



8-1970

A Field Experience with the Section of Nutrition, Division of Health, Florida Department of Health and Rehabilitative Services

Ann Miller Rowland
University of Tennessee, Knoxville

Follow this and additional works at: https://trace.tennessee.edu/utk_gradthes



Part of the [Nutrition Commons](#)

Recommended Citation

Rowland, Ann Miller, "A Field Experience with the Section of Nutrition, Division of Health, Florida Department of Health and Rehabilitative Services. " Master's Thesis, University of Tennessee, 1970.
https://trace.tennessee.edu/utk_gradthes/3970

This Thesis is brought to you for free and open access by the Graduate School at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Masters Theses by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.

To the Graduate Council:

I am submitting herewith a thesis written by Ann Miller Rowland entitled "A Field Experience with the Section of Nutrition, Division of Health, Florida Department of Health and Rehabilitative Services." 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:

Mary Rose Gram, Cyrus Mayshark

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

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

July 31, 1970

To the Graduate Council:

I am submitting herewith a thesis written by Ann Miller Rowland entitled "A Field Experience with the Section of Nutrition, Division of Health, Florida Department of Health and Rehabilitative Services." I recommend that it be accepted for nine quarter hours of credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Nutrition.

Mary Nell Taylor
Major Professor

We have read this thesis
and recommend its acceptance:

Mary Rose Gram

Cyrus Moyshech

Accepted for the Council:

Linton A. Smith
Vice Chancellor for
Graduate Studies and Research

A FIELD EXPERIENCE WITH THE SECTION OF NUTRITION,
DIVISION OF HEALTH, FLORIDA DEPARTMENT OF
HEALTH AND REHABILITATIVE SERVICES

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
Ann Miller Rowland
August 1970

ACKNOWLEDGMENTS

The author wishes to express appreciation to Miss Mary Nelle Traylor, her major professor, Department of Nutrition, University of Tennessee, for her guidance and assistance throughout the graduate program and in the preparation of this thesis. Gratitude is extended to Dr. Mary Rose Gram, Department of Nutrition and Dr. Cyrus Mayshark, Department of Public Health Education for their support.

Sincere appreciation is given to Miss Mildred Kaufman, Administrator of the Section of Nutrition, Division of Health of the Florida Department of Health and Rehabilitative Services and her staff for their cooperation and valuable assistance during the field experience.

The author is grateful for the financial assistance received from the Maternal and Child Health Service of the United States Public Health Service.

A very special acknowledgment to the author's husband, Wendell, for his patience, encouragement, and support.

A. M. R.

ABSTRACT

This thesis describes and analyzes the author's eight-weeks of field observations and experiences with the Section of Nutrition in the Florida Department of Health and Rehabilitative Services. The purpose of the field experience was to augment the academic program with practical experiences.

The field experience was planned to strengthen the author's philosophy and understanding of the principles of public health. The author observed and participated in nutrition programs within the health agency at various levels as well as with professional groups and community agencies. The author was provided the opportunity to develop her professional skills and competencies through practical application of established nutritional programs in a health agency and in the community.

The field experience made the author aware of the necessity of a planned nutrition program to adequately meet the nutritional needs of a population. The author's previous work experience in a Children and Youth Project and observing in two such projects provided a basis for comparing different approaches to planning programs for similar services in different geographic areas. Moreover, the field experience strengthened the author's professional skills and competencies.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. STATE OF FLORIDA	3
Geographical and Climatic Characteristics.	3
Factors Which Determine Health Programs.	4
Culture and economy.	4
Population	6
Vital statistics	7
III. FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES .	12
History and Development.	12
Organization	13
State-county relationship.	15
IV. SECTION OF NUTRITION	17
History and Philosophy	17
Organization	18
Staff.	20
Qualifications	20
Recruitment, training, and staff development	21
Program.	23
Objectives	23
Office of State Health Director.	24
Office of Planning	24
Section of Public Health Nursing	25
Section of Health Education.	25
Bureau of Vital Statistics	27

CHAPTER

PAGE

IV. (continued)

Section of Public Health Statistics.	27
Bureau of Finance and Accounts	28
Bureau of Maternal and Child Health.	28
Migrant health project	31
Special projects	32
Bureau of Adult Health and Chronic Disease	33
Diabetes	34
Heart diseases	34
Health maintenance	34
Arthritis.	35
Bureau of Local Health Services.	35
Section of Sanitation.	35
Home Health Services	36
Bureau of Health Facilities and Services	38
Bureau of Dental Health.	39
Other agencies and groups.	41
Program implementation	42
State and regional levels.	43
County level	44
V. PROFESSIONAL DEVELOPMENT	47
Consultation with Other Professional Workers	47
In-Service Education	49
Group Work with Nonprofessional Groups	51
Counseling Nonprofessional Persons	53
Program Planning	54

CHAPTER	PAGE
VI. SUMMARY AND EVALUATION	65
LITERATURE CITED.	67
APPENDIXES.	71
A. JOB DESCRIPTIONS FOR NUTRITION POSITIONS	
FLORIDA DIVISION OF HEALTH AND	
REHABILITATIVE SERVICES	72
B. MONTHLY STATISTICAL REPORT.	82
VITA.	83

CHAPTER I

INTRODUCTION

The primary purpose of the field experience in Public Health Nutrition was to help the author strengthen her philosophy and understanding of the principles of public health. Planned experiences in a field agency enabled the author to augment her academic background and professional skills. Previous professional experiences include employment as a dietitian and as staff nutritionist in hospitals and in a Children and Youth Comprehensive Health Project affiliated with a university department of pediatrics.

The generalized field experience was planned to provide opportunities for the author to observe public health programs developed at the state, regional, and local levels to meet specific health needs of communities. The author has confined her report to the observation of those agencies supporting or conducting nutrition programs.

The Division of Health of the Florida Department of Health and Rehabilitative Services, Jacksonville, Florida, was selected for the field experience training because of its outstanding nutrition program. Jacksonville served as a base throughout the field experience; however, the author travelled to various sections of the state.

Specific objectives of the supervised field experience were to:

1. Test certain theories in public health through practical application which contribute to the development of a philosophy in public health.

2. Increase the author's knowledge of administrative organization of nutrition in public health.
3. Gain a better understanding of procedures used to determine the nature and magnitude of nutritional needs.
4. Observe how broad nutrition goals are implemented to meet specific nutritional needs at the local level.
5. Gain a knowledge of the methods and techniques applied to program evaluation.
6. Identify with the public health profession.

This thesis summarizes the observations and experiences of the author with the Division of Health of the Florida Department of Health and Rehabilitative Services, Section of Nutrition. Chapter II describes Florida and factors which determine programs and policies of the Florida Division of Health. Information concerning the programs of the Division of Health of the Florida Department of Health and Rehabilitative Services is summarized in Chapter III. Chapter IV explains the history, organization, and program of the Section of Nutrition. An analysis of the author's professional development is discussed in Chapter V. The final chapter, Chapter VI, summarizes and evaluates the field experience.

CHAPTER II

STATE OF FLORIDA

Public health needs and problems are more clearly understood if the geographical, cultural, economic, and demographic characteristics of an area are carefully considered. In order to assess the needs of a community, understand its health problems, and plan public health programs, an analysis of certain statistics is necessary.

I. GEOGRAPHICAL AND CLIMATIC CHARACTERISTICS

The Florida peninsula is 350 miles in length from north to south and has a 150-mile tail of islands, the Florida Keys, at its southeastern tip. Florida is 100 miles wide from east to west with the exception of the width of the panhandle at the northernmost part of the state which reaches westward for approximately 400 miles from the east coast (1). Florida ranks twenty-second in size as a state (2) and is divided into 67 counties. The capital, Tallahassee, is located in the northwest panhandle of the state (1).

Florida's southern location is responsible for the climatic characteristics contributing to the vacation-orientation of the state. Seasonal temperatures fluctuate, but the average annual temperature is 69.5° Fahrenheit in the northern section and 75.1° Fahrenheit for the southern section of the state (2). The subtropical climate is a major factor in attracting people, especially those of retirement age, to make their homes in Florida.

II. FACTORS WHICH DETERMINE HEALTH PROGRAMS

Culture and Economy

Florida, discovered by Ponce de Leon in 1513, has had a long and varied history as evidenced by the five flags which have flown over it; however, its first settlers were the Indians. Purchased from Spain by the United States in 1819, Florida became a state with a population of 57,951 people in 1845 (1).

The Spanish, English, Negro, and Indian heritage contributes to cultural, religious, and ethnic characteristics (3). With the exception of the Cuban immigrants, there are at the present time few foreign-born citizens. The characteristics of the general population varies with sections of the state. Cosmopolitan retirees and tourists primarily visit the southern and southcentral portion of the state. The population of the northwestern section of the state is largely rural similar to that in other Southeastern states.

Knowing and understanding the differences in cultural characteristics are important considerations when planning public health programs. One example of a cultural group in Florida with special health and nutrition needs are the Miccosukee and Seminole Indians. The Indians, numbering approximately 1200, dwell on four reservations--Big Cypress, Brighton, Dania, and Forty Mile Bend. Medical services are provided to the Indians by the federal government on contract with the Florida Division of Health and the county health departments of Highlands, Glades, Hendry, Dade, and Broward Counties. The Indians are citizens of Florida, not wards of the federal government, even though they live on tax-exempt

reservations. Indian customs, traditions, and language barriers are factors which add to the difficulty of assisting them with their sanitary and medical problems. The major health problems of the Indians are caused by poor sanitation and malnutrition. Hookworm, diarrhea, and intestinal influenza are prevalent diseases primarily due to poor sanitary practices. Malnutrition, partially due to the lack of proper foods, and dental caries, caused by poor hygiene and poor food habits, are widespread. The Indian diet consists primarily of the following foods: fried fish, grits, sweet potatoes, corn, squash, pumpkin, and meat. Bananas and citrus fruits are occasionally eaten since the fruit trees grow in most yards (4).

The transformation from a rural to an urban state has been the most significant development contributing to the economy. This movement began in the thirties and still continues. The ratio of rural to urban population in 1890, 1930, and 1960 was 4 to 1, 1 to 1, and 1 to 3, respectively.

Although Florida is an urban state, agriculture is a leading industry. Prosperous farms, cattle ranches, sugar cane crops, truck gardens, and citrus groves accounted for a gross farm income of \$1.06 billion in 1964, two and one-half times the 1949 gross income (3). The success of the agricultural economy is dependent upon the migrant farm workers; however, their wages are inferior when compared to those of other industries. Approximately 100,000 Atlantic coast migrants enter the state each year in the early fall. Many of the migrants establish their domicile in Florida since they spend six to eight months there. During this extended time, the state has more opportunity to help these people than any of the other states in the migrant stream (5).

In 1964, federal funds were obtained by the Florida Division of Health to initiate a statewide program of health services for migrant farm workers and their dependents in counties with concentrated migrant population. Presently, there are 14 county health departments participating in the project (6).

Tourism, also a leading industry, grossed \$2.58 billion in 1964. The tourist industry employes a large number of domestic workers, and like the migrants they too receive inferior wages. Further support of the economy comes from natural resources--minerals, forests, and seafoods, the manufacturing industry, and those concerning defense and space programs (3).

Population

Through the years Florida has had a rapid but geographically irregular population growth. Miami, Fort Lauderdale, and West Palm Beach did not exist in 1890, when the population recorded for what is now a three-county area encompassing these cities was less than 1,000. Presently, these metropolitan areas are the most rapidly growing centers of the state. The total population of Florida jumped from 400,000 to 1,000,000 between 1890 to 1920. From 1940 to 1960 the population climbed from two million to five million. During this period, the population of Miami, Tampa, St. Petersburg, and Jacksonville accounted for 35 percent of the total population (1) and by 1968 these cities contained more than 40 percent of the total population (7).

A strong elementary and secondary school system supports a progressive educational program. There are 80 institutions of higher education in Florida; of this number 24 are state supported (8). It is

pertinent to note that the median school years completed by residents 25 years and older was 10.9 in 1960 (2).

In 1968, Florida ranked ninth in the nation in population with an estimated population of 6,202,000 (2). Although Florida is one of the fastest growing states in the United States, in recent years the rate of population increase has slowed noticeably. Caucasian in-migration has been primarily responsible for the increase in population (1). The 1968 population estimates place the white population at 5,102,300 and the non-white at 1,099,700. The white race experienced a record low increase during the 1965-68 period while the nonwhite race dropped to their lowest rate of growth in 25 years (9).

In 1960, the median population age was 31.2 years, compared to the national median of 29.5 years (2). The difference resulted in part from the influx of retirees 65 years and older, two-thirds of whom reside in eleven coastal communities. The percentage of persons 65 years of age and over comprised 13 percent of the total population, in 1968; whereas, persons 19 years of age and under accounted for 37.3 percent of the total population. The age specific population distribution is an important consideration when studying changes in the birth and death rates over a period of time. The shifts in age distribution tend to disguise the meaningful changes in vital rates, unless adjustments for age are made (9).

