber of community nutrition projects. The local dairy council does
not initiate community activities. Their main responsibility is to
know what community activities are being planned and to let the
people know what the dairy council has to contribute.
In the fall of 1964 the health department, the dairy council, and the Health Council of Birmingham and Jefferson County worked cooperatively on an education project for low-income families. Jointly, the public health nutritionist and the nutritionist from the dairy council planned and coordinated a workshop for professional people working with low-income families. A hand-out sheet on good food buying practices was prepared by the public health nutritionist and the dairy council nutritionist for food stamp recipients. The student visited the dairy council office and received an assortment of their educational material.

Community Service Council. The Community Service Council is a non-profit organization functioning under the United Appeal. Its purpose is to coordinate all social, welfare, and health activities for the community.

The Health Council of Birmingham and Jefferson County, a functional division of the Community Service Council, was reactivated in 1963. Through committee activity and staff efforts, the Health Council participates in important areas in the health field. One of the public health nutritionists is chairman of the Nutrition Committee in the Health Council.

A large project last year for the Nutrition Committee was the educational program on using the food dollar wisely. The programs were presented to low-income families in ten housing projects in
Birmingham. The attendance at these classes was good. This seems to have been a worthwhile project. While the student was doing her field experience, requests were made for the classes to be held at the St. Andrew's Episcopal Church and in Loveman's Village, a housing project. The classes were underway at St. Andrew's in time for the student to teach a class on dry storage. The student observed and assisted with the demonstrations in two of the classes at Loveman's Village.

An educational program for parents on nutrition was developed and presented by the Nutrition Committee in three of the Head Start Projects in the summer of 1965. The theme of the program was to encourage parents to prepare nourishing foods in school lunches and at home. The senior public health nutritionist was involved in the orientation of the teachers in the Head Start Project.

IX. COOPERATION WITH OTHER OFFICIAL AGENCIES

United States Department of Agriculture. Jefferson County was selected as a pilot area for a Food Stamp Program. Families eligible for food stamps may exchange a sum of money for stamps of greater value. Except for imported items, these coupons may be used to purchase any food item from an authorized retailer (10). The use of food stamps eliminates the problem of storage and distribution of commodities, and the low-income families have a greater opportunity to improve their nutrition.
The Director of the Food Stamp Program in Jefferson County is constantly looking for ways to help food stamp recipients spend the coupons wisely. He participated in the planning and presentation of food management classes taught under the direction of the Community Service Council to low-income families. The public health nutritionists serve as resource persons for nutrition education.

The University of Alabama Medical Center. The involvement of nutritionist with the dietetic internship program at the University of Alabama Medical Center began in 1963. When the medical center received approval for the program from the American Dietetic Association, the interns were required to have experience in public health. The nutritionist at the health department agreed to work with the internship program. Two weeks in public health were planned. The first intern for the community affiliation came early in 1964.

The nutritionists also serve on committees originating in the medical center. Such a committee was in the process of developing an educational program for both clinic patients and private patients with diabetes. The senior nutritionist was working cooperatively with two dietitians from the medical center in writing the script and planning the slides for the nutrition section of the program. The student attended two of their meetings.

Alabama Department of Public Health. The Alabama Department of Public Health employs three state nutritionists, two of whom are
situated in the health department building in Montgomery, Alabama. Two of the nutritionists are in the maternal and child health unit, and the other provides consultation to institutions. These nutritionists are used for consultation by the nutritionists of Jefferson County. The field student spent three days in Montgomery with a nutritionist in the Maternal and Child Health Bureau.

The overall objectives of the state nutritionists are to provide in-service training and consultant service to staffs of state and local health departments, to provide consultation to personnel in other agencies, to participate in nutrition education programs and workshops, to participate in studies to determine food and nutrition needs, to cooperate with community and professional groups, to develop and evaluate material, and to keep and write records (11).

