Field Experiences with the Office of Nutrition, Department of Health Nassau County, New York

Suzanne Repnicki
University of Tennessee, Knoxville
To the Graduate Council:

I am submitting herewith a thesis written by Suzanne Repnicki entitled "Field Experiences with the Office of Nutrition, Department of Health Nassau County, New York." 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:

Roy E. Beauchene, 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.)
To the Graduate Council:

I am submitting herewith a thesis written by Suzanne Repnicki entitled "Field Experiences with the Office of Nutrition, Department of Health Nassau County, New York." 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.

Major Professor

We have read this thesis and recommend its acceptance:

Accepted for the Council:

Vice Chancellor for Graduate Studies and Research
FIELD EXPERIENCES WITH THE OFFICE OF NUTRITION,
DEPARTMENT OF HEALTH
NASSAU COUNTY, NEW YORK

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
Suzanne Repnicki
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The student thanks her parents, Mr. and Mrs. Edward F. Repnicki for their encouragement and confidence.
ABSTRACT

This report is based upon observations and experiences during seven weeks with the Office of Nutrition, Nassau County Department of Health. The purpose of the field training was to supplement academic experience in public health nutrition at the University of Tennessee.

A gamut of experiences aided the student in her study of the function of the Office of Nutrition in the official health agency and in the community. Information was obtained pertaining to the physical, social, economic, and political climate in relation to the health needs of the county residents. Observation and participation in a variety of activities increased the student's understanding of community health and the role of the nutritionist in public health. These experiences also provided opportunities to observe how priorities are established and what services are offered to meet the established priorities within the nutrition unit and within the department of health. Developing the nutrition component of the Levittown Health Fair provided an opportunity to work with other health professionals and with a large number of residents from the county including both adolescents and adults.

The orientation to the Nassau County Department of Health contributed to an understanding of the organization and the role of the official agency in meeting community health needs. Insight was gained through conferences with the Director of Nutrition and her staff for a greater understanding of the responsibilities of the nutrition unit within the agency. Observation demonstrated how program planning is greatly influenced by overall priorities of the organization. The experience in
providing nutritional services through various modes of communication such as individual counseling and group teaching increased self-confidence. As a result of the Levittown Health Fair project screening techniques were used, recognition of the need for community health care was observed, and professional skill in developing, planning, implementing, and evaluating a community activity was developed. Through these experiences an understanding of professionalism was gained. The public health nutritionist must be an informed activist in health care planning and in political affairs if her services are to contribute to improving community health, and the field training has provided the background for the student to begin fulfilling this role.
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CHAPTER I

INTRODUCTION

America at this point in time is experiencing a shift in the assumptions upon which decisions are based. From the industrial age to a technological age, society has evolved to where it is less tolerant of flaws and more conscious of affluence; it is in a "revolution of rising expectations." Such words as freedom, revolution, liberation, and dis­sent point out the discontentment and the demand for change from the present way of life. Today survival infers the ability to meet and adapt to the challenges of change.

Public health is a reflection of the society and is therefore affected by the "revolution of rising expectations." No longer will society accept health as a privilege. No longer can a nation of such unlimited resourced allow the uncoordinated health care system to continue its course downstream in quality and upstream in cost. Issues of health have moved into the political arena as a major crisis of the day. Emphasis has shifted from curative to preventative and rehabilitative medicine. Health care is a right undeniable to every citizen regardless of age, race, or economic station. Primary medical care programs are soon to become a reality for the entire population. The government, with increasing proportions of health expenditures, has supported educational programs throughout the country, such as the one at the University of Tennessee, to prepare persons to promote and provide quality health services for all citizens.

As part of the graduate program in Public Health Nutrition, the
student spent seven weeks in Nassau County, New York, in the spring of 1972 to apply knowledge learned from academic disciplines to actual field experiences in the health agency. The objectives of the experience were:

1. to strengthen the student's philosophy and understanding of public health,
2. to study the physical, social, economic, and political climate of the community in relation to the health needs and to observe the role of the nutritionist in meeting these needs,
3. to observe the structure of the Nassau County Department of Health and the relationship it has to function,
4. to observe how priorities are determined and the services which are offered to meet the established priorities,
5. to observe how the Office of Nutrition functions within the official organization and how the services rendered relate to and are coordinated with other community agencies,
6. to increase self-confidence in personal abilities through involvement in activities of public health nutrition, and
7. to provide opportunity to evaluate performance in the field.