Vital Statistics

The Florida birth rate in 1967 was 16.4 (9) compared to 17.4 for the nation (2). In 1968, the white birth rate increased slightly from

the 1967 rate of 14.5 to 14.8 as compared to a decline in the nonwhite rate from 25.4 to 24.1, respectively. Since the early forties, the birth rate among the whites has been approximately two births per 1,000 population below the national rate while the birth rate for the nonwhites was consistently below that of the nation until 1952 when the rate surpassed that of the United States.

The incidence of illegitimacy between the white and nonwhite population varies significantly. Illegitimacy has always been higher among the nonwhites. In the past decade, the percentage of illegitimate birth to total births increased from 2.4 to 6.4 percent in the white population, whereas the increase was 27.4 to 36.7 percent in the nonwhite group.

A disturbing factor of the current illegitimacy status is the increase occurring among adolescents, although almost all child-bearing ages have contributed to the increase. Between 1958 and 1968 the percentage for the white teenage group increased from 5.8 to 17.1 and for the nonwhite group from 47.2 to 62.6. Further indication of the extent of this problem is revealed in the 1968 birth data report, as 47 and 56 percent respectively of all illegitimate births for white and nonwhite populations were in the adolescent age group as compared with 37 percent for both races in 1950.

Since birth weight is recognized as an important factor which affects infant mortality, a study of the data concerning low-weight infants is desirable. Low-weight birth is defined as an infant weighing five pounds eight ounces or less. Of the 101,904 live births recorded in Florida in 1968, 9 percent were in the low-weight category. The percentage of low-weight births was greater for the nonwhite than for the white population.

The total infant mortality rate in Florida decreased from 29.7 in 1960 to 23.8 in 1967. The infant mortality rate for whites decreased from 23.6 to 18.8, and among nonwhites the rate decreased from 46.1 to 37.1 during this period. The national infant mortality rate in 1967 was 22.4. The national infant mortality rate for the whites was 19.7 and 35.9 for the nonwhites. The 1968 Florida infant mortality rate for the white population was 24.1 and for nonwhites the rate was 36.1. The decline of infant mortality in Florida can be partially attributed to the improved prenatal care and improved diagnosis and treatment of the diseases in infancy.

The neonatal mortality rates have declined since 1950 and the rate for the state is close to that for the nation. The neonatal mortality rates for Florida in 1967 were 14.6 for the whites and 24.5 for the nonwhites (9), as compared with the national rates of 15.0 and 23.8 for the two groups (2).

The ratio of fetal deaths in 1968 is 14.7 deaths per 1,000 live births as compared with a ratio of 22.4 in 1950. Generally the ratio has stabilized at about 15 to 16 deaths per 1,000 live births for Florida and the nation. The ratio increased from 22.9 in 1967 to 25.0 in 1968 for the nonwhite population and declined among the white population from 12.4 to 11.0 during this time. Fetal deaths have declined for both races since 1950; however, the ratio of the nonwhite group has remained approximately twice that of the whites (9).

The 1968 mortality rate for residents of Florida increased 9.0 percent over that of 1967. The age adjusted mortality rate rose from 7.3 in 1960 to 7.7 in 1968. A comparison of the age adjusted death rate

by race shows an increase in the white race and a decrease among the non-white. The increase is greater among the elderly whites, which may indicate that this segment of the population is subject to a higher risk of mortality now than in the past. On the other hand, it may indicate that methods of estimating the population understate the number of residents in the appropriate age groups (9).

The rank and rates of the 1967 ten leading causes of deaths in Florida as compared with those of the nation are shown in Table 1. The first six causes of deaths in Florida are the same as those for the United States. Other bronchopulmonic diseases ranks seventh in Florida and tenth in the United States. Other diseases of circulatory system and general arteriosclerosis which rank eighth and ninth in Florida, are ninth and seventh in the United States. The tenth leading cause of death in Florida is diabetes mellitus whereas it ranks eighth in the United States.

The leading causes of death are predominantly diseases of the elderly. Therefore, programs relating to this segment of the population are of the utmost importance. Intensive programs are indicated for preventive screening, early detection, treatment, and prevention of diseases. Diseases of the heart and diabetes mellitus can be prevented or controlled through proper dietary measures.

Nutrition services are needed as a means of solving nutrition-related health problems of the general population with priority being given to special ethnic groups such as the migrants, Indians, and Cubans and to vulnerable groups like the elderly, adolescents, preschool children, and prenatal women. The Section of Nutrition has cooperatively planned programs with other bureaus, sections, and agencies to meet these needs.

TABLE 1

Leading causes of death in the state of Florida
as compared with those of the United States
for 1967

Leading Cause of Death (per 100,000 estimated population)	Florida		United States	
	Rank	Rate	Rank	Rate
Diseases of Heart	1	386.8	1	364.5
Malignant Neoplasms	2	186.9	2	157.2
Vascular Lesions Affecting the Central Nervous System	3	121.9	3	102.2
Accidents	4	65.2	4	57.2
Influenza and Pneumonia ¹	5	30.9	5	28.8
Certain Diseases of Early Infancy	6	24.9	6	24.4
General Arteriosclerosis	9	16.6	7	19.0
Diabetes Mellitus	10	15.7	8	17.7
Other Diseases of Circulatory System	8	19.7	9	15.1
Other Bronchopulmonic Diseases	7	22.2	10	14.8

¹Excludes pneumonia of newborn.

Source: Florida State Board of Health 1968 Florida Vital Statistics. Florida State Board of Health, Jacksonville; Bureau of the Census 1969 Statistical Abstract of the United States, 90th ed. U. S. Government Printing Office, Washington, D. C.

CHAPTER III

FLORIDA DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

I. HISTORY AND DEVELOPMENT

The first health programs in Florida were administered by local county health boards until 1889, when a state-wide health board was established. Initially the programs were primarily devoted to preventing, controlling, and eradicating communicable diseases such as yellow fever, smallpox, cholera, and malaria.

At the end of 1932 the State Board of Health was composed of four bureaus and five divisions. Communicable Diseases, Laboratories, Engineering, and Vital Statistics comprised the bureaus and Public Health Nursing, Malaria Research, Malaria Control Studies, Library, and Drug Inspections made up the five divisions.

Between 1932 and 1945 major emphasis was placed upon control of venereal diseases and malaria. Also in this period, health demands led to the creation of five new divisions and/or bureaus--Division of Tuberculosis Control, Bureau of Dental Health, Local and County Health Work, Maternal and Child Health, and Public Health Education.

Special Health Services, established in 1945, included programs directed toward chronic disease and most recently, glaucoma. Licensure regulations for institutions caring for the ill and aged were recognized as being essential in the past decade. Hospitalization programs for the indigent and medically indigent were implemented. A major priority in this period involved the development of Local Health Services. Environmental

health and the control of air and water pollution will receive priority attention in the years to come. Recently, family planning has received much attention as Florida promotes economic, educational, and social betterment (1).

II. ORGANIZATION

In 1968, Florida citizens adopted a three-part Amendment to the Constitution. This Amendment provided for an annual rather than a bi-annual meeting of the Legislature and a more tightly organized executive department. The document stipulated that the executive branch of the government was to be limited to 25 departments. Therefore, the 1969 Legislature passed the State Governmental Reorganization Act coordinating some 200 scattered agencies into 23 departments.

The State Board of Health, located in Jacksonville, became the Division of Health within the Department of Health and Rehabilitative Services on July 1, 1969. Figure 1 shows the current organization of the State Division of Health. All statutory powers, duties, functions, records, personnel, property, appropriations, and funds allocated to the State Board of Health were transferred to the new department. The five-man policy making body of the State Board of Health became an advisory council to the Secretary of the Department of Health and Rehabilitative Services.

During reorganization the Division of Nutrition within the Bureau of Local Health Services became the Section of Nutrition in the same bureau. The functions of air and water pollution control as well as pest control were moved to other state agencies. On the other hand, the

DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES

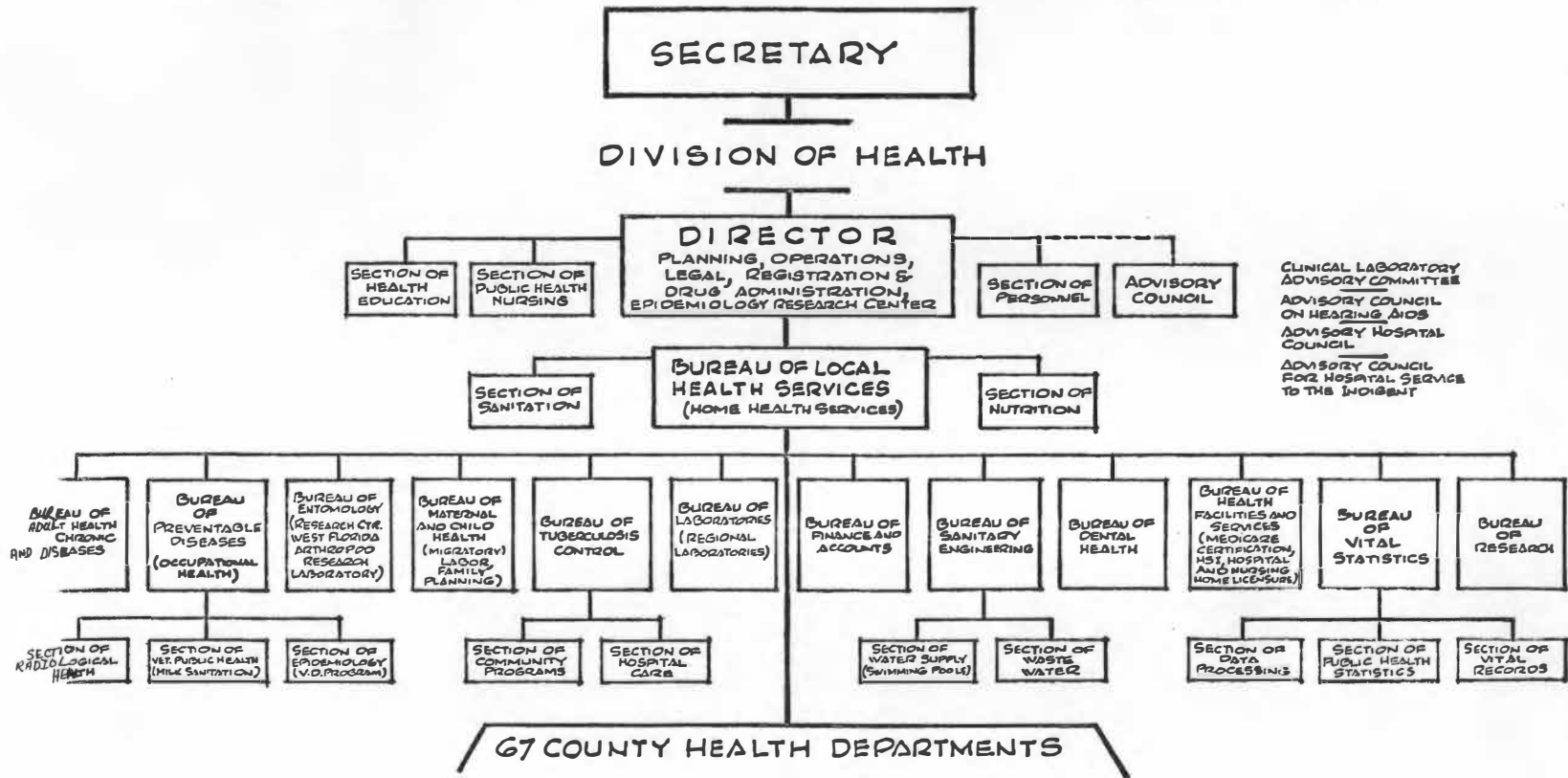


Fig. 1 Organizational chart of the Florida Division of Health, 1969.

State Tuberculosis Control Board, which administered the tuberculosis hospitals, was abolished and the functions and management of the hospitals came under the auspices of the State Division of Health (10).

State-County Relationship

Since 1960 separate health units have been established in all of the 67 counties in Florida; 25 counties have full time medical directors while 42 counties share 16 health directors (11). The major duties of the Florida Division of Health and the county health departments are required either by Legislative Acts, by order of the Division of Health, or by specific state or federal appropriations (12). County health departments help communities identify health problems and develop and implement programs in relation to the problems. The Division of Health is responsible for setting general policies, distributing state and federal funds, operating programs required by law, reviewing program plans, and offering consultative services.

The county health directors and staff representatives of the Division of Health cooperatively developed a program guide for county health directors. The guide is a flexible, yet practical, mechanism whereby programs can be projected. Furthermore, the guide serves as a basis for consultation from state-level personnel. This guide sets minimal standards for each program (13). Basic programs conducted by county health departments include: public health nursing, sanitation, maternal and child health, adult health and chronic disease, and tuberculosis control. Other programs which county health departments might

include are: nutrition, home health services, accident prevention, veterinary public health, and the hearing aid program.

In 1931, Florida Statute 154 provided for joint partnership between the state and county in providing health services to the population. A major problem which confronts the county and state concerns appropriations. Presently, the counties furnish 80 percent of their total budget and the remaining 20 percent is supplied by the state and/or federal government. State and federal funds are distributed to each county health department on a formula basis with consideration given to population concentration. Qualifications and salary scales for state and county health department employees are established by the State Personnel Board. The State Legislature appropriates funds for state employees, but not for county employees (14). A bill presently before the 1970 State Legislature requests that the state assume more responsibility in furnishing appropriations to county health departments.