Rather than giving direct service, the nutritionist works with the nurses in helping them to teach nutrition. Some direct service is provided, as in the case of the two children with phenylketonuria the student visited with the nutritionist. One of the families was an indigent family from a less populated area. The other family had a moderately low income and was located in Montgomery. Both children were under the care of a private physician, and they were receiving diet instructions from the doctor and from the state nutritionist. Regardless of financial status, Lofenalac is provided for all children with phenylketonuria by the Alabama State Department of Public Health.
One day was spent at a pre-school clinic in Enterprise, Alabama. The clinic was organized by the county. The state nutritionist talked with the mothers about nutrition. Providing an adequate diet and eating breakfast before going to school were stressed. The student spoke to several groups of the mothers.

One morning was spent in the maternity clinic at the Autauga County Health Department. Service is given in the clinic by the state nutritionist. There is no doctor in the clinic so the public health nurse sees the patients. Nutritional anemia is a significant problem among prenatales in this area. Iron supplements, under a physician's orders, are given to patients with low hemoglobins. The nutritionist talked with them about food sources of iron.

X. EVALUATION OF PROGRAM

As part of the Bureau of Public Health Nursing, the nutritionists are required to keep a record of daily activities similar to the ones kept by the nurses. These records are valuable in determining the percentage of the nutritionist's time being spent in various activities. In a broad nutrition program, such as the one in Jefferson County, the nutritionist needs to know if she is giving service to priority needs. Knowing what percentage of her time is being spent in various activities, helps the nutritionist determine if her time is allocated in proportion to need.
Each month the Nutrition Consultants compile a monthly narrative of the highlights of their activities. These narratives are circulated throughout the bureau with the monthly reports from the Nursing Supervisors. By comparing the objectives for the year with the monthly narratives, the Nutrition Consultants are able to evaluate progress in their programs toward their goals.
The student has depicted her observations and experiences with the nutritionists in Jefferson County. The diversified nutrition program emphasized the varied activities of a public health nutritionist. The nutritionists' careful planning and cooperation provided invaluable experience and knowledge which aided in reaching the established objectives.

The personnel of the Jefferson County Department of Health cooperated in giving a better understanding of the organization, administration, and services of the health department. In personal interviews, bureau directors pointed out how programs originate and develop within the agency. Emphasis was placed on how other bureaus work with the nutritionists. Interviews with personnel in agencies other than the health department developed an understanding of the public health nutritionist's role in community health activities.

The variety of nutrition activities observed provided a clear picture of the overall nutrition program in Jefferson County. The student became acquainted with methods of determining nutrition problems in a community and then observed the programs developed to meet these needs.

Most of the formal teaching observed was to less-educated members of the population. Through experience and observation the
student now has a better understanding of teaching skills and techniques used for this group. Some opportunity to observe or participate in teaching other types of groups, such as the orientation class for nurses, would have been profitable if it could have been arranged.

Opportunities were arranged for participation in the nutrition program. These experiences were giving consultation to an eighty-nine bed nursing home, preparing material for a newsletter, counseling patients with dietary problems, and teaching classes to low-income families. Through planning and carrying through of projects, the student developed self-confidence in her ability to function as a nutritionist in a public health agency.

The nutritionists in Jefferson County have developed an outstanding and varied community nutrition program. Through cooperation with community organizations and involvement in programs and projects, they have become an effective liaison between the health department and the community. Voluntary agencies, official agencies, churches, and other institutions and organizations request the services of the nutritionists. Observing the personal and professional characteristics of the nutritionists which have contributed to the development of this program helped the student to recognize the importance of these factors to the nutrition program.

The field experience reinforced the student's belief in the importance of nutrition in the overall health program. The public health nutritionist is an important member of the public health team.
She must have confidence in her abilities, and she must be able to work cooperatively with other members of the team. A basic knowledge of nutrition and an ability to communicate with those individuals and groups in need of this information are essential. To be able to relate to different age, social, economic, and educational levels is a requirement for any public health nutritionist. Because of this learning experience, the student feels better prepared to provide nutrition services and to meet the responsibilities of a nutritionist.
BIBLIOGRAPHY


2. Chamber of Commerce This is Birmingham. Chamber of Commerce, Birmingham, Alabama. (Undated).


APPENDICES
APPENDIX A

Figure 4. A Meal Plan For You.
A MEAL PLAN FOR YOU

☐ Low calorie
☐ High calorie
☐ Diabetic
☐ Low Sodium

Prepared by the
Jefferson County Department of Health

Bureau of Public Health Nursing
Daily Meal Plan for

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**Fruit Exchanges**

I serving portion - 44 calories.