The field experience is analyzed in the following four chapters of the thesis. Chapter II describes the County of Nassau, the nature of the population with respect to their health needs, and the Nassau County Department of Health. The Office of Nutrition is discussed in some detail in Chapter III. Chapter IV is an evaluation of the student's performance during the field experience. Chapter V includes the concluding remarks about the field experience.
CHAPTER II

THE COUNTY OF NASSAU

I. NATURE OF THE POPULATION

A basic concept of health planning is that it is an ongoing process, in that, as needs and priorities change so must health programs change to meet these needs. To evaluate the health needs of the community it is essential to understand the evolution of the community, its present status, and whenever possible, project the needs of the people into future environments. In an effort to better understand the nature of the population in its surroundings, consideration was given to the physical factors, governmental and educational systems, population characteristics, socio-economic conditions, and the health resources.

Physical Factors

The county of Nassau is located on a fragment of the North American Continent, Long Island, which lies southeast of the mainland of New York State, of which it is a part. The county extends from the border of New York City on the west to Suffolk County on the east, from the Atlantic Ocean on the south to the Long Island Sound on the north. It has an area of about 300 square miles which is a little less than one-sixth of the area of Long Island (1).

Governmental and Educational Systems

Governmental and educational systems also play a vital role in depicting the nature of the population of the County of Nassau. In 1898
Benjamin D. Hicks was chairman at a meeting which drafted legislation for the new county consisting of towns of Hempstead, North Hempstead, and Oyster Bay. This legislation was approved at Albany in 1899. The new county was named "Nassau" in honor of William II of England who was son of William II of Nassau, and in reference to the British and Dutch backgrounds of the residents of the county (2). In the 1930's changes in the county began to occur to meet the needs and demands of the growing population. It was during this time that the Nassau County Department of Health was created as an official health agency of the county.

Under the County Charter, the County Executive must "supervise, direct, and control the administration of all departments of the County Government." He is elected at large for a three-year term of office. Preparation of the annual budget is the responsibility of the County Executive, who then submits it to the Board of Supervisors for final approval. The County Executive appoints advisors and advisory committees to assist him in providing a responsive government. The County Executive also has the responsibility of presiding over the Board of Supervisors, the legislative body of the county government. The board is elected from towns and cities in every odd numbered year, except for the Long Beach Supervisor who is elected for a four-year term (3).

The county is not directly involved with the public school system. Each school district elects its own school board, votes its own budget, and determines its own tax rates. However, while the Nassau County Community College is part of the community college program of the state, the Board of Trustees is appointed in part by the County Executive with the approval of the Board of Supervisors and in part by the Governor of
the State of New York (3). Because the county does not have the legal responsibility for school-age children, county health programs do not emphasize this age group as a major priority.

Population Characteristics

Population characteristics, including some which are culturally defined, are necessary to describe the nature and the needs of the people of Nassau County. The importance of the past must be given attention to gain a better perspective of the present conditions of the society. The first inhabitants of Long Island were Indians, but British and Dutch cultures are also deeply rooted in its past. The County of Nassau has in many historical accounts been called the epitome of the history of America. But historical landmarks and the names of a few towns and villages are perhaps the only evidence of the beginnings of Nassau County.

The existing cultures of Nassau may still be considered the epitome of the typical suburban population of a metropolitan city in America, a society which had its beginnings after 1900. Between 1900 and 1930 the population of the county multiplied fourfold. The residents of Nassau County are of cultures with such a complex nature that no one statement could include the entire population. It is this complexity that must be considered in health program planning.

Until recently Nassau was the fastest growing county in the United States (3). Between 1950 and 1960 the population of the county increased at a rate of 93.7 percent whereas the state had an increase of only 13.2 percent. During the next decade the population continued to increase but at a rate of 9.8 percent, much more commensurate with the entire state of
New York which increased by 8.6 percent. In 1970 the population had reached 1,428,082 (4).