CHAPTER IV

SECTION OF NUTRITION

I. HISTORY AND PHILOSOPHY

In 1909, the State Board of Health recognized the existence of nutrition problems. Even though the etiology of pellagra had not been determined in 1914, it was accepted that dietary deficiencies caused the disease. As a result of a health survey in 1914, programs were implemented to improve dietary habits of the population thus initiating the state's first nutrition program.

Nutrition received less emphasis with the decline in incidence of pellagra; however, the fact that many children were malnourished and anemic was acknowledged. Nutrition education programs in maternal and child health were, again, a major goal in 1941, and the first nutritionist was employed at the state level that year. The Department of Nutrition Investigation and Services was organized in 1946 as a result of the high incidence of anemia and its supposed cause, hookworm disease. Florida became the first state in the nation to organize such a service and the primary objectives were: investigation, education, demonstrations, and consultation (1). In 1950, the Department of Nutrition Investigation and Services became the Division of Nutrition and Diabetes Control. The first county health department nutrition position was established in 1957. In 1958, the Division of Nutrition was established as a unit in the Bureau of Local Health Services (13), and in 1969 the Division of Nutrition was changed to the Section of Nutrition within the bureau (10).

Presently, nutrition consultation services are available throughout the state and efforts are made to reach residents in every age group and economic level. Programs have been developed to improve the nutritional status of all age groups through nutrition education activities in various clinics for community groups, schools, and institutions caring for the ill and aged. The importance of understanding nutrition to improve health and to prolong life has attained new status (1).

II. ORGANIZATION

The Administrator of the Section of Nutrition is administratively responsible to the Chief of the Bureau of Local Health Services. Figure 2 shows the organizational chart of the Section of Nutrition. In addition to the positions shown on the organizational chart, nutritionists employed by university affiliated special projects are invited to attend nutrition staff meetings thus making a total of 35 positions for nutritionists in Florida. Twelve of the positions are at the state level and all are presently filled. The positions include: the Administrator, Public Health Nutrition Consultant III (nutrition training coordinator), Public Health Nutrition Consultant III (maternal and child health nutrition consultant), three Institutional Nutrition Consultants (one is presently on educational leave), and six Public Health Nutrition Consultants II (regional nutrition consultant). The nutrition training coordinator provides consultative services to three county health departments as does the maternal and child health consultant. One regional consultant serves as the Nutrition Coordinator for the Statewide Migrant Health Project. Two of the Institutional Nutrition Consultants are assigned to the

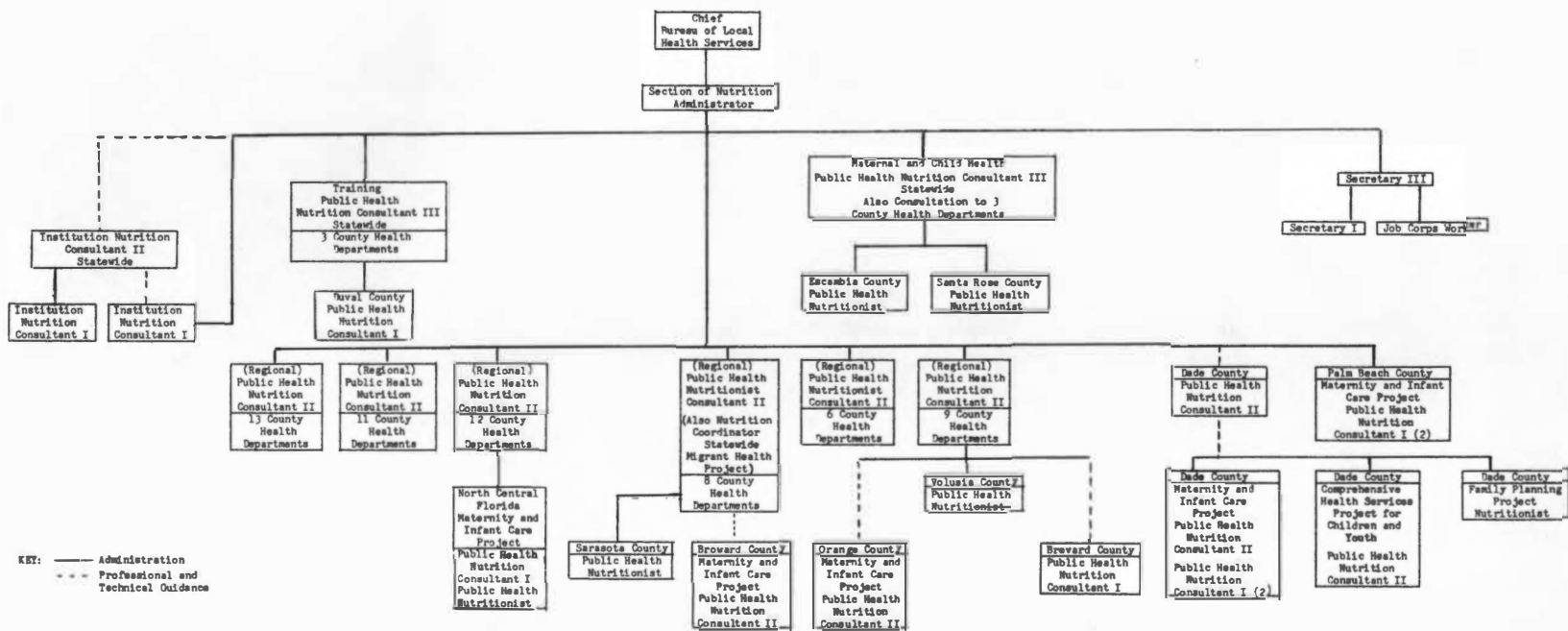


Fig. 2 Section of Nutrition Organizational Chart.

Source: Adapted from Division of Nutrition 1969 Division of Nutrition Functional Operational Chart. Florida Department of Health, Jacksonville. (Mimeographed.)

Bureau of Health Facilities and Services and the third position is in the Section of Nutrition.

The remaining positions are in county health departments or special projects. Four of the positions are for residents in nutrition assigned by the Section of Nutrition to county health departments as an incentive to initiate nutrition programs. (Nutrition residents are recent college graduates with backgrounds in food and nutrition or dietetics.) Five positions are established in county health departments. Special projects include nine positions with Maternity and Infant Care Projects; one position with the Children and Youth Project affiliated with a county health department, and one position with a university affiliated Children and Youth Project; one position with the Family Planning Project; and two positions with the two university affiliated Child Development Centers. Four of the twenty-three positions were vacant (15).

III. STAFF

Qualifications

The rules and regulations of the Florida State Personnel Board, an incentive-type program, are used to classify positions in the Section of Nutrition. Educational and professional background, size of area served, and supervision of other professional personnel are determining factors in personnel assignments. The classifications include Public Health Nutritionists, Public Health Nutrition Consultant I, II, and III, Institutional Nutrition Consultant I and II, and the Administrator of the Section of Nutrition. Descriptions for each position are included in Appendix A.

Recruitment, Training, and Staff Development

The growing demand for the public health nutritionist and the increased recognition that health problems may be related to nutritional aberrations are factors which give recruitment of public health nutritionists high priority. As one approach in meeting personnel demands, the Section of Nutrition established a two-year residency program for counties in which there is a reasonable intent to add a nutrition position to the staff within one or two years. This enables the county to employ promising individuals with baccalaureate degrees who can extend nutrition services. In addition the program provides the opportunity for residents in nutrition to explore or develop their interest in public health nutrition. The residents are oriented to public health and receive supervised work experience in a county health department. They are then encouraged to pursue graduate study in public health which is required for more responsible positions in public health nutrition (16). Financial assistance is available to staff members for graduate study (15).

The summer trainee program is another method of recruiting potential nutritionists. Undergraduate college students are employed by the Division of Health during the summer to stimulate interest and gain experience in public health. The Section of Nutrition provides experience for one or two students in the field of public health nutrition.

The Section of Nutrition provides field experiences for graduate students majoring in nutrition with an emphasis in public health. The quality and wide range of nutrition programs in Florida makes this a meaningful experience. Some graduate students become sufficiently interested in the program to eventually return as staff members.

A public health experience will be included in the Dietetic Internship Program to begin September 1, 1970, at the University of Florida Medical Center. One month of the six-month program for 12 interns will be devoted to community nutrition. The experience is planned so that the dietetic intern will become more aware of the role of nutrition in a public health agency, gain an understanding of the importance of continuing health care as part of comprehensive health care, and acquire an awareness of the role of a consultant.

Formal orientation to the State Division of Health is arranged for all new public health state employees. The orientation is designed to acquaint the employee with programs within the Division of Health. Regional nutritionists are responsible for orienting newly employed nutritionists in county health departments.

A staff conference for all public health nutritionists in the state is held annually. The nutritionists present brief reports regarding their respective programs. It is anticipated that semi-annual conferences will be conducted beginning the next fiscal year. State-level nutritionists meet quarterly to discuss business concerning pertinent activities. Two of the meetings are planned with state nursing consultants.

Funds are available for state-level nutrition personnel to attend at least one out-of-state convention or conference. Nutritionists are encouraged to attend seminars, conferences, and institutes to further staff development (15).

IV. PROGRAM

In pursuit of established objectives, nutritionists have coordinated nutrition activities with various bureaus and/or sections within the Division of Health. Conferences were scheduled with personnel of the various bureaus and/or sections in order for the author to discuss the nutrition component in their respective areas. Areas included were: Office of State Health Director--Office of Planning, Section of Public Health Nursing, and Section of Health Education, Bureau of Vital Statistics, Bureau of Finance and Accounts, Bureau of Maternal and Child Health, Bureau of Adult Health and Chronic Disease, Bureau of Local Health Services--Section of Sanitation and Home Health Services, Bureau of Health Facilities and Services, and Bureau of Dental Health. These units either provide services to support the nutrition program or plan cooperative activities to reach common objectives.

Objectives

The six overall objectives adopted by the Section of Nutrition are:

1. To promote understanding of the role of nutrition in health maintenance, health protection and disease control by providing authoritative information on diet and nutrition to both the public and the public health personnel.
2. To identify nutrition-related health problems existing at the local level.
3. To provide nutrition consultative services to guide in the development of good food selection habits essential for health maintenance and disease control.
4. To participate in basic and continuing education of public health professionals, educators, and sub-professional health personnel who can disseminate and apply nutrition information.

5. To provide consultation services to group care and day care facilities to help upgrade the quality, palatability, efficiency and sanitation of good services.
6. To coordinate public health nutritional services with related programs of other state agencies and community groups (13).

The following criteria are used to evaluate progress toward achieving the objectives and to determine the effectiveness and efficiency of the program operation. First, a review of the number and nature of nutrition services rendered is utilized to assess the relevance of the nutrition program to current health problems. A sample of the form used is shown in Appendix B. The form indicates which programs the nutritionist is working in and the number of people she reaches although the proportion of time is not reflected in this particular report. Second, the nutrition component is evaluated periodically to determine if nutrition is being stressed in the over-all care and treatment of patients. Third, the degree of improvement in the nutritive quality of food intake and nutritional status of those receiving nutrition services is assessed periodically. Direct observations, review of records, surveys, and questionnaires are suggested methods for this type of assessment (13).

Office of State Health Director

Office of Planning. The primary functions of the office of planning include: preparing program plans and reports required by the state and federal governments; reviewing plans and coordinating administration of projects, contracts, and agreements; reviewing current programs periodically and collecting specific information requested by the State

Health Director. The office of planning reviews the ongoing program and the administration of the Section of Nutrition periodically. Plans for annual renewal of federal funding by the United States Public Health Service are prepared by this office (11).

Section of Public Health Nursing. The public health nurse in her daily routine is able to share nutrition information with the public. Furthermore, she is in a position to obtain information that is of the utmost importance to nutritionists. In-service education programs for nurses are conducted periodically by nutritionists. Nutritionists aid in the orientation of newly employed public health nurses. Through such programs the nutritionists provide current information and help for the nurse in the areas of community education, family nutrition, school health, and institutional nutrition services. The public health nurse can assist the nutritionist by: describing problems completely; collecting as much information as possible about individual and family eating habits, food buying and preparation; and providing information from the physician on the prescribed therapeutic diet, diagnosis, and pertinent facts about care (17).

Section of Health Education. The principle objectives of the Section of Health Education are: program planning and evaluation and promotion of health education. The Administrator and three Health Educators support programs of all bureaus within the Division of Health and of all county health departments.

The Section of Health Education is involved in various activities; however, only a few will be mentioned. Consultation is provided to the

various bureaus and county health departments in planning workshops, institutes, and conferences at the local, regional, and state levels. For example, a cooperative program sponsored by the State Education Department, Division of Health, county health departments, and various colleges and universities is the Teacher Project for Health and Education. The project provides for a study of community health resources by teachers at all levels of education. The nutrition component of the project is presented by nutrition consultants in the areas in which the program is held. The nutrition segment is designed to acquaint the teachers with the functions of a nutritionist at the county, regional, and state levels. Slides depicting various phases of health in which the nutritionist participates are shown. The teachers are informed of other resources, such as the State Education Department and the National Dairy Council, where guidance is available for planning lessons, nutrition seminars, or science fair projects.