- Apple - 1 small
- Apricots - 2 med.
- Banana - ½ small
- Blackberries - 1 cup
- Blueberries - 2/3 cup
- Cantaloupe - ¼ med.
- Cherries - ½ c.
- Grapefruit - ¼ small
- Juice - ½ cup
- Grapes - ½ cup
- Orange - 1 small
- Peach - 1 med.
- Pear - 1 small
- Pineapple - ¾ cup
- Plums or Prunes - 2
- Raspberries - ½ c.
- Strawberries - ¾ c
- Tomato juice - 1 cup
- Watermelon - ¼ sl. 1" thick

**Bread Exchanges or Substitutes for 1 slice of bread - 2 gr. Pro. 15 gr. Carbohydrate and 68 calories**

- Biscuit, roll 2" diameter — 1
- Muffin 2" diameter — 1
- Cornbread (1½” cube) — 1
- Flour — 2½ level T.
- Cereal cooked — ½ cup
- dry (flake and puffed) — ¾ c.
- rice and grits, cooked — ½ cup
- Spaghetti and noodles — ½ cup
- Crackers graham — 2
- oyster (½ c.) — 20
- Saltines (2” sq.) — 5
- soda (2½” sq.) — 3
- round, thin 1½” diameter — 6-8

**Dried vegetables (prepared without sugar or additional fat)**

- beans, peas, dried, cooked — ¼ cup
- lima beans, fresh — ½ cup
- Corn, sweet — 1/3 cup
- parsnips — 2/3 cup

**Potatoes**

- white (baked or boiled 2” diameter) — 1
- white, mashed — ½ cup
- sweet or yams — ¼ c

**Desserts**

- 1 dip or ½ c. vanilla ice cream can replace 1 slice bread and 2 tsp. fat.
- 1 piece angel food or sponge cake 1½” cube.
Meat Exchanges - 1 meat exchange contains 7 grams protein, 5 gr. fat and 75 calories.

Beef, Lamb, Pork, Liver, Chicken, 1 oz.
Cold Cuts (1/2x1/8") ---1 slice
Salami, Bologna, Liverwurst, etc.
Frankfurters (8-9#)------1
Egg-----------------------1
Fish
Salmon, Tuna, Crab = 1/2 c.
Shrimp, Oysters------5 small
Sardines----------------3 med.
Cheese, cheddar type----1 oz.
Cottage----------------1/4 c.
Peanut Butter--------2 T.

Fat Exchanges
Butter or margarine ------1 tsp.
Bacon, crisp-----------------1 slice
Cream, coffee ------------2 T.
Cream cheese--------------1 T.
French dressing-----------1 T.
Mayonnaise---------------1 T.
Cooking oil---------------1 tsp.
Sour cream---------------1 T.

Vegetables - Group I
Asparagus
Broccoli
Cabbage
Cauliflower
Celery
Collards
Cucumber
Gr. Beans

Group II - 1/2 cup
Beets
Carrots
Squash, winter
Onions-

Lettuce
Turnip greens
Squash, summer
Spinach
Tomato - fresh
or canned
Eggplant

Turnips
Pumpkin
Rutabagas
Peas, green
Sample Meals for your

--- diet plan

Breakfast

Noon Meal

Night Meal

Snacks (as allowed)
Suggestions for the preparation of food on your meal plan.

Meat preparation - Use no additional fat in cooking except as allowed in the meal plan.
Broiling - cooking under a direct heat.
Pan-broiling - start in a cold skillet over low heat.
Roasting - cooking with dry heat in the oven.
Boiling or stewing - cooking in water.