Naturally, with the migration from New York City, there are many different cultures now living in Nassau County. A total of 5.1 percent of the population are of the nonwhite races (4). Many are Puerto Ricans. Some of these persons speak only Spanish fluently. Persons providing information and services must resolve this language barrier so that the services can be provided effectively. Many of the pamphlets and other materials provided by the department have been written, not just in English, but also in Spanish, to help meet the needs of these persons.

The natality rate decreased for the 13th consecutive year in 1970. The crude rate of 12.1 per thousand is the lowest birth rate on record since 1905 (5).

In 1960, 6.2 percent of the population was 65 years of age or older; in 1970 the percentage was 7.9 (4). The aging population is an important factor when planning programs in community health care.

The crude death rate has been slowly increasing from 6.9 in 1960 to 7.8 in 1970. One reason for this increase is that the age of the population has been slowly increasing. The county death rate is substantially below the 9.4 per thousand population death rate of the U.S. as a whole (6). As shown in the chart below, there are large differences in age-specific death rates by race with the nonwhite double that of the white for most age groups. It would be expected that the nonwhite population would be a major target group in medical care priorities set by the department of health.
AGE-SPECIFIC DEATH RATES (PER 1,000) BY RACE, NASSAU COUNTY, 1970 (5)

<table>
<thead>
<tr>
<th>Ages</th>
<th>White</th>
<th>Nonwhite</th>
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<tbody>
<tr>
<td>All ages</td>
<td>7.9</td>
<td>6.9</td>
</tr>
<tr>
<td>Under 1</td>
<td>13.2</td>
<td>31.5</td>
</tr>
<tr>
<td>1-4</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>5-14</td>
<td>0.8</td>
<td>2.0</td>
</tr>
<tr>
<td>15-24</td>
<td>1.0</td>
<td>2.4</td>
</tr>
<tr>
<td>25-34</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>35-44</td>
<td>5.3</td>
<td>6.5</td>
</tr>
<tr>
<td>45-54</td>
<td>14.8</td>
<td>9.1</td>
</tr>
<tr>
<td>55-64</td>
<td>61.3</td>
<td>20.5</td>
</tr>
<tr>
<td>65+</td>
<td>49.9</td>
<td></td>
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Death from heart disease ranks highest representing 42.3 percent of all causes of resident deaths. The next six causes, in descending order, were malignant neoplasms, cerebrovascular disease, accidents, pneumonia and influenza, cirrhosis of the liver, and diabetes mellitus. The death rate for malignant neoplasms and cirrhosis of the liver rank higher than the national rates (5). Since at least heart disease, diabetes mellitus, and cirrhosis of the liver are related to diet, nutritional services are vital to the health programs which are aimed at meeting the needs of the population.

The infant mortality rate has been steadily declining in recent years. In 1970, the recorded rate of 16.0 per thousand live births was considerably below the United States and New York State rates which both average 19.8 (5, 6). The nonwhite infant death rate was 32.6 per thousand which was over twice the white rate (5). The doubled risk for the nonwhite population is certainly a major consideration for the programs in community health in Nassau County.

Socioeconomic Conditions

In describing the characteristics of the County of Nassau, perhaps most important are the social and economic factors. The needs of the population can be better understood with a knowledge of these factors.

With such a defined increase in population during the decade of the 1950's, one can appreciate why Nassau has for many years been one of the main suburbs of New York City. The urban population during this time
rose 107.9 percent, whereas the rural population decreased 90.7 percent (4).

Nassau is a relatively affluent and prosperous county with one of the highest per household incomes of counties in the Northeastern section of the country. In 1970 the figures for Nassau rank highest for the entire state. The per household income for Nassau County is $17,927 (7). The growth of the economy in Nassau enables the department of health to expand its services. Once again Nassau may be looked upon as the epitome of America in that, with all of its affluence, there are many problems of poverty still yet to be solved. Although the per capita income is substantially above the national average, the unemployment rate has increased dramatically from 1970 to 1971, averaging 5 percent in 1970 and 6.5 percent in 1971 (8).