It is pointed out that the teachers are in a position to observe the health and nutrition problems of students. Teachers are encouraged to report conditions such as underweight, overweight, poor color, fatigue, and irritability of students to public health nurses. Teachers are encouraged also to create positive attitudes toward food and health by incorporating nutrition information into classroom subject matter.

The Section of Health Education assists bureaus and county health departments in the development, selection, and evaluation of printed materials. The section promotes and implements cooperative health programs in schools and in official and voluntary agencies by providing information for in-service training of teachers in health education.

Motion pictures, slides, film strips, and other aids are circulated to schools, universities, official and voluntary health agencies, civic groups, and responsible individuals. "Florida Trends in Public Health," a publication devoted to program material, is edited and published by the Section of Health Education. Another method by which the Division of Health informs interested citizens of the state's public health programs is through "Florida Health Notes." This monthly publication is distributed to Florida residents upon request. The Section of Nutrition contributes information for issues concerning nutrition (11).

Bureau of Vital Statistics

Section of Public Health Statistics. The responsibilities of the Section of Public Health Statistics are twofold. The first responsibility is to analyze, summarize, and interpret vital records and special studies. "Monthly Statistical Report," a publication which presents current data on births, deaths, marriages, and divorces is distributed to hospitals, county health departments, schools, and others upon request. The publication includes an article of public health interest which is prepared by a bureau staff member. The annual summary and analysis of vital record data, "Florida Vital Statistics," is published by the Section of Public Health Statistics.

The second responsibility of the section is to provide statistical support and consultation to bureaus within the Division of Health. Statistical consultation is being provided for the Section of Nutrition in planning the Nutritional Status Study of the migrant population and in providing data for a report on "Hunger and Malnutrition in Florida" (11).

Bureau of Finance and Accounts

The primary functions of the Bureau of Finance and Accounts include: budgeting, accounting, purchasing, shipping, receiving, and duplicating services. The bureau works with the Division of Health program directors to plan for maximum utilization of funds. Furthermore, the bureau staff assists the State Health Director and chiefs of the various public health programs in planning and implementing the overall financial program. It is the responsibility of the bureau to keep the Secretary of the Department of Health and Rehabilitative Services and the State Health Director informed of expenditures in relation to the budget.

Funds are provided through the General Appropriations Act which is approved by the Legislature. In general, funds are appropriated for programs and activities which are authorized by existing statutes. Allowances are made for any increases required to maintain the current level of services. Federal formula grants and funds appropriated by counties are also dispersed by the bureau.

Grant and Donation Trust Funds are special funds not included in the General Appropriations Act. Expenditures available through the special funds are federally financed and support special and research projects. The Maternity and Infant Care Projects, Children and Youth Projects, or the forthcoming Nutritional Status Survey of the migrants are examples of programs supported by such funds (11).

Bureau of Maternal and Child Health

About two-thirds of the total nutrition staff's time is devoted to maternal and child health (15). This emphasis is one factor which

may have contributed to the decrease in the infant mortality rate since 1960. The infant mortality rate continues to exceed that of the nation which is part of the justification for nutritionists giving priority to maternal and child health programs. Furthermore, approximately one-third of the total population is 19 years of age and under. Another factor which contributes to the amount of time spent in maternal and child health programs is the fact that about one-third of the nutrition staff is specifically assigned to this area and supported with categorical funds.

Nutritional care contributes to the overall objectives of the Bureau of Maternal and Child Health which are to reduce maternal, infant, perinatal, and child morbidity and mortality. Moreover, the bureau provides continuous health surveillance from infancy through adolescence. The main purpose of the nutrition program in the bureau is to contribute to maximum mental and physical growth, development, and well being of the population. These purposes can be accomplished by providing services designed to help individuals in meeting the nutritional requirements of pregnancy, infancy, childhood, and adolescence.

A position for a nutrition consultant is established in the Section of Nutrition to provide nutrition consultation and to coordinate nutrition services with the Bureau of Maternal and Child Health, county health departments, and special projects. The consultant coordinates nutrition programs in counties and projects with the overall state nutrition program. In addition, she develops guidelines for normal and therapeutic diets in maternal and child nutrition, nutrition education programs, and materials for teaching aids.

Nutrition services provided by the state for the county health departments include technical guidance, in-service education, and consultation to special projects. Examples of special projects include the Maternity and Infant Care Projects; Children and Youth Projects; Family Planning Project; Migrant Health Project; and Child Development Center in Dade County and the Diagnostic and Evaluation Clinic in Tampa; Crippled Children's Clinics; health services to special children such as children with phenylketonuria; school health programs; well child clinics; and programs of the Office of Economic Opportunity.

Low-income families are encouraged to participate in the donated foods or food stamp programs and to utilize available foods to meet the nutritional needs of the family. Counties not participating in either the food stamp program or commodity distribution program are encouraged to do so. There are 58 participating counties.

Nutritional consultants provide resources for school nutrition education programs. School health coordinators and teachers receive guidance in identifying nutritional needs and problems as well as in planning in-service education. The nutritionists participate with other staff members of county health departments and with members of County Boards of Public Instruction in cooperatively planning a curriculum for pregnant teenagers, so that they might continue their high school education. Seven such schools to accommodate approximately 100 students are located throughout Florida.

Nutrition consultants cooperate with various community agencies which provide health related services for mothers and children. Examples of such agencies include: Agriculture Extension, Welfare, VISTA, Office

of Economic Opportunity, and Scout groups. Radio, television, newspaper articles, and other mass media are utilized to convey nutrition information to families.

The need for a symposium to consider the implications of nutrition and mental development in relation to the poverty cycle has been recognized. Plans are being developed to conduct statewide or regional symposiums for medical and allied medical personnel (18).

Migrant health project. The primary objectives of the nutrition services in the Migrant Health Project are:

1. To identify the nutrition needs and problems of migrant farm workers and their families.
2. To improve inadequate diets associated with low-weight births, maternal and infant mortality or morbidity, mental retardation, retarded child growth and development, and chronic diseases that may be related to poor nutritional status.
3. To develop baseline data whereby progress regarding nutritional status can be measured.
4. To provide appropriate maximum nutrition services to families through migrant health services in county health departments and to provide nutrition education through schools, migrant community groups, day care centers, professional groups, and commodity food distribution agencies. Most of the project nutrition program plan was implemented in 1969.

Counties participating in the Migrant Health Project receive nutrition services from the nutrition coordinator for the project, three

regional nutrition consultants, and other nutritionists employed by or assigned to participating county health departments. The nutritionists receive technical guidance and supervision from the nutrition coordinator.

Clinical observations indicate that iron deficiency anemia in preschool children and pregnant women and obesity in middle-aged women are the major nutrition problems in migrant families (19). In the winter of 1970-71, the Section of Nutrition will conduct a Nutritional Status Survey of Migrants as part of the National Nutrition Survey. Funds will be made available from the United States Public Health Service. The survey findings will be used for planning nutrition and public health programs for the migrant population (15).

Special Projects

Today, America is in a health care crisis. In 1968 Walter Reuther stated that in order to deal with the crisis, it must be recognized that the present health care system is disorganized and obsolete. He further stated that comprehensive health care should be made available to every citizen as a matter of right (20).

The Comprehensive Health Care Projects were authorized through federal funding as one approach to help alleviate the health care crisis. One of the purposes of these projects is to explore new methods of delivering comprehensive health care to citizens. Another objective of the projects is to provide comprehensive health services to mothers, infants, children, and youths particularly in areas with a concentration of low-income families (21).

Florida has seven Comprehensive Health Care Projects which are funded through the Division of Health for county health departments or

a university medical school. The five Maternity and Infant Care Projects are located in Dade, Broward, Orange, and Palm Beach Counties. The fifth project encompasses 13 northcentral counties. One Children and Youth Project in Dade County is affiliated with the Dade County Health Department and the other with the University of Miami School of Medicine.

One of the main duties of the nutritionists with the projects is to increase the availability and continuity of nutrition education and services for the segments of population in project areas. Through cooperation with regional and county nutritionists, project nutritionists coordinate the nutrition programs of the projects with the county health department nutrition programs.

Bureau of Adult Health and Chronic Disease

The Bureau of Adult Health and Chronic Disease is responsible for determining the nature and extent of various chronic diseases which are considered public health problems. Programs to deal with problems related to diabetes mellitus, heart disease, health maintenance, arthritis, cancer, hearing aids, prevention of blindness, and smoking and health are presently being conducted (22).

The need for a nutrition consultant has been recognized and proposed by the Section of Nutrition, but the position has not been established. The Administrator of the Section of Nutrition coordinates nutrition services with the bureau. County and regional nutritionists provide nutrition services in programs concerning adult health and chronic diseases within their respective geographic areas. Some of the ways in which the Section of Nutrition participates with the bureau are described as follows.

Diabetes. Guidelines for the diet administered to patients in the diabetes screening program were developed. In selected screening programs, nutritionists provide diet counseling in group sessions and on an individual basis. Nutritionists provide in-service education regarding the nutritional aspects of diabetes to medical and paramedical staff. A nutritionist or nutrition resident participates in the diabetic camp for children and youth which is held annually. A diet column for "Timely Topics," a monthly publication for persons with diabetes, is prepared by various nutrition staff members. Meal planning and preparation are examples of topics for articles included in the publication (23).

The Florida Diabetes Association has approved approximately 12 diabetes societies for lay people. The Administrator of the Diabetes Section in the Bureau of Adult Health and Chronic Disease indicated that in localities where nutritionists and/or dietitians participate the programs are more active than in areas where these professionals are not available (24).

Heart diseases. Nutritionists work cooperatively with voluntary associations in their respective counties developing and implementing programs which provide dietary guidance for the prevention of heart disease. Individual dietary counseling on referral is given to patients on modified diets prescribed by physicians. Staff members participate in the annual stroke camp conducted by the Florida Heart Association.

Health maintenance. Another program area in which nutritionists participate is health maintenance. Programs are developed and initiated

in weight control and weight reduction for adults. The principal technique used is group teaching. Nutritionists are guest speakers at TOPS (Take Off Pounds Sensibly) Organization and other interested groups. Information to combat unsound dietary practices and food fads is presented.

Guidance in meal planning and in food purchasing for the older citizens who live on limited incomes is another aspect of the health maintenance program. The Duval County nutritionist periodically demonstrates the use of various commodity foods or foods used most often by this age group. The author participated in such a program called "Kitchen Kapers" held at a community center located in a low-income area. The purpose of the program was to demonstrate the use of some commodity foods and to stress the need of including protein in the diet daily. Food demonstrations using the commodity canned meat and the yellow split peas were given after which a tasting party was held.

Arthritis. The arthritis program is another area of adult health and chronic disease in which nutritionists participate. Nutrition staff members prepare articles for the arthritis newsletter which is published monthly by the Northeast Florida Arthritis Association for citizens who have the disease (23).

Bureau of Local Health Services

Section of Sanitation. The primary function of the Section of Sanitation of the Division of Health is to provide better environmental health services to the citizens of Florida. The staff consisting of an Administrator, Assistant Administrator, training consultant, and four

regional consultants provide consultation to staff in county health departments. Each county health department employs one or more sanitarians depending on the population of the county.

A 12-week orientation in public health is given to sanitarians upon employment. The orientation is designed to give a comprehensive view of the sanitation programs in the state (10). The Administrator of the Section of Nutrition participates in the orientation by presenting an overview of nutrition programs and by giving the locations of regional and county nutritionists. The cooperation of nutritionists with the sanitarians in school health, institutional, and migrant health programs is discussed. Cooperative programs for consulting dietitians and food service supervisors and for nursing home licensure are examples of joint activities (25).

Home Health Services. The main objectives of the Home Health Services Program are twofold. The first objective is to establish facilities and acquire staff in areas served by each county health department. The responsibility of the facility is to deliver quality home care which includes skilled nursing care and at least one other therapeutic service. The "other" services include physical therapy, medical social service, speech therapy, home-health-aide service, and occupational therapy. The second objective is to provide home health services if such services are not available from another appropriate agency within the area served by each county health department (13).

Health maintenance for the chronically ill has become a problem of the community. Probably the most significant contributing factor is the increase in the life expectancy of the population. The need and

demand for facilities for the care of patients with chronic diseases and the aged have increased with the aging of the population. This is especially true in Florida since the elderly comprise a high proportion of the population. Hospitalization is not necessarily recommended for those with long-term illnesses over age 65. Although the majority of chronically ill patients need professional medical services, they do not require the intensive care given in a hospital facility. Often adequate care can be provided in the home with proper guidance in educating the patient and family and with medical supervision.

Home Health Agencies in Florida are administered by one of the following institutions or organizations: an extended care facility, hospital, rehabilitation center, county health department, or Visiting Nurses Association. There are now 51 such agencies in existence as compared to 69 in 1969. An explanation for the decrease is that less populous counties have insufficient resources to support the program. It is estimated that approximately 75 percent of the population in the state have access to the services of the Home Health Agencies (26).