Vegetables
Fresh or frozen vegetables should be cooked in a small amount of salt water. Do not use white meat or bacon fat for seasoning except as allowed in your meal plan.

Free Choice foods—the following have little or no caloric content and can be used freely.

- Coffee
- Tea
- Clear broth
- Gelatin, unsweetened
- Sour pickles
- Cranberries
- Rhubarb
- Pepper and other spices
- Lemon
- Saccharine
- Vinegar
- Nutmeg
- Mustard
- Cinnamon

Suggestions for Weight Control
1. Be patient—a weekly loss of 2# is ample.
2. Get as much daily exercise as able—walking, bowling, bicycling, tennis, golf, etc.
3. Use some good old-fashioned will-power and refuse that second helping or rich desserts.
Figure 5. When Your Doctor Says: Cut Down on Salt.
WHEN the Doctor Says:

"CUT DOWN ON SALT"

Bureau of Public Health Nursing
Jefferson County Department of Health
Birmingham, Alabama
March, 1966
When the doctor says: "Cut down on salt", he means for you to cut down on sodium.
Foods differ in the amount of sodium they contain.
The following foods can be used in your diet -
Each day you need:
1. Milk: 3 or 4 cups skim milk or buttermilk.
   Do Not Eat: Ice cream, sherbet or milkshakes.

2. Lean Meat: 6 - 1 oz. servings
   Choose between beef, chicken, liver, pork (fresh), tongue (fresh), turkey and neckbones.
   Fish, fresh or frozen.
   Canned salmon or tuna
   Egg
   American Cheddar or Cottage cheese
   Do Not Eat: Salted or smoked meat such as ham, bacon, sausage, salt pork, luncheon meats, frankfurters, chipped or corned beef.
   Processed cheese or peanut butter.
   Sardine or salted fish.

3. Fruit: 2 or 3 servings
   Apple, Orange, Peach, Pear and Tangerine - 1 small
   Banana - ½ small
   Grapefruit - ½ small
   Fruit juice - ½ cup
   Grapes - 12
   Watermelon - 1 cup
   Prunes - 2
   Canned fruit, unsweetened - ½ cup
4. Vegetables: 3 or 4 servings
   Cabbage  Lettuce
   Carrots  Okra
   Green Peas  Stringbeans
   Greens (Collard, Turnip, Spinach)  Tomatoes
   String beans  Squash
   Squash  Tomatoes
   Tomatoes  Rutabaga

Do Not Eat: Sauerkraut, canned soups.

5. Breads and Cereals: 3 servings
   Bread - 1 slice
   Biscuit or Roll - 1
   Cornbread - 1 (1½") cube
   Dry Cereal - 3/4 cup
   Macaroni, spaghetti, noodles, grits, rice, oatmeal - cooked - ½ cup
   Popcorn (unsalted) - 1 cup
   Beans & Peas, dried - cooked - ½ cup
   Beans, baked (no pork) - ¼ cup
   Corn - 1/3 cup
   Potato, white - 1 small
   Potato, mashed - ½ cup
   Potato, sweet - ¼ cup or ½ small
   Graham Crackers - 2 (2½") sqs.

Do Not Eat: Self-rising cornmeal or flour, salted popcorn, potato chips, pretzels.

6. Fat: 3 servings used in cooking and on bread
   1 teaspoon margarine
   1 teaspoon fat or oil
   1 Tablespoon French dressing
   1 teaspoon mayonnaise
   6 small unsalted nuts

Do Not Eat: Salted Nuts, fat meat, bacon drippings
7. Free foods you may use:
- Lemon juice
- Vinegar
- Onions
- Pepper
- Dry mustard
- Paprika
- Diet colas - Tab or Diet Pepsi

Do Not Use: Salt, bouillon cubes, pickles, olives, soy sauce, Worcestershire sauce, meat sauces, onion or garlic salt, catsup, chili sauce, carbonated beverages, beer.

You may put 1/2 teaspoon salt in shaker and use during the day for seasoning.