One of the major problems in Nassau is housing. Many poverty-stricken homeless families have been placed in motels in the county by the Department of Social Services. Locating new living quarters for these families has been a problem. Several housing projects are in the process of being constructed, but many project proposals have been rejected by various communities who all seem to be chanting "Over There."

There are 58,000 individuals who receive public assistance, from a total population of over 1,500,000 residents. From the total of 401,056 households in the county, only 11,200 households are participating in the Food Stamp Program (9). Poverty is present in Nassau County, but it is not as widespread as in many areas of the country. There are 12 designated poverty areas in Nassau County. See Appendix A for a detailed map of the poverty tracts. The fact that poverty is present determines many of the programs and priorities of the department of health.

In the total population there are proportionately more children
than persons over the age of 65. Recent statistical information records 34.8 percent of the total population under 18 years of age and only 7.9 percent above the age of 65. The median age of persons living in Nassau County is 30.9 years (4).

**Health Resources**

Although it is not feasible to learn all of the health resources in the county in the seven-week experience, certain health statistics and agencies with which the student had contact will be described. These are some of the factors which affect the population and the programs of the Nassau County Department of Health.

There are 2.0 physicians per thousand persons in the county and a total of 18 hospitals providing 3.06 beds per thousand persons (10). There is one dentist for every 1,100 persons in the county (11). See Appendix A. At first glance it appears that background data shows fairly adequate services but, as is all too often the case, services are not equally distributed throughout the county. Even though the services are not evenly distributed, areas where one finds the lowest rates of physicians per thousand population are still equal or above the national average of 1.5 physicians per thousand population (12). One of the problems lies in the fact that there is insufficient public transportation in the county. Due to the fact that services are not readily available in every section of the county, and that most services seem to be in the high rather than in the low-income areas, the Nassau County Department of Health has a responsibility to help those persons who are unable to obtain medical services. There are also 3.27 nursing home beds per
thousand population and 1.30 health-related facility beds per thousand population (13). The statistical background provides evidence that if one can afford services, they are available in Nassau County.

Several agencies are providing home care for the residents of Nassau County, including several voluntary agencies which are certified home health agencies. The department of health is also a certified home health agency. Perhaps in the future, since there are several agencies accepting the responsibility for home care, including many proprietary agencies, the department of health will consider reestablishing priorities and programs to provide other services. This would be consistent with the policy that health planning must include constant evaluation of programs and the benefits provided in relation to the needs of the population.

There are several group health programs in the county. One of the largest is the Health Insurance Plan (HIP), which has been in existence for 25 years. The plan is essentially a prepaid contract insurance plan for groups to receive a comprehensive health package. Persons participating in this program are primarily from middle and upper income groups. Although there is no HIP for low-income groups in Nassau County, there is one pilot project for a small group in a poverty area in the adjoining county, which is now being subsidized by the federal government. Perhaps in the future a program will be established in Nassau if the pilot project is successful.

Since each school district is autonomous, and no one particular agency has the legal responsibility to care for school age children, health services are provided by individual school districts. Typically services are coordinated by a staff member of the school health district.
The Nassau County Medical Center is an official health resource of the county. Within the medical center is the county hospital which serves the medically indigent citizens of the county. The medical center also directs a neighborhood health center for the medically indigent in Inwood, New York, a small poverty area in Nassau County. The department of health supplies public health nurses in several clinics at the Inwood project.

In the mid 1950's the State Department of Mental Hygiene was created to set up community health boards. In 1960 this unit was given authority to establish the Narcotic Drug Abuse and Addiction Program, which allowed the board to set up more local programs. The department of health no longer receives aid nor has a drug program as one of its responsibilities. Mandated responsibilities establish program priorities (14).