Consultative services from the State Division of Health in planning, organizing, implementing, and evaluating a Home Health Agency are available to organizations. In addition, aid is available to help establish services other than skilled nursing care (13).

The Public Health Nutrition Consultant assists in identifying nutrition needs of senior citizens and helps establish realistic nutrition goals for individual patients. Furthermore, she evaluates the dietary aspects of the total care plan and provides reliable information concerning nutrition, food products, food buying, and food

preparation (27). In areas where home-health-aide positions have been established as part of the Home Health Services Program, nutritionists teach the aides basic nutrition concepts.

Bureau of Health Facilities and Services

The primary objectives of the Bureau of Health Facilities and Services are twofold. The first objective is to improve the quality of care administered in health facilities by enforcing established laws, by consultation, and by training employees. The second objective is to administer federal financial assistance for medical care (13).

The bureau administers four different licensure programs: homes for the aged, nursing homes and related facilities, intermediate care facilities, and skilled nursing homes. The program functions of the bureau are: reviewing plans, surveying facilities and processing applications for licensure, consulting, and ascertaining civil rights compliance.

The purposes of the institutional nutrition consultation program within the bureau are: to assist group care facilities in providing nutritionally adequate meals which meet the appropriate needs of the population served at a reasonable cost and in a sanitary manner; and to assist with nutrition and food service education for personnel, patients, and residents. The author attended a one-day workshop for food service supervisors. The purpose of the workshop was to discuss: innovations in food service in the 1970's, solving problems in dietary services, principles of human relations, and the art of communicating.

The Institutional Nutrition Consultants provide services to all types of group care facilities within a designated geographical region. Consultation is offered to institutions when other resources are not available. The consultants serve as resource persons to regional and county nutrition consultants and coordinate activities with the state institutional program. The state, regional, and county nutrition consultants cooperate in planning workshops for consulting dietitians. Furthermore, regional and county consultants provide follow-up consultation to facilities in their respective geographical areas, at the request of the state consultants.

The Section of Nutrition and the bureau participate in a continuing project with the Florida Dietetic Association, Florida Hospital Association, and the Florida Nursing Home Association in recruiting and placing shared part-time and consulting dietitians for employment in group-care facilities. Workshops are held periodically for the dietitians to discuss reference materials and to cooperatively plan training programs for food service workers in such facilities (28).

Bureau of Dental Health

The main purpose of the Bureau of Dental Health is to improve the dental health of people living in the State of Florida. Direct and consultative services are provided by the bureau and are available without charge to school and community groups.

One mobile dental clinic is operated by the bureau. The clinic provides school dental examinations and corrective dental care to medically indigent children living in areas with few or no practicing dentists. The state laboratory is available to private and public health

dentists for analyzing saliva samples of patients for lactobacillus bacteria. The purpose of this service is to enable the dentist to advise his patients regarding the needs and procedures for the reduction of tooth decay by controlling excessive intake of carbohydrate.

Various health education materials such as films, filmstrips, television spot announcements, dental models, fluoridation flipcharts, books, posters, pamphlets, and teachers packets are available without charge or on a loan basis to teachers, dentists, or other interested responsible persons. Portable dental equipment is provided to private dentists through county health departments. The purpose is to make it possible to render dental services to homebound or chronically ill, disabled, or aged patients who are institutionalized.

The Chief of the Bureau of Dental Health and two and one-fourth dental consultants are responsible for providing consultative services to county health departments who wish to establish and staff dental clinics. Twenty-nine Public Health Dentists staff 40 dental clinics in Florida. Other examples of dental services include the organization and orientation of concerned groups who finance dental care of medically indigent children in the community; providing speakers for Parent-Teacher Associations and lecturers for college and university health classes; community counseling on fluoridation; and the promotion of the dental component of other health programs in the state (11).

A bill requiring the fluoridation of all water supplies in the state is before the 1970 Florida Legislature. The Bureau of Dental Health prepared a publication "Florida Notes on Dental Health" which was made available to all dentists and state legislators. The pamphlet provided

documented data on the benefits of fluoridation of water supplies. It is significant to note that 20 communities in Florida have natural fluoridated water supplies and 18 communities have controlled water fluoridation.

Dental disease is considered a major preventable public health problem by the Division of Health. Surveys indicate that 9 percent of Florida elementary school age children have lost one or more permanent teeth. Furthermore, 15 percent of junior and senior high school age students have lost one or more permanent teeth, and 600,000 adults have lost all of their teeth.

The Section of Nutrition in cooperation with the Bureau of Dental Health and other bureaus and sections developed guidelines that would include nutrition as an integral part of dental health programs. The program has not been implemented due to personnel changes in the Bureau of Dental Health; however, efforts are now being made to implement these recommendations.

Other Agencies and Groups

The Section of Nutrition works with various state and local official or voluntary health agencies and professional associations to coordinate nutrition and home economics programs and to extend services. Examples of the agencies and associations are: the State Department of Education, Extension Service, Division of Family Services, and the Florida Home Economics Association. Other examples include the Florida Dietetic Association, Field Agency Nutrition Service (FANS), and the Office of Economic Opportunity.

A representative of the Section of Nutrition spends considerable time and effort as a member of the FANS Committee. FANS is a voluntary, nonprofit organization composed of professional home economists who represent various governmental agencies in Florida concerned with nutrition. The purpose of FANS is to improve the nutritional status and food habits of Florida's populace. Twelve Florida counties have organized nutrition committees at the local level. The author attended a FANS meeting in Palm Beach, Florida, at which time members of county nutrition committees presented an annual summary of the activities and projects sponsored by their respective committees. The author also attended a County Field Agency Nutrition Service, CO-FANS, meeting in Dade County.

Plans for a follow-up conference on the White House Conference on Food, Nutrition, and Health have been instigated by the Section of Nutrition. The conference will be held in the early fall of 1970. The purpose of the conference is to discuss the recommendations made at the White House Conference and make recommendations for suitable action in Florida. Representatives of agencies attending the White House Conference are involved in planning and will participate in the state conference. Individuals, both professional and nonprofessional, will be invited to represent the 67 counties at the conference (15).

Program Implementation

Regional and county nutritionists develop nutrition programs for their respective areas according to the identified health problems in the community and within the framework of the objectives adopted by the Section of Nutrition. The programs are planned cooperatively with the

county health director, the nursing director, and representatives of involved community agencies.

State and regional levels. To ensure that nutrition services provided to the public are both authoritative and realistic and to assist counties in meeting their program goals, the Section of Nutrition provides the following services to county health units.

1. Nutrition consultation is available for health professionals to plan services and to discuss specific problems.
2. Nutrition staff members conduct in-service education programs for groups of professional and sub-professional workers.
3. Group classes and/or demonstrations are conducted in clinics or other facilities in communities for public health patients or for the general public. Weight control, prenatal diets, diabetes, and family meal planning are examples of the topics discussed.
4. Diet counseling on normal or therapeutic diets is given to individuals referred by public health personnel or private physicians.
5. Program evaluation is conducted either of the total nutrition program or of a specific phase of the program administered by the county health department.
6. Technical guidance is provided to resident nutritionists working at the county level and to nutritionists employed by county health departments.
7. Evaluation of food planning, food service, and nutrition services of various institutional facilities is made in conjunction with the licensure and certification programs.

8. County health department staffs are informed of nutrition education materials available from the Section of Health Education. Additional materials concerning various aspects of nutrition are obtainable from the Department of Health, Education, and Welfare, the Public Health Service, and the state and federal Department of Agriculture (13).

County level. The author welcomed the opportunity to observe a county-level nutrition program in operation. Brevard County, located on the east coast in South Central Florida, has three health units. A nutrition position was established in 1968, and the nutritionist has become an integral part of the public health team.

Nutrition services are needed most by the following population groups in Brevard County: pregnant women, infants, children through adolescence, aged persons, persons with chronic diseases requiring specific therapeutic diets, and low-income families with limited education. Prematurity has been a major cause of infants deaths in Brevard County. Therefore, mothers and infants attending prenatal and child health clinics are routinely given intensive nutrition instructions and counseling. Teenage mothers also receive priority consideration for nutrition education. The nutritionist teaches nutrition classes to girls attending the Educational Center for Teenage Mothers. This center is one of seven centers in the state established so that pregnant teenagers would have the opportunity to continue their education during pregnancy. There were approximately 100 students enrolled at the Brevard County center during the 1969-70 school year.

Six children in Brevard County have been diagnosed as having phenylketonuria, an inborn error of metabolism. Close dietary

supervision and care is required to prevent mental retardation. The nutritionist confers regularly with each patient's physician regarding the patient's progress. Furthermore, she visits each family monthly for dietary counseling and encouragement.

The mean age of the population in Brevard County is 26 years, yet the leading cause of death is heart disease. Diabetes mellitus and obesity are also prevalent chronic diseases. Clinic visits are scheduled or home visits are made to counsel patients on fat-controlled, calorie-controlled, or sodium-restricted diets prescribed by physicians. The nutritionists work with the Brevard County Heart Association to make the general public more aware of the relationship between diet and heart disease. For example, plans are being formulated to serve a luncheon, consisting of foods allowed on a fat-controlled diet, to a men's organization.

Individual dietary counseling is provided for diabetic patients in clinics, and a series of four diabetic classes on foods are given at selected times during the year. In regard to obesity, dietary counseling is provided in clinics for weight control and weight reduction. A series of four weight-control classes are jointly planned and taught by the nutritionist and personnel from the Extension Service. When requested, the nutritionist presents weight-control programs to such groups as TOPS and Weight Watchers organizations.

Brevard County is one of the state's more opulent counties; however, there are large pockets of poverty where individuals and families require special help in obtaining needed food assistance. During clinics, discussions concerning family food selection, meal planning, food buying,

and food budgeting are held. Plans are being made to give food demonstrations in clinics using commodity foods. Eligible persons are encouraged to participate in the Food Distribution Program, which was established in the past year, partly as a result of the work of the county nutrition committee chaired by the nutritionist.

The food and nutrition service provided in all nursing homes and the juvenile home are evaluated annually by the nutritionist. Conferences for consulting dietitians who work with hospitals and nursing homes are arranged by the nutritionist for the purposes of discussing programs, problems, regulations, and other pertinent matters.

The nutritionist disseminates nutrition information to citizens of Brevard County through nutrition classes for the nursing program at Brevard Junior College, the Teacher Project for Health and Education, and education programs for elementary and secondary school students. Topics include general nutrition needs, therapeutic diets for specific body malfunctions, and career opportunities in the field of dietetics and nutrition. Indirect nutrition services are given to the county population through in-service education, classes, and conferences with health department staff, other agency personnel, school personnel, the newspaper, and radio (29). Furthermore, the nutritionist writes articles for "Timely Topics," a publication for diabetics and for "Nutrition in a Nutshell," a publication of the Section of Nutrition written for professional readers.

The Brevard County Nutritionist, at the request of her health officer, projected the nutrition program through 1973. The program projection included additional services needed, additional resources required, cost of resources, projected needs, and projected cost estimates (30).

CHAPTER V

PROFESSIONAL DEVELOPMENT

The field experience provided opportunities for the author to develop professional competencies and to recognize her strengths and weaknesses. The author became cognizant of the importance of continual self-evaluation.

Through observant association with Public Health Nutritionists, the author gained valuable insight into the roles of state and county health departments in providing nutrition services to meet the health needs of the population. Furthermore, the author observed the relationship of the state and county health departments and how each supported and conducted public health programs in Florida. The author improved her skills in providing nutrition services by participating in various nutrition activities. These experiences induced a very positive reinforcement of her previous academic background.

A brief account of the various nutrition experiences and an assessment of the author's professional development is described in this chapter.

Consultation with Other Professional Workers

Consultation, a problem solving process whereby the primary goal is to increase the consultees effectiveness in the work setting, is the most common method used to extend nutrition services. The author observed several consultative conferences conducted by an Institutional Nutrition Consultant. She has chosen two conferences which illustrate the consultation process.

A consulting dietitian for two small hospitals in Walton County requested the consultative services of an Institutional Nutrition Consultant regarding hospital menu planning. The consulting dietitian is the school lunch supervisor in Walton County and a member of the American Dietetic Association. The primary interest of the dietitian was to have the institutional consultant check the four-week cycle of menus which she had prepared. The Institutional Nutrition Consultant and the author reviewed the menus and made appropriate suggestions for change. For example, ice cream was on the menu for the diabetic patient. It was pointed out that even though ice cream is on the diabetic exchange list, the patient would need to be instructed as to the manner in which it could be included in his diet.

The primary purpose of the consultation visit from the standpoint of the Institutional Nutrition Consultant was to establish rapport with the dietitian and give encouragement. Even though the visit was not consultative in the strictest sense, it was pointed out to the author that initial conferences often follow this pattern.

Many times it is difficult to differentiate title versus function. It appeared that the dietitian functioned as a part-time dietitian rather than as a consultant. She performs the duties of a dietitian such as writing menus and developing policies and procedures for the dietary departments. This dietitian's primary role is to develop in-service programs for food service supervisors with regard to hospital food production and management; therefore, she should function as a part-time dietitian rather than as a consulting dietitian.