**Use No Soda for Heartburn**

**Sample Menu**

This is an example of how you can get the food you need each day:

**Breakfast**
- 1/2 cup orange juice
- 1 soft boiled egg
- 1 slice toast
- 1 teaspoon margarine
- 1 glass skim milk
- coffee

**Lunch or Supper**
- Hamburger pattie on small bun
- Slaw with 1 teaspoon mayonaise
- 1 small apple
- 1 glass buttermilk

**Snack** - 1 glass skim milk

**Dinner or Main Meal**
- Baked chicken leg and thigh
- Turnip greens
- Tossed salad with lemon juice
- 1 Biscuit with 1 teaspoon margarine
- 1 glass skim milk

**Snack:** 1 small banana
Figure 6. Before the Baby Comes.
Before the baby comes

INSTRUCTIONS FOR EXPECTANT MOTHERS
JEFFERSON COUNTY DEPARTMENT OF HEALTH
BUREAU OF PUBLIC HEALTH NURSING
WHAT TO DO BEFORE YOUR BABY COMES

Having a baby is normally a happy, wonderful experience when you follow the suggestions set down here for providing good health.

1. Care of the Teeth - see your dentist for necessary work. Brush teeth after eating.
2. Get Enough Rest - 8 hours sleep at night and a short rest period during the day.
3. Daily Walks in the fresh air are needed each day under normal conditions. Continue your regular housekeeping activities unless otherwise instructed. Avoid heavy lifting.
4. Bathe Daily. During last month of the pregnancy take either a shower or a sponge bath. No douches unless ordered.
5. Care of the Breasts. Wear a brassiere that fits properly. Keep the breasts and nipples clean. If the nipples become irritated from the watery fluid that oozes from them about the fourth month, wash the breast and nipples with mild soap and water. Consult your doctor if the nipples are inverted, if the breast or nipples are sore or inflamed, or if you notice any lumps in the breast.
6. Avoid Constipation by establishing a regular time for moving your bowels. In case of constipation prunes or prune juice may help. Consult the doctor before taking laxatives other than milk of magnesia or mineral oil.
7. Marital Relations. Do not have intercourse during the time your second and third menstrual periods would have taken place. Do not have intercourse at all during the last six weeks of pregnancy or before you return, after delivery, for the six weeks' examination.

Approved:
T. M. Boulware, M.D.
Consultant
Report the following signs or symptoms to the Clinic or Public Health Nurse:

- Passage of blood from the vagina
- Severe headaches or spots before the eyes
- Dizziness, swelling, shortness of breath or pain in the pit of your stomach
- Excessive nausea or vomiting
- Decreased output of urine
- Severe abdominal cramping
- Failure to notice baby's movements after 5 months, or for several days

LET'S MAKE DELIVERY PLANS

If you are planning to have your baby delivered at University Hospital and Hillman Clinic you must -

1. You will receive a card on your first visit to clinic. Take the card and go to the Outpatient Clinic Office - Corner of 6th Avenue and 19th Street South - to make delivery plans. This requires a deposit of one hundred twenty-five dollars ($125.00) before your third (3rd) visit to Clinic.

2. On your third (3rd) visit to clinic, you will receive a second card. Take this card and go to the Outpatient Clinic Office - Corner of 6th Avenue and 19th Street South - to complete delivery plans. This will require a registration fee in accordance with your classification. Delivery plans must be completed before time to go to the hospital for delivery.

3. Have someone donate a pint of blood in your name at the Red Cross Building, 500 North 20th Street.

4. After your delivery, return to the Clinic for a physical examination when the baby is six (6) weeks old. At this time, instructions in Planning Your Family will be available for you by request.

5. If you plan to deliver in another hospital, be sure to make all necessary arrangements for admission.
The foods you eat during pregnancy are important -

To your Unborn Baby. Your Baby is "built" from the food you eat - bones, teeth, skin, muscles, tissue, blood.

To You. You feel better, have a more normal pregnancy and delivery and have more energy to care for the baby and other members of the family after delivery.