Nassau and Suffolk counties have a joint Comprehensive Health Planning Council (CHP), originated in 1969, which is incorporated as a planning body totally independent of any professional organization or governing body. The CHP is supported with both federal and local funds on an equal basis. While federal law mandates that at least 51 percent of the council must be consumers, the by-laws of the Nassau-Suffolk CHP have raised this to 60 percent, thus underscoring its commitment to meaningful consumer participation. Consensus planning includes information gathering, crisis intervention, and the development of subregional and special problem health planning groups. A representative of the department of health is a member of the council (15).
II. NASSAU COUNTY DEPARTMENT OF HEALTH

Health care delivery systems are theoretically planned to meet the needs of the population, such as health care for the indigent. But there are many other factors involved in the decision-making process of establishing priorities for services. The programs are created by individuals who naturally inject their own ideas into the priorities concerning the needs of the persons for whom they are planning.

The following section describes in some detail the official health resource agency, the Department of Health in Nassau County. In an attempt to show established priorities, the programs and activities of the department are described in respect to the development, the organization, and the major divisions of the Nassau County Department of Health.

Development of the Department of Health

Prior to 1938, there were 67 separate health units in Nassau County, served by 41 health officers. The county government was radically changed in 1938 to a more centralized form, this change coming during the period when Nassau County had such a great influx of persons from the City of New York. During this same year the Nassau County Department of Health was organized as a county health unit of the New York State Health Department, under the jurisdiction of the state department as established by the Public Health Law of New York, and on this basis it receives state aid.

During the first year divisions of nursing, sanitation, and communicable disease were organized. The county was divided into 16 nursing districts and eight sanitary inspection districts with three types of clinics: infant and preschool, social hygiene, and maternity. At the end of the first year there were 47 employees in the department.
During the 1940's with the end of World War II, the staff of the department was greatly increased, which strengthened the department, especially the maternal and child care, nursing home, and medical rehabilitation programs. In 1949, the Division of Laboratories and Research began to function. During the 1950's the population almost doubled, thus increasing the demand for additional personnel to expand established services and plan more extensive programs (16).

Presently the Nassau County Department of Health has increased its staff to over 700 persons. The department has expanded from the basic program of the late 1930's to meet the responsibility of providing an improved and coordinated health system for more than 1,500,000 residents through programs offering a wide spectrum of services in three main areas: personal, environmental, and community health.

Although the development of the department includes the historical account of the increase in personnel and the expansion of services, it is also necessary to describe the shift in priorities which have occurred with the evolution of the County of Nassau. In January of 1972, a new Health Commissioner took office in the county. With a new administrator there have been and will continue to be many changes within the department of health.

In a county with a wide variety of health resources, the first priorities of the department of health must be given to those persons who do not have other means of obtaining health services, primarily those of low-income and aged groups. Programs are established basically on the legal responsibilities of the department of health, that is those which are mandated.
The department of health is in the process of broadening its emphasis. Traditionally services were primarily nursing oriented, but with the expansion of programs and the addition of permanent medical directors at the area health centers, the emphasis has been expanded to include medical services. It is anticipated that in the future the department will move from medical care to more comprehensive services (14). Thus priorities are in keeping with the needs and demands of the population, that is the rising demand for more adequate health care.

Organization

The development of the department of health could also be meaningfully described using the past organizational structures within the agency. In an attempt to describe the services and programs, an analysis follows of the present organization of the department of health.

A five-member Board of Health, appointed by the County Executive, is composed of consumers and providers. Two members of this board must be physicians. It is the duty of the board, with the approval of the New York State Public Health Council, to appoint a Commissioner of Health who must be a physician with extensive training in the field of public health. The commissioner directs the activity of the entire department in an effort to enforce the Nassau County Public Health Ordinance, the New York State Public Health Law, and the Sanitary Code.

Directly responsible to the Commissioner are the Deputy Commissioners and the directors of the various divisions and offices of the department of health. Together the divisions represent a wide scope of disciplines arranged into functioning groups for the purpose of solving health-related problems (Figure 1). Programs most often include services
Figure 1. Organization of the Nassau County Department of Health, 1972.
involving persons from several divisions; health delivery has become too complex for one unit to attempt to provide a service without the assistance of another discipline. For example, the Lead Poisoning Program is directed by the Bureau of Epidemiology, but many other offices and divisions work cooperatively with the bureau to provide services. The Office of Social Services, the Division of Nursing, the Division of Laboratories and Research, and the Division of Environmental Health are all part of the Lead Poisoning Program. The New York State Department of Health also plays an active role in this program by providing services from the Division of Laboratories and Research. Several other departmental programs follow a similar pattern of the multidisciplinary approach to solving health problems.