In contrast, the Institutional Nutrition Consultant and the author had a consultative conference with the food service supervisor of a small hospital in Jackson County. The purpose of the visit was to establish rapport and to determine the effectiveness of the consulting dietitian employed by the hospital. The consulting dietitian has an in-service consultative session each month for food service supervisors from three or four facilities in the area. As a result of these sessions, this food service supervisor writes and utilizes cycle menus and was in the process of establishing policies and procedures for the dietary department. The Institutional Nutrition Consultant was supportive in the development of the policies and procedures.

The conference with the dietitian indicates the need for a workshop for consulting dietitians in West Florida. Such workshops have been successful in other areas of the state. The principles of consultation and the role of the consulting dietitian with medical and allied medical personnel would be appropriate topics for the workshop.

Although the author's observation during the consultative conferences was greater than her actual participation, she became aware of the obvious importance of establishing rapport, developing good communications between the consultee and the consultant, being supportive, and being sensitive to the situation. The author was therefore given an insight into her own self-evaluation and she will try to utilize these techniques in developing skills as a consultant.

In-Service Education

The purposes of in-service educational programs are to compensate for the lack of technical knowledge needed for a job, and to broaden the

outlook and understanding of a specific area. Furthermore, in-service programs keep the staff informed as to recent developments in a particular field. Various approaches are used for conducting in-service programs. Conferences, both individual and group, workshops, seminars, and staff meetings are examples of some of the methods employed.

The author, in conjunction with a regional nutrition consultant, presented a two hour in-service program to five graduate nurses at the Polk County Hospital. Approximately two hours were spent in reviewing and selecting information pertinent for the presentation. Since the students will be taking the state board examinations required for registered nurses, the purpose of the session was to review therapeutic diets. The author discussed liquid, bland, soft, high caloric and high protein diets, and diabetic diets. To encourage participation, the students were asked to plan a one-day menu for a diabetic using a 1500 calorie diet plan as a guide. Food models demonstrating the allowed amounts of food were used in discussing the diet exchanges.

Communications during the program developed to a much greater extent than the author had anticipated. The author attributes this in part to the genuine interest of the students which was revealed by the questions directed toward her. In addition, the forthcoming state board examinations motivated the students' interest in therapeutic diets. The fact that the students actively participated in the class by planning menus for the diabetic and the use of the visual aids probably also contributed to their interest and stimulation.

By participating in an in-service educational program, the author increased her confidence in making presentations to a professional group.

The experience also broadened the author's understanding of total health care.

Group Work with Nonprofessional Groups

In working with nonprofessional groups, various approaches are used. Teaching tends to be more effective when members of the group actively participate. The author observed or participated in several activities involving nonprofessional groups. The following describes three of these activities.

The author observed a workshop for food service supervisors in which dietitians served as consultants. The program, sponsored jointly by the Hospital Institution Educational Food Service Society (HIEFFS), and the Florida Dietetic Association, focused on problem solving and communicating. In the opinion of the author, portions of the program were too technical for the food service supervisors. For example, the terminology used in one of the presentations on communicating was directed more to the professional dietitian/nutritionist rather than to the food service supervisor. This demonstrates the importance of informing program participants about the audience to be addressed. Furthermore, perhaps the food service supervisors would have benefited more had they been responsible for a greater portion of the program. It seems that a food service supervisor could have discussed the "Benefits and Advantages of Membership in HIEFFS" more candidly than an Institutional Nutrition Consultant.

Another experience with nonprofessional persons involved the Miccosukee Indian Tribe. In an attempt to improve the nutritional

status of the Indians and to teach the mothers how to prepare a wider variety of foods, the Dade County nutritionist visits the Forty Mile Bend reservation school each month. Initially, the school children and the cafeteria cook participated in preparing single dishes. Cooking schools for women in the community were organized to teach them the use of an electric range and preparation of various foods needed to improve their nutritional status. This was discontinued since many families preferred to continue to live in the traditional chickees (thatched roof structures open on all sides) and do not use the ranges.

During the school year, the nutritionist plans cooking lessons. Professional dietitians and/or nutritionists volunteer to help with supervising the school cook, school children, and interested women from the community as they prepare a complete meal using the school lunch facilities. The author participated in the May meal preparation lesson and the following menu was prepared:

Scalloped Ham and Potatoes

Broccoli

Fruit Salad

Banana Cream Pie

Milk, butter, and bread were furnished by the school. Menus are planned to coincide with available seasonal foods. Although the menu was not based on traditional patterns, some families, particularly those living in conventional homes, are beginning to prepare dishes learned at the school. However, since many families continue to live in chickees, perhaps this is an indication that activities utilizing traditional Indian foods might be more effective. When planning for a change in food behavior, one should be aware of the various meanings that specific foods

have for a particular group, recognizing that customs, beliefs, and status are associated with food (31).

A third experience with a nonprofessional group was provided when a regional nutritionist asked the author to give an informal talk to a group of patients in a family planning clinic. The author therefore had the opportunity to give an impromptu discussion regarding general nutrition. Patients were encouraged to ask questions and discuss phases of nutrition that were of interest to them. Weight control, child feeding practices, and food budgeting were the topics discussed.

The value of these experiences increased the author's ability to identify and plan suitable programs for various levels of health personnel. In addition, the author realized the importance of establishing good rapport with members of nonprofessional groups and of understanding and respecting their cultural differences. Moreover, the author recognized the necessity of a flexible program.

Counseling Nonprofessional Persons

Previously, the author has had experience in interviewing and providing nutritional guidance and counseling in pediatric and adolescent clinics. During the field experience, the author had various opportunities to provide individual nutrition counseling by participating in maternity and well child clinics. The author observed a county and a regional nutrition consultant as they counseled parents of patients having phenylketonuria. The author recognized the need for strengthening technical knowledge regarding the nutritional aspects of special problems such as phenylketonuria.

Program Planning

The author visited two Children and Youth Projects during the course of her field experience. The observations of these two projects in addition to the author's previous work experience with such a project in Birmingham, Alabama, provided a basis for comparing different approaches to planning for similar services in different geographic areas. The objectives of all the 64 projects in the United States are essentially the same, that is, to explore new methods of delivering health care and at the same time providing comprehensive health services to preschool and school age children in areas with concentrations of low-income families. The methods of delivering health care are unique to each project since services are tailored to and planned in cooperation with the community being served. Thus, new and better ways of delivering health care to children of the poor are developed (32).

The two projects observed and the Birmingham Project differ with respect to personnel, geographic area, eligibility, problems, and priorities. The characteristics of each project are shown in Table 2. The project staffs include health specialists in the areas of medicine, dentistry, nutrition, social service, and psychology. Health education positions are included on both of the Florida projects, but not the Birmingham Project. The staff of the Dade County Children and Youth Project (CandY) and the Birmingham Project include specialists in certain areas such as hearing and speech while the University of Miami Project has consultants in these areas. On the other hand, family-health-aides are included on the staff of the University of Miami Project and not the CandY or Birmingham Projects. A position for a nutritionist is included

TABLE 2

Characteristics of three children and youth projects

Characteristics	Project Number 636	Project Number 638	Project Number 622
Affiliation	Dade County Health Department	University of Miami School of Medicine	University of Alabama Medical Center
Community Geographic Site	Dade County residents who live south of S. W. 8th Street	Dade County residents who live in a six square block area in the City of Miami	Jefferson County residents
Organization Clinic location	Satellite Clinics	1 central location	1 central location
Patients:			
Ethnic Groups	Negro-White-Spanish-speaking	Negro-White-Spanish-speaking	Negro-White
Age	6 years of age and under	0-16 years	0-18 years
Eligibility	less than \$4,000/year for family of 4	--	\$3,600/year for family of 4
Potential Population Size	10,000	--	100,000

TABLE 2 (continued)

Characteristics	Project Number 636	Project Number 638	Project Number 622
Staff Positions	Pediatricians Dentists Nurses Social Workers Nutritionist Health Educator Psychologist Speech and Hearing Consultant	Pediatricians Dentists Nurses Social Workers Nutritionist Health Educator Psychologist Dental Aides Family Health Aides	Pediatricians Dentists Nurses Social Workers Nutritionists Psychologist Special Education Consultant Psychiatrist
Nutrition Problems ¹	Iron deficiency anemia Feeding problems Dental caries Allergies Poor appetite Overweight	Iron deficiency anemia Poor appetite Feeding problems Obesity	Age 0-12 years Iron deficiency anemia Feeding problems Dental caries Poor appetite Overweight Adolescent age group Dental caries Obesity Underweight Duodenal ulcers Metabolic Diseases Diabetes Cystic fibrosis

TABLE 2 (continued)

Characteristics	Project Number 636	Project Number 638	Project Number 622
Nutrition Component	Nutrition counseling: Individuals Groups	Since the nutrition position was vacant, little specific information was available	Nutrition counseling: General Clinics Pediatric Adolescent Special Clinics Diabetes Cystic fibrosis Special Groups Obese adolescents
	Develops or procures visual aids	Dietary staff at hospital where project patients are hospitalized occasionally provide nutrition consultation and/or services to project staff or patients	Develops or procures visual aids
	Coordinates nutrition program with other health and education related programs		Coordinates nutrition program with nutrition component of: Jefferson County Health Department Maternity and Infant Care Project Child Development Center University of Alabama Hospital and Clinics The Children's Hospital
	Utilizes volunteers and voluntary agencies		
	Consultation to: Staff members through formal and informal in-service		
	Dietary staff of hospital where project patients are hospitalized		

*Clinical
Special groups
obese adolescents*

TABLE 2 (continued)

Characteristics	Project Number 636	Project Number 638	Project Number 622
			<p>Consultation to staff members on informal basis</p> <p>Nutrition conferences with: Medical students, <i>interns, and residents</i> Medical interns Medical residents Student nurses</p> <p>Hospital ward rounds and in-patient discharge conferences: Project staff members Medical students, <i>interns, residents</i> Medical interns Medical residents</p> <p>Provides community nutrition experience for dietetic interns at the University of Alabama Hospital and Clinics</p>
Community Involvement	Head Start	--	Dial-A-Dietitian Girls Clubs Parent-Child Center

¹Impressions from laboratory data and clinical observations.

on the staff of both Florida projects; however, the position with the University of Miami Project was vacant. The Birmingham Project has two nutrition positions.

The Candy Project, affiliated with the Dade County Health Department, includes all children six years of age or less who live in Dade County south of Southwest Eighth Street and who are financially eligible. Approximately 10,000 potential patients live in this geographical area. The appropriations for the University of Miami Project are funded to the University of Miami School of Medicine, and the project encompasses approximately six square blocks. Persons who live within this area and who are between the ages of 0-16 years are eligible, provided the financial eligibility is met. Like the University of Miami Project, the Birmingham Project is also affiliated with a medical center, the University of Alabama Medical Center. The project administers health services to all eligible persons who are between the ages of 0-18 years and reside in Jefferson County, Alabama. Slightly over 100,000 eligible patients live within this geographical area. Since the Candy Project is affiliated with the Dade County Health Department, satellite clinics were established in health department centers in the project area, whereas, the two university affiliated projects have one central location.

The problems of the projects differ in various respects. For example, the ethnic differences in the project populations are noteworthy. The majority of the population served by the Birmingham Project are non-white while many of the patients included on both the Florida projects are Spanish speaking. The nutritional problems of the projects vary as would be expected when considering the differences in the age groups.

Nutritional iron deficiency anemia, due to excessive milk intake, is common in all three of the projects in patients between the ages of 6 to 36 months. Other nutritional problems seen most frequently by the Candy Project nutritionist include feeding problems, dental caries, allergies, poor appetite, and overweight. With the exception of allergies, the same problems were seen most often among this age group at the Birmingham Project. Nutritional problems presented most often in the adolescent age group in Birmingham include: obesity, dental caries, underweight, duodenal ulcers, and metabolic diseases, such as diabetes and cystic fibrosis.

Since the nutrition position with the University of Miami Project was vacant, the nursing staff provides nutrition information to the patients. One of the nurses indicated that nutritional problems seen most often included nutritional anemia, poor appetite, and feeding problems. For example, many Cuban children aged 5 to 6 years drink milk from a bottle. Another feeding problem frequently seen is the adding of pureed foods to infant formulas. Another nurse indicated that she did not consider this practice a feeding problem; consequently, information regarding this particular feeding practice was excluded when she gave nutritional counseling to the patient. Apparently little emphasis is given to nutrition in patient counseling. Occasionally the dietary staff of the hospital in which project patients are hospitalized provides nutrition consultation and/or services to the project staff on patients.

The Candy Project Nutritionist, in contrast, provides nutrition counseling for patients and staff in-service education. Furthermore,

she consults and coordinates the CandY nutrition program with other health and education related programs and utilizes voluntary agencies and volunteers. To extend nutritional services, the volunteers have tested recipes, priced foods, assisted with tasting parties, and prepared educational materials and toys under the supervision of the nutritionist.