**EAT THESE FOODS EVERY DAY**

**MILK**

Choose from

- Sweet Milk
- Powdered Milk
- Canned Milk
- Buttermilk
- Cheese (1 oz. = 3/4 cup)

**LEAN MEATS**

- Beef, Veal, Pork, Chicken, Turkey, Fish, Lamb.
- Liver once a week
- Egg - 1 or 2 each day

Dry beans or peas - 1 cup

Meat should be baked, broiled, stewed or boiled.

DO NOT FRY
VEGETABLES AND FRUITS - 4 or more servings

Size of the serving (1/2 c.)

1 or 2
serv.

Dark Green Leafy Vegetables
Turnip greens, collards, mustard greens, spinach

OR

1 or 2
serv.

Deep Yellow - carrots, rutabagas
sweet potato

Include a raw vegetable each day.

1 or 2
serv.

Citrus Fruits - orange, grapefruit
tomato, raw cabbage, cantaloupe, watermelon

1 or 2
serv.

Other Fruits and Vegetables
Cook vegetables in a small amount of water. Season with a small amount of butter, margarine or oil.

4
serv.
each day
Breads and Cereals
Whole grain, enriched bread, rolls

1 tsp.
each meal
Butter or margarine

SAMPLE MENU

Breakfast Lunch Dinner
Orange juice Vegetable soup Liver
1/2 c. oatmeal Cheese toast Baked Potato
Scrambled egg Shredded carrot - raisin Greens
Toast with Sliced Tomatoes
Butter salad Cornbread
Milk Apple Rice pudding
Coffee Milk Milk
GAINING TOO RAPIDLY?

SUBSTITUTE:

Skim Milk or buttermilk* for homogenized milk

Snacks such as fruit, carrot sticks, crisp vegetables, tomato juice, bouillon.

Limit to \( \frac{1}{2} \) cup serving a day of rice, macaroni, noodles, spaghetti for 1 slice of bread

DO NOT EAT

Gravies - Fat Meat - Bacon - Sausage - Fried Foods

Mayonnaise

Cake - Pie - Candy - Sugar - Syrup - Honey - Jelly

Preserves - Jam

Soft Drinks - Wine - Beer - Whiskey

Potato Chips - Popcorn

*Made from skim milk
Figure 7. Health Lines.
Do you need a Sherlock Holmes in your kitchen to find where the money goes? Does the amount you are spending for food seem to buy less and less? If not - you're unique in the world of food management because national food prices have risen a great deal in the first three months of this year.

What can you - the food supervisor - do to control food costs in your nursing home? (There are some dollar stretching rules so let's list them!)

**Planning** - You must begin with a well-planned menu as a guide for serving the food.

**Keeping an inventory** - Set up a list of all foods in the storeroom and freezer. Check this weekly and compare with the menu before making your order sheet. You may find it takes a long period of time to set this up, but once done the time it will save is amazing.

Consider your personnel before you buy. This means that preportioned meats may be the answer when your staff is limited in numbers. Mixes may be cheaper than using an extra cook for baking.

Buy grades that fit the menu item - Grade "C" tomatoes are fine for casseroles or soups. A better grade should be purchased for a salad or for serving cold canned tomatoes. A cheaper product is not a saving unless it can be used and gives a desirable product.

Check the cost per serving - This applies to meat, fresh, frozen, or canned fruits and vegetables, cereals and dairy products. Foods that are cheaper per unit are not always cheaper per serving due to waste and unusable portions.

Use standardized recipes - Equipping your kitchen with a reliable quantity recipe book or starting a quantity file is a must. Use recipes that give a good product and the same number of servings each time. You can then precost the menus you are planning. When you start to buy and your kitchen is set up to use standardized recipes use the following hints for food buying:

**Hints for food buying**

1. Consider the total number of people to be served including both patients and personnel.
2. Divide the number of people to be served by the number of servings per unit. For example:
A guide listing the yield of units purchased for different foods may be helpful and should be kept in your desk.

3. Consider your storage space before buying. It's wasteful to purchase food and lose it because of inadequate storage. For example, limited refrigerator space will make it necessary to buy smaller quantities of fresh fruits and vegetables more frequently.