**Division of General Administration**

The Division of General Administration includes the following offices: Administration and Finance, Management Analysis, Biostatistics, and Public Health Education. These offices and the Office of the Commissioner compose the Executive Division of the department.

The Office of Management Analysis develops new programs, evaluates and revises existing procedures, and provides necessary data for administrative analysis. This includes preparing the program budget for state aid and estimates of program costs. For example, all man hours devoted to ambulatory care centers, including those of the staff nutritionist, are tabulated by this office to arrive at the cost per clinic visit. In addition, this unit is responsible for the preparation of procedure manuals and forms for the entire department.
The Office of Biostatistics collects and compiles mortality and morbidity statistics. This office also uses data processing systems to develop activity, clinic, and laboratory information for the other divisions of the department. The staff provides consultation to the other divisions for statistical analysis, research, and collection of data information for other studies within the department. For example, the Director of Nutrition obtained consultant services for a study of the Weight Reduction Program of the Office of Nutrition which she presented at a meeting of the American Dietetic Association.

The Office of Public Health Education has four primary responsibilities: public information, public health education and consultation, audiovisual supply, and the departmental library services. These activities are provided by a staff of public health educators, technicians, and library and clerical staff. The public information section serves as a liaison for the department and the mass media. This office consults with the staff of the department for planning educational materials and programs. The Office of Public Health Education works with the nutrition unit, as it does all units of the department, by offering to develop visual aids and publicity services. The Director of Nutrition and a visual aid specialist worked closely together planning a multimedia presentation for the annual meeting of the New York State Dietetic Association. A paraprofessional staff (Health Guides) from local communities is trained for home visitation to discover health needs and to refer people to existing services; they also assist professionals in the departmental health centers. These guides assist the nutritionists as well as other professionals as translators for the Spanish-speaking members of the
community who attend the clinics. The library is a part of the larger Nassau Library System which consists of 60 public libraries. Services include the national Medical Literature Analysis and Retrival System and distribution of all monthly publications in the department's library to the staff personnel. The library also distributes publications from the department to all public libraries in the county.

Division of Laboratories and Research

The Division of Laboratories and Research functions to assist the entire department in the prevention, diagnosis, and treatment of disease through medical and environmental health laboratories. The medical laboratories perform pathological and microbiological tests. Specimens submitted by physicians include those for blood typing, prenatal patients, serologic tests for syphilis in patients, and diagnosis of viral diseases.

The environmental health laboratories perform chemical and bacteriological tests on milk, water, sewage, and factory wastes. Samples are collected and delivered by inspectors from the Division of Environmental Health.

Division of Nursing

The Division of Nursing is perhaps best described as a vital service component of many programs rather than a program unit. The public health nurse is involved with individual and family health in the home and in the community.

There are over 175 nurses on the staff providing services to the community. The nursing unit provides public health nurses for the departmental clinics. In 1971 more than 2,500 clinics were staffed by public health nurses.
In an effort to coordinate hospital and post hospital care, Home Care Coordinators are supplied to most of the hospitals in the county. These persons act as a liaison between the hospital and the public health nurses who are providing home care services. Often the services of the Home Care Coordinator lessens the medical costs by enabling persons to leave the hospital when home care services can provide the necessary treatment and rehabilitative services. Also by facilitiation of home care, it frees hospital beds for acutely ill persons.

Although the Division of Nursing offers home care services to many residents, the staff works in a coordinated effort with the Visiting Nurses Association and other nursing agencies in providing services. The Home Care Program of the department offers a mechanism for a multidisciplinary approach to health services. Direct services are arranged by nurses for physical therapy, occupational therapy, and speech therapy. Nutritional services are not provided by direct service, but if a nurse should need assistance, the nutritionists are available for case conferences. A fee is charged for services. When there is a need for assistance with the payments, the patients are referred to the medical social workers of the department.