To strengthen nutritional counseling the nutritionist developed or procured visual aides such as plastic food models and suitable hand-out materials for normal and therapeutic diets. Displays and bulletin boards have been utilized to disseminate nutrition information as have individual and group teaching situations for both mothers and children.

The nutritionist shares technical information and provides nutritional consultation to staff members. Formal staff in-service programs are held periodically. Information on feeding young children, nutritional anemia, and poor appetite are examples of topics presented by the nutritionist.

Frequent consultation is provided to the dietary staff of the hospital in which CandY Project patients are hospitalized. Furthermore, the nutritionist and nutrition consultants with various Dade County Health Department programs and state nutrition consultants coordinate health related programs. For example, special emphasis was given to the health component of Head Start when CandY Project provided health services to children within the project area. Nutrition educational materials for the children and parents were provided to teachers in Head Start Schools and Day Care Centers. Programs held for the parents included topics such as stretching the food dollar and the eating habits of young children. In addition, the nutritionist on occasion provides lectures to nursing students and student teachers (33).

The similarities of nutritional services provided by the Birmingham Project as compared to the Candy Project are described as follows. Nutrition counseling is provided routinely during pediatric and adolescent general clinics and special clinics such as diabetes and cystic fibrosis clinics. Various visual aid materials were developed or procured. Suitable handout materials were developed in cooperation with the Jefferson County Health Department Nutritionists, the Maternity and Infant Care Project Nutritionist, the Child Development Center Nutritionist, the clinic dietitians at the University of Alabama Hospital and Clinics, and the Children's Hospital. Technical information regarding nutrition is provided to the project staff on an informal basis. The project nutrition staff works with the dietary staff of the hospital in which the project patients are hospitalized in coordinating in-patient and out-patient nutritional care.

Some of the different ways in which the Birmingham Project extends nutrition services to project patients are discussed as follows. The nutrition staff participated in planning and implementing nutrition programs in various agencies such as the Parent and Child Center (a program sponsored by the Office of Economic Opportunity to assist disadvantaged families) and the Girls Clubs located in various sections of the county. Since obesity is a major nutritional problem among the adolescent age group, a series of special sessions on weight reduction was provided for adolescent girls. Various project disciplines participated in the program as did physical therapy personnel from the University of Alabama Medical Center. Approaches used to provide better continuity of care for clinic patients and hospitalized project patients were:

nutrition conferences held with medical students, interns, and residents, and student nurses; and participation of the nutrition staff in hospital rounds and in-patient discharge conferences. The nutrition conferences provided the opportunity for the nutrition staff to discuss and clarify nutrition concepts. During the hospital rounds and discharge conferences, various members of both staffs have had occasion to discuss a particular patient, his problems, and to suggest follow-up care. These are mechanisms which help medical students, interns, residents, and physicians to recognize and provide for nutritional needs ultimately contributing to comprehensive health care. Because of staff limitations at the University of Miami Project, this process cannot occur.

The nutrition staff answered calls for Dial-A-Dietitian, a service sponsored by the Alabama Dietetic Association and the Alabama Heart Association. Citizens are encouraged to utilize this service in obtaining authoritative information about food and nutrition. Furthermore, nutritionists work with various health agencies in the community and with the dietary staff at the University of Alabama Hospital and Clinics to cooperatively plan and coordinate a one-month community nutrition experience for dietetic interns.

By comparing the projects, the author realized the need for a nutritionist to coordinate and to provide for continuity of nutrition health services. Certain factors such as available personnel, geographic area served, age of patients, cultural differences, and the wants and desires of the patients should be considered when planning a nutrition program. These factors would influence priorities established to accomplish program objectives. The author recognized the usefulness of formal

in-service education as a method to use and share technical information on nutrition with other staff members. Furthermore, the author became aware of the value of utilizing available community resources when planning a program for nutrition.

Since the author will assume the position of Chief Nutritionist with the Birmingham Project, she will encourage the use of formal in-service education for the project staff. She will plan a more detailed, but flexible program for the nutrition component. Moreover, she will consider the use of volunteers and teachers' aides to extend nutrition services, and she will strive to seek ways to provide opportunities whereby patients and their parents can become actively involved in planning the nutrition program.

CHAPTER VI

SUMMARY AND EVALUATION

The author found that the eight-week field experience in Public Health Nutrition strengthened her philosophy and understanding of the principles of public health, thus enabling her to develop a more positive identification with the public health profession. Furthermore, she believes that the objectives for the field experience were attained through varied observations and participation in planned experiences provided by the field agency.

The generalized field experience increased the author's knowledge of the administrative organization and functions of public health nutrition programs at the state, regional, and local levels. The author became more aware of the need to coordinate comprehensive health programs within public health agencies as well as with other agencies. By observing a nutrition program plan in operation, the translation of broad nutrition goals into specific action to meet the nutritional needs of a specific population was realized. Furthermore, the author gained a better insight into the methods and techniques used for program evaluation.

Through observation and participation in various clinics the author gained a better understanding of the nature and magnitude of nutritional needs. Planned experiences such as nutritional counseling, both group and individual, in-service educational programs, and group work with nonprofessional groups reinforced the author's professional skills and competence.

During the field experience, the author became aware of the need for coordination, cooperation, good communications, and flexibility when working with other health professionals and with individuals and groups in the community. In addition, the author became aware of the need for continuous self-evaluation and for continuing education to promote maximum professional development.

Previous work experiences, academic background, and the field experience have provided invaluable training in the field of nutrition. As the author resumes her role as a nutritionist she will strive to become more competent in her chosen profession.

LITERATURE CITED

LITERATURE CITED

1. Hardy, A. V., and M. Pynchon 1964 Millstones and Milestones: Florida's Public Health. Florida State Board of Health, Jacksonville.
2. Bureau of the Census 1969 Statistical Abstract of the United States, 90th ed. U. S. Government Printing Office, Washington, D. C.
3. Patrick, R. W., and A. Morris 1967 Florida Under Five Flags, 4th ed. University of Florida Press, Gainesville, Florida.
4. Florida State Board of Health 1964 Health of Florida's Indians. Florida Health Notes, 56, No. 10. Florida State Board of Health, Jacksonville.
5. Florida State Board of Health 1965 Better Health for Migrants. Florida Health Notes, 57, No. 7. Florida State Board of Health, Jacksonville.
6. Florida State Board of Health 1969 Florida Migrant Health Project. Sixth Annual Progress Report. Florida State Board of Health, Jacksonville.
7. Personal Interview with O. H. Boorde, Administrator, Public Health Statistics Section, Florida Division of Health, May, 1970.
8. Russell, M. 1970 U. S. Colleges: Tabular Data, 2, 13th ed. CCM Information, Inc., New York.
9. Florida State Board of Health 1968 Florida Vital Statistics. Florida State Board of Health, Jacksonville.
10. Florida Division of Health 1970 The New Look in Florida's Public Health. Florida Health Notes, 62, No. 4. Florida Division of Health, Jacksonville.
11. Florida State Board of Health 1968 Annual Report. Florida State Board of Health, Jacksonville.
12. Florida State Board of Health 1968 The Major Duties of the Florida State Board of Health and the County Health Departments. Florida State Board of Health, Jacksonville.
13. Florida State Board of Health 1970 County Health Director's Program Guide. Florida State Board of Health, Jacksonville.
(Mimeographed.)
14. Personal Interview with J. B. Stapleton, M. D., Chief, Bureau of Local Health Services, Florida Division of Health, March, 1970.

15. Personal Interview with Mildred Kaufman, Administrator, Section of Nutrition, Florida Division of Health, March, 1970.
16. Division of Nutrition 1967 Residency Program in Public Health Nutrition. Florida State Board of Health, Jacksonville. (Mimeographed.)
17. Division of Nutrition and Division of Public Health Nursing 1967 Your Public Health Nutritionist Can Help the Public Health Nurse. Florida Division of Health, Jacksonville. (Mimeographed.)
18. Bureau of Maternal and Child Health 1969 State Plan for Maternal and Child Health 1968-69. Florida Division of Health, Jacksonville. (Mimeographed.)
19. Section of Nutrition 1970 Plan for Nutrition Services for the State-wide Migrant Health Project. Florida Division of Health, Jacksonville. (Mimeographed.)
20. Reuther, W. P. 1969 The Health Care Crisis: Where Do We Go From Here? Amer. J. Public Health 59:12.
21. Phillips, M. G. 1969 Nutrition Opportunities in Specialized Health Areas. J. Amer. Dietet. Assoc. 55:348.
22. Bureau of Adult Health and Chronic Diseases 1969 Activities Report. Florida Division of Health, Jacksonville.
23. Personal Interview with Mary Anne Marshbourne, Maternal and Child Health Nutrition Consultant, Florida Division of Health, April, 1970.
24. Personal Interview with Dave Wolf, Administrator, Diabetes Section, Bureau of Adult Health and Chronic Diseases, Florida Division of Health, April, 1970.
25. Kaufman, M. 1966 Sanitarian Training Program. Florida State Board of Health, Jacksonville. (Mimeographed.)
26. Personal Interview with Dorothy Hildabran, Administrator, Home Health Services, Florida Division of Health, March, 1970.
27. Florida State Board of Health 1969 Nutrition Consultation to Home Health Agencies. Florida State Board of Health, Jacksonville. (Mimeographed.)
28. Division of Nutrition and Bureau of Health Facilities and Services 1967 Institutional Nutrition Consultation Program. Florida State Board of Health, Jacksonville. (Mimeographed.)

29. Rhode, A. 1970 Program Plan for Brevard County Nutrition Services, 1970. Brevard County Health Department, Rockledge, Florida. (Mimeographed.)
30. Brevard County Health Department 1968 Annual Report 1968. Brevard County Health Department, Rockledge, Florida.
31. Knutson, A. L. 1965 The Individual Society, and Health Behavior. Russell Sage Foundation, New York, p. 142.
32. Proceedings of National Conference of Children and Youth Projects 1969 New York University Medical Center, New York.
33. Wilcox, M. E. 1969 Annual Report for 1969 of the Nutrition Component. Children and Youth Project #636, Miami, Florida. (Mimeographed.)

APPENDIXES

APPENDIX A

JOB DESCRIPTIONS FOR NUTRITION POSITIONS FLORIDA DIVISION OF HEALTH AND REHABILITATIVE SERVICES

PUBLIC HEALTH NUTRITIONIST

DISTINGUISHING CHARACTERISTICS OF WORK

This is nutrition education and diet counseling work with individuals and groups in the field of public health nutrition.

An employee in a position allocated to this class is responsible for educating and counseling individuals and groups of persons in food and diets in a program of public health nutrition; provides nutrition education and prepares diets for individuals or groups of persons with specific nutritional problems or diseases; plans and prepares diets for use by professional public health personnel, and conducts group demonstrations and classes on special phases of diet and nutrition in public health clinics.

Work is performed under supervision of a public health nutrition consultant.

EXAMPLES OF WORK PERFORMED

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

Provides specific nutrition instruction and diet counseling to individuals referred through local health department offices, specialized public health projects, and health department clinics.

Develops and carries out food demonstrations and teaching in areas such as food selection, preparation and budgeting for individuals and groups.

Makes home visits to assist public health nurses in providing services to patients and families having specific food and nutrition problems.

Plans and provides assistance with nutrition, food service and meal planning to employees of hospitals and other group care facilities.

Prepares exhibits, posters, and literature for publicity and educational purposes.

Assists public health nurses, teachers and school food service personnel in teaching nutrition to school children.

Participates in studies and surveys on the relationship of dietary factors to health and diseases.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

Graduation from an accredited four-year college or university with major course work in foods and nutrition, dietetics or institutional administration.

PUBLIC HEALTH NUTRITION CONSULTANT I

DISTINGUISHING CHARACTERISTICS OF WORK

This is responsible nutrition and dietetic work in conducting a nutrition program for a small or medium size county health department or assisting in a large metropolitan county health department or specialized county project.

An employee in this class performs responsible work in planning, developing, and conducting a program of public health nutrition in a small or medium size county health department or assists Public Health Nutrition Consultants of a higher level in planning, developing and coordinating the nutrition components of a specialized county health project or the nutrition program within a large metropolitan county health department. Conducts and evaluates the nutritional services provided for the community and provides nutrition consultation services to professional staff such as physicians, nurses, social workers, teachers and allied community agencies.

Work is performed under the supervision of a public health nutrition consultant of a higher level or a county health director.

EXAMPLES OF WORK PERFORMED

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

Plans, develops, and conducts nutrition services as part of the total public health program for a small, medium, bi-county or tri-county health department.

Serves as a consultant on nutrition and dietetics to the county health officer, public health nurses, sanitarians and other health department staff.

Interprets public health nutrition services and maintains cooperative relationships with civic, educational, governmental research, and other groups concerned with food and nutrition to achieve coordination of nutrition services.

Plans and provides consultation on food service to employees of group care facilities.

Plans and conducts nutrition education programs in schools.

Prepares exhibits, posters, and literature for use in educational programs, gives talks on nutrition and food service to professional, school, community, and other groups.

Supervises the work of lower level Public Health Nutritionists providing direct counseling and dietary services.