**Where to purchase**

Purchase from the supplier in your area who provides the grade and quality you want. Discuss the delivery schedule with the supplier. You may need deliveries made more than once a week or at a certain time. Make sure the supplier can meet your schedule.

**Comparing prices**

Compare the prices of the different suppliers. Be sure the prices you compare are for the same grade or it is meaningless. If you are buying large quantities consider receiving bids from several reputable firms.

**Checking in items**

- Check the amount you ordered
- Check the amount you received, count the number of cases and weigh the meat and vegetables
- Check the amount you are charged for.

There's a lot to learn about buying and from time to time, we will give you other buying tips.

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**WELCOME**

Jefferson County's newest nursing home is Hanover House which opened in January. Hanover House is an 80 bed home built in the English Tutor style. It is located on Hanover Circle behind St. Vincent's Hospital.

We would like to wish Mr. Ed Shaw, Administrator; Mrs. Martha Gilliland, Nursing Director; and Mrs. Mary Lou South, Food Supervisor much success.

**SOMETHING NEW**

The staff at A.G.Gaston has conferences each month to discuss better nursing and nutrition care for their patients. Staff members take turns planning the conferences, arranging for speakers or films and participating in the program.

FairHaven has recently completed a series of five classes on nutrition for the residents. A different group of residents was invited each week, and each class covered a different topic on nutrition. The purpose in this was to encourage each group to share what it learned with the other groups. If a resident wished to attend more than one class, he was welcome to do so.

Plantation Manor Nursing Home has recently started publication of a newsletter which is circulated to residents, friends and relatives. Mrs. Carmelita Lee is the Editor-In-Chief.

The Alabama Dietetic Assn., through the Birmingham Dietetic Assn., is now sponsoring Dial-A-Dietitian in Jefferson County. For any nutrition or dietary information dial 879-4563 and a dietitian will answer your questions.

Have you tried something new lately? If so, we'd be interested in knowing about it.

The material for this issue of Health Lines was prepared by Miss Nanoy Brittain, field student in nutrition from the University of Tennessee.
APPENDIX C

FOOD PREFERENCE SHEET

| Daily eaten for breakfast?  |
| Daily eaten at noon?       |
| Daily eaten at supper?     |
| Eaten between meals?       |

*In the blank if you eat any of the foods in each week, or anything that tells how often you eat a food.*

*If you eat meat 3 times a day put a 'x' under each*
FOOD PREFERENCE SHEET

1. What do you usually eat for breakfast? ________________________________

2. What do you usually eat at noon? ________________________________

3. What do you usually eat at supper? ________________________________

4. What do you eat between meals? ________________________________

Place a check in the blank if you eat any of the foods in that group. Place a number under day, week, or month that tells how often you eat a food from this group.

For example: If you eat meat 2 times a day put a 2 under Day.

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<th>Day</th>
<th>Week</th>
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If you eat meat 3 times a week and not every day put a 3 under Week.

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If you drink sweet milk, buttermilk, skim milk, or powdered skim milk please put the number of cups of milk you drink a day, week, or month.

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Meats such as cheese, chicken, beef, pork, ham, eggs, weiners or bologna

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Dried beans or peas

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Peanut Butter

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Liver

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Citrus fruits such as oranges, orange juice, grapefruit or grapefruit juice, tomatoes or tomato juice

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Other fruits such as bananas, apples, grapes

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<th>Item</th>
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<tr>
<td>Dark green and yellow vegetables such as greens, carrots, sweet potatoes</td>
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<td>Other vegetables such as squash, string beans, English peas, potatoes</td>
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<td>Breads such as white or whole wheat bread, crackers, cereal, rice, grits, spaghetti and macaroni</td>
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<td>Fats such as margarine, butter, bacon, sausage, gravy, white or fat meat</td>
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<td>Jam, jelly, sugar, syrup</td>
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<td>Pies, doughnuts, cake, candy</td>
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<td>Cokes and other soft drinks, Kool-Aid</td>
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<td>Beer, whiskey</td>
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<tr>
<td>Potato Chips</td>
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