The Division of Nursing also relates to the nutrition program through the Office of Hospitals and Related Facilities. A public health nurse serves on the survey team with the public health nutritionist and several other professionals.

The division is involved in educational activities with graduate and undergraduate students and the Home Health Aide Training Program. During the year more than 400 graduate and undergraduate students are
are provided with field training. The unit also directs the Home Health Aide Training Program. Planning this program involves arranging for many other disciplines from the department to participate in the teaching process. This program has a nutrition component. Each time the course is taught a public health nutritionist presents the nutrition information.

**Division of Environmental Health**

Part of the responsibility for environmental health control is shared by the Nassau County Department of Health. This division provides comprehensive protection and improvement services through continuous surveillance by engineers and sanitarians. The department prefers that the resolution of problems be obtained more by voluntary community action than by the application of regulatory power.

The staff is involved in the special areas of water resources, water pollution control, air pollution control, and land pollution control. There are many ongoing ecological activities within the division, including radiation protection, injury prevention, rodent control, and rabies surveillance. The staff provides educational programs for community groups such as swimming pool operators, lifeguards, food managers, and workers involved in food service in hospitals and educational institutions. The personnel also work closely with other interested individuals and groups in the community in the prevention of environmental hazards.

The Bureau of Food and General Sanitation is included within the Division of Environmental Health. This unit inspects over 5,000 food processing and selling establishments. The personnel from this bureau also have the responsibility of investigating complaints and promoting correction through consultation, education, and law enforcement.
Although many programs of the department are structured similarly to the New York State Department of Health, the Division of Environmental Health is an exception. New York State legislation has created a Department of Environmental Conservation, separate from the State Department of Health, which at the state level has assumed many of the duties of environmental control. In Nassau County it is anticipated that the Department of Environmental Conservation and the Department of Health can function in a coordinated effort to improve the environment (14).

**Division of Personal Health Services**

The Division of Personal Health Services provides preventative, diagnostic, therapeutic, and rehabilitative services with a staff of both professionals and paraprofessionals. It is interesting to note that the programs of the division demonstrate the changing priorities and emphasis of the entire department. That is the emphasis on providing for those citizens who would otherwise be unable to obtain medical care. The personnel have been organized into functional groups to provide medical services (Figure 2). Because of the variety of services offered and the numerous disciplines involved in this division each unit has been given some consideration.

The Office of Rehabilitative Services is responsible for the services of physical therapy, speech therapy, and occupational therapy. Primarily services are provided by direct referral from physicians or Home Care Coordinators. Recently the unit expanded services for ambulatory patients in several departmental health centers. Although there are many situations where the nutrition unit could be of service in the rehabilitation of patients, at the present time there is no direct relationship
Fig. 2. Organizational chart of the Division of Personal Health Services, Nassau County Department of Health, 1972.
between the two units. Perhaps as the department provides more complete health care, there will be a nutrition component included in the rehabilitative services offered by the department.

The Office of Social Services has varied and widespread responsibilities throughout the county. The staff of medical professionals, social work assistants, and community service workers provide direct service to all new individuals or families who seek the services of the department. The intention of the comprehensive interviewing is of a preventative nature: to identify potential social problems. Consultation is given to public health nurses. Both a weekly newsletter and a monthly publication are prepared by the unit for the entire staff of the department. The office serves the entire community by providing health resource information through the Information and Referral Service. This service involves answering over 2,000 calls each month. Persons from the Home Care Program and many physically handicapped persons are referred to the office for assistance. The unit is involved in several research projects in community action programs, such as the program to detect lead poisoning.

The Office of Dental Services plans and supervises the Dental Health Program, involving dental screening and care services. In the past the unit served only a preschool population but has now expanded services to reach children up to 14 years of age and women who receive care from the maternity clinics. Thus again one can see the trend within the department is toward providing more complete medical services. The unit has in the past worked with the nutrition unit in preparing preventative dental educational materials which contain nutrition information as a basic component. Education does not cease at the end of each clinic.
The staff is actively involved with school and community groups who are interested in dental health. Student training is also a part of the educational program of this unit.