Participates in preparing and conducts in-service education programs for professional workers such as medical and paramedical personnel, teachers, and welfare workers.

Assists with and participates in studies and surveys on the relationship of dietary factors in health and disease.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, community nutrition, or public health nutrition and one year of post-master's or two years of pre-master's experience in public health nutrition; or

Graduation from an accredited four-year college or university with major course work in foods and nutrition, dietetics, or institutional administration and three years of progressively responsible work experience in public health nutrition.

A one year dietetic internship approved by the American Dietetic Association may be substituted for one year of the required experience.

PUBLIC HEALTH NUTRITION CONSULTANT II

DISTINGUISHING CHARACTERISTICS OF WORK

This is advanced nutrition and dietetic work in directing the nutrition program in a large metropolitan county health department, as a consultant in nutrition and dietetics for a region of the State, or in planning and conducting the nutrition and dietetic components of a specialized county health program.

An employee in a position allocated to this class is responsible for planning, developing, and coordinating the nutrition program within a large metropolitan county health department; serves as chief staff nutritionist for a specialized county project; or serves as a regional nutrition consultant for a multi-county area. Plans, develops, and coordinates a nutrition program or project by evaluating existing services, implements and directs the nutrition program within the assigned area, or provides expert technical nutrition consultation for a region of the State to Public Health Nutritionists, Public Health Nutrition Consultants and professional medical and public health personnel in the areas of program planning and implementation.

Work is performed under the general administrative supervision of the Director of Public Health Nutrition, or a county health department or project director.

EXAMPLES OF WORK PERFORMED

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

Provides technical guidance as a regional consultant to public health nutritionists and nutrition consultants in counties and projects through periodic visits and conferences.

Coordinates nutrition services with the operating programs of the State Board of Health, and with other civic, educational, governmental and research groups concerned with food and nutrition.

Evaluates the nutrition program and recommends policies, standards and services to meet needs of the various population groups served.

Reports and summarizes activities and progress at regular intervals.

Provides nutrition consultation services to professional staff such as physicians, nurses, social workers, teachers of public health and allied community agencies.

Participates in preparing and conducts in-service educational programs for new staff and for professional staff such as physicians, public health nurses, dentists, social workers, therapists, and teachers.

Participates in public health field training activities for graduate and undergraduate students such as nutritionists, dietitians, and other professional health workers.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, community nutrition, or public health nutrition and two years of post-master's or four years of pre-master's full time paid work experience in public health nutrition; or

Graduation from an accredited four-year college or university with major course work in foods and nutrition, dietetics, or institutional administration and five years of progressively responsible work experience in public health nutrition.

A one year dietetic internship approved by the American Dietetic Association may be substituted for one year of the required experience.

PUBLIC HEALTH NUTRITION CONSULTANT III

DISTINGUISHING CHARACTERISTICS OF WORK

This is highly responsible nutrition and dietetic work at the State level assisting the Director of Public Health Nutrition in the areas of planning and training for the Division of Nutrition Florida

State Board of Health, or serving as a consultant to a specialized State-wide public health program.

An employee in this class performs highly responsible consultative work in nutrition and dietetics in serving as the assistant to the Nutrition Director on the State level in planning, organizing and coordinating the State-wide nutrition programs; or serves as a nutrition and dietetic consultant for a specialized or highly selective State-wide program by planning, developing, and interpreting the nutritional components of the program. Duties include the evaluation of available nutrition services and providing consultation to medical personnel and nutritionists at the State level, in county health departments, and specialized county health programs. Duties may also involve the responsibility for planning and conducting a comprehensive orientation and in-service training program for the Division of Nutrition.

Work is performed under the general administrative direction of the Director of Public Health Nutrition and/or directors of specialized State-wide programs.

EXAMPLES OF WORK PERFORMED

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

Prepares, reviews, and selects nutrition educational materials for various communications media and for use in the recruitment and training of public health nutrition personnel.

Plans, develops, and conducts professional training programs for staff on a State, county, or regional basis.

Interprets nutrition components and available nutrition services to staff of State Board of Health, related community agencies and professional organizations, and maintains cooperative relationships with a variety of State agencies and professional organizations.

Provides nutrition consultation services to highly responsible professional staff such as physicians, nurses, social workers, and therapists in State public health agencies.

Cooperates with and assists schools of home economics and departments of home economics in basic programs in preparing students for work in public health nutrition and dietetics.

Plans and supervises public health field training activities for graduate and undergraduate students such as nutritionists, dietitians, and other professional health workers.

Plans and conducts studies and surveys on the relationship of dietary factors to health and diseases.

Designs and prepares grant applications for special projects and short and long term training programs to develop new services to improve and extend nutrition services as part of the overall State-wide public health services.

Reports and summarizes activities and progress at regular intervals.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, community nutrition, or public health with a major in nutrition and three years of post-master's or six years of pre-master's full-time paid work experience in public health nutrition.

A one year dietetic internship approved by the American Dietetic Association may be substituted for one year of the required experience.

INSTITUTIONAL NUTRITION CONSULTANT I

DISTINGUISHING CHARACTERISTICS OF WORK

This is professional consultative work in nutrition and dietetics in the Institutional Nutrition Consultative Program of the State Board of Health.

An employee in a position allocated to this class performs consultative services in an assigned geographical area of the State or a special program area of the Public Health Nutrition Program involving nutrition and food services for such institutions as hospitals, rehabilitation institutions, and other State and county institutions; provides nutrition and dietary consultation to employees of group care institutions to improve food service and dietetic care provided by institutional facilities; and renders consultative services pertaining to food purchasing, preparation, menu planning, budgeting, therapeutic diets, work organization, employee training and supervision, and other activities related to food service.

Work is accomplished under the general supervision of an Institutional Nutrition Consultant II.

EXAMPLES OF WORK PERFORMED

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

Participates in planning and conducting training for food service workers for group care facilities.

Participates in planning, developing and conducting a program to improve standards of nutrition and food service as they relate to group care facilities.

Provides consultation and instruction to dietary staffs and other professional staffs such as physicians, nurses, social workers, and dietitians in dietary, nutrition and food service facilities.

Participates in interpreting regulations for licensure or standards for certification for food services in group care facilities to public health staff and personnel in the facilities.

Assists in providing consultation to building committees, administrative officials, architects, engineers, equipment specialists, and others in planning and evaluating food service departments.

Participates in public health field activities for graduates and undergraduates in such fields as nutrition, dietetics, and other professional health work as it relates to group care.

Provides consultation to administrators and the 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 as related to food service.

Participates in developing, evaluating and selecting educational materials.

Reports and summarizes progress and activities at regular intervals. Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, public health nutrition, or institutional management and two years of full-time professional, technical experience in a hospital, school, or other institutional food service program, one year of which must have been in a consultative or institutional administrative capacity; or

Graduation from an accredited four-year college or university with major course work in food and nutrition or institutional administration, plus a one-year dietetic internship approved by the American Dietetic Association or membership therein, and three years of full-time professional dietetic experience in a hospital, school, or other institutional food service program, one year of which must have been in a consultative or institutional administrative capacity.

INSTITUTIONAL NUTRITION CONSULTANT II

DISTINGUISHING CHARACTERISTICS OF WORK

This is a highly professional work in supervising and planning the Institutional Nutrition Consultation Program for the Division of Nutrition of the State Board of Health.

The employee in this class is responsible for performing highly skilled nutritional and dietetic work in supervising, planning, and coordinating the Institutional Nutrition Consultation Program of the Division of Nutrition of the State Board of Health.

Work is performed under the general supervision of the Director of Public Health Nutrition.

EXAMPLES OF WORK PERFORMED

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

Serves as a specialist in nutrition, food service, and group care facilities for the State Board of Health and coordinates the program with the program of the Division of Nutrition and other operating programs in the agency and in the county health departments.

Participates in the preparation and interpretation of regulations for licensure and standards for certification for food service in group care facilities.

Interprets available nutrition and dietetic services and provides consultation to State level agencies and professional organizations concerned with group care; establishes and maintains cooperative relationships with such agencies and organizations.

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

Plans and conducts studies and surveys related to food service in group care facilities.

Provides consultation and instruction to nutrition staffs and other professional staffs such as physicians, nurses, social workers, and dietitians in dietary, nutrition, and food service facilities.

Provides consultation to staff of State Board of Health and county health departments, building committees, administrative officials, architects, engineers, equipment specialists, and others in planning and evaluating food service departments and building plans for food service facilities.

Participates in public health field activities for graduates and under-graduates in such fields as nutrition, dietetics, and other professional health work as it relates to group care.

Develops, evaluates and selects educational materials.

Reports and summarizes progress and activities at regular intervals.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, public health nutrition or institutional management and three years of full-time professional, technical experience in a hospital, school, or other food service program, two years of which must have been in a consultative or institutional administrative capacity; or

Graduation from an accredited four-year college or university with major course work in food and nutrition or institutional management, plus a one-year dietetic internship approved by the American Dietetic Association or membership therein, and four years of full-time professional dietetic experience in a hospital, school, or other institutional food service program, two years of which must have been in a consultative or institutional administrative capacity.

DIRECTOR OF PUBLIC HEALTH NUTRITION

DISTINGUISHING CHARACTERISTICS OF WORK

This is highly responsible administrative work involving the directing and planning of nutrition and dietetic programs for the Division of Nutrition of the State Board of Health.

The employee in this class performs highly responsible administrative and consultative work in planning and directing the nutrition and dietetic program for the State Board of Health; and correlates and integrates the nutrition and dietary aspects of the public health program with other phases of the State public health program at both the State and local level.

Work is performed under general administrative direction of the Director of the Bureau of Local Health Services.

EXAMPLES OF WORK PERFORMED

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

Plans, develops, and directs a nutrition program throughout the State for the promotion of positive health, prevention of ill health, and the dietary aspects of the control of disease.

Serves as a specialist in nutrition to the State Health Officer and all bureaus of the State Board of Health, nutrition consultants, local health officers, and upon request, to other State agencies.

Plans and participates in special research studies relating to the nutrition of the State population.

Plans, coordinates and participates in public health field activities for graduates and undergraduates such as nutritionists, dietitians, and other professional health workers.

Recruits, selects, trains, and evaluates the nutrition staff.

Represents the State Board of Health at professional and other meetings.

Initiates and directs the development of nutrition educational materials.

Prepares articles for professional journals, magazines, newspapers, and radio and television programs.

Establishes and maintains cooperative relationships with educational, research, governmental, and other agencies concerned with foods and nutrition in order to strengthen, coordinate, and promote activities related to public health nutrition.

Performs related work as required.

MINIMUM TRAINING AND EXPERIENCE

A master's degree in nutrition, community nutrition or public health with a nutrition major and five years of progressively responsible full-time paid work experience in public health nutrition, two years of which must have been at the level of a Public Health Nutrition Consultant II.

Effective: 7-1-68

APPENDIX B

MONTHLY STATISTICAL REPORT

Nutrition Consultant _____ County Served _____ Dates of Service _____

Monthly Statistical Report of Number of Persons Reached With Nutrition Services

*Identify Project 1. MIC 4 Diag. & Eval. 2. C&Y Center 3. Migrant 5. Other, Specify	Direct Services						Indirect Services						TOTAL			
	Clinic		Home Visit		School Student	Other	TOTAL	Health Dept. Staff	Other Agency Staff	School Personnel	Institution Personnel	Other		TOTAL	Telephone	Correspondence
	Proj	Other	Proj	Other												
<u>Maternal and Child Health</u>																
<u>Maternity</u>																
<u>Child Health</u>																
<u>School Health</u>																
<u>Other, Specify</u>																
<u>Mental Health</u>																
<u>Dental Health</u>																
<u>Adult Health and Chronic Diseases</u>																
<u>Cardiovascular</u>																
<u>Diabetes</u>																
<u>Normal Diet</u>																
<u>Weight Control</u>																
<u>Other, Specify</u>																
<u>Home Health Services</u>																
<u>Health Facilities and Services - Food Service</u>																
<u>Hospitals</u>																
<u>Nursing Home</u>																
<u>Extended Care Facility</u>																
<u>Child Caring</u>																
<u>Other, Specify</u>																
<u>Nutrition Education(General)</u>																
<u>Planning and Evaluation</u>																
<u>Other, Specify</u>																
TOTALS																

82

Fig. 3 Monthly statistical report of number and nature of nutrition services rendered.

VITA

Ann Miller Rowland was born in Dickson County, Tennessee, April 14, 1939. She was graduated from Charlotte High School, Charlotte, Tennessee, in 1957. The author received her B. S. Degree from the University of Tennessee in 1962 and completed her dietetic internship at Vanderbilt University School of Medicine, Nashville, Tennessee, the following year.

The author was employed as a therapeutic dietitian with the Veteran's Administration Hospital in Murfreesboro, Tennessee, from 1963 until 1966. During the next year she worked as an administrative dietitian with the University of Tennessee Food Services, Knoxville, Tennessee. The author was then employed with the Children and Youth Project in Birmingham, Alabama, from 1967 until entering graduate school in 1969.

The author is a member of the American Dietetic Association and the Tennessee Dietetic Association.

She was married to Wendell T. Rowland in June, 1958.