The Office of Nutrition provides counseling and consultation on nutrition and nutrition-related problems. The unit relates to the other units of the Division of Personal Health Services through the multimedical services provided at the clinics. Consultations are also provided to any professional needing nutritional information within the department. The unit cooperates with other agencies as it attempts to improve the nutritional status of the community and to promote adequate nutrition and food service at varied institutions. The office also provides training programs for students, paraprofessionals, and professionals from the department and from the community. The Office of Nutrition is described in further detail in the following chapter.

The Office of Medical Care Administration directs and supervises the ambulatory care clinics. Since 1970 more emphasis has been placed on the diagnosis, treatment, and rehabilitation services. Trends are showing a move toward providing total medical care to those persons of the community who otherwise would be unable to receive these services. It is through the clinic that the department is able to provide for the indigent and medically indigent persons of the community. The county is presently divided into two territories for the purpose of providing medical services. Each area contains a local health center with a medical administrator and a medical director. Areas also contain a smaller health center and several satellite clinics which are operated in cooperating hospitals under the direction of the area medical directors. These centers
and satellite clinics are located to serve as "storefront" medical service areas for the residents of the county. In relation to the poverty areas (see Appendix A) the department operates or contributes staff to clinics in Freeport, Hempstead, Elmont, Mineola, Glen Cove, and several other locations where poverty is prevalent. The health centers and satellite clinics offer several services to both children and adults including pediatric, maternity, family planning, chest screening, dental care, and immunization. Also orthopedic and chest diagnostic clinics operate on a referral basis. Plans are now being finalized to offer, in addition to the above services, gynecology and general medicine clinics for adults. It is anticipated that services will be offered in night clinics within the next year.

The Bureau of Medical Care Administration is responsible for administering and supervising programs which relate to health care standards for facilities and patient care. Within the bureau is the Office of Hospitals and Related Facilities. This office consists of a staff health team including a medical administrator, physician, nutritionist, public health nurse, and a sanitarian. Together these persons, under contract with the New York State Department of Health, have the responsibility of certifying all hospitals, nursing homes, and health related facilities in the county. It is interesting to note that the department of health is providing the services of an inspection team. Trends are toward providing more regulatory services as opposed to the traditional preventative care. The staff conducts surveys to determine that the health facilities are in compliance with the New York State Hospital Code and the Federal Health Insurance (Medicare) standards. Consultation and assistance is also provided to insure that quality care is provided at the facilities.
The Bureau of Epidemiology concerns itself with both communicable and chronic disease through prevention, detection, treatment, and control. The staff directs the communicable disease program. Epidemiologic studies and the investigation of communicable and chronic disease are also among the responsibilities of the bureau. Distribution of vaccines, antibiotics, and other biological products to physicians is supervised by the bureau. Activities often involve other units of the department. The Office of Biostatistics conducts many epidemiologic studies under the supervision of the Bureau of Epidemiology. Staff members also function as consultants to the Divisions of Environmental Health and Laboratories and Research. Certain highlighted activities include the Lead Poisoning Program and working with the Diabetes Detection Centers of the Nassau County Diabetes Chapter of the New York Diabetes Association. The bureau also distributes vaccine for influenza innoculation programs.
CHAPTER III

OFFICE OF NUTRITION

I. DEVELOPMENT AND ORGANIZATION

The Nassau County Department of Health, as described in Chapter II, is a conglomerate of many disciplines organized to promote optimum health throughout the county. The Office of Nutrition is one of the units functioning to obtain this goal of health care. The function of the nutrition unit should correlate with that of the entire department. History, organization, and goals and objectives are discussed to better understand how the nutrition unit has evolved as an active force within the department of health.

History of the Unit

In 1959, the Office of Nutrition was established as a unit of the Nassau County Department of Health. Before this time all nutritional services were provided by the Regional Nutritionist. Until 1970, the office was organizationally located within the Administrative Division of the department. As a staff unit, the Office of Nutrition was positioned to serve all divisions within the department.

Under the present organization the Office of Nutrition has been relocated to serve as a unit of the Division of Personal Health Services. This change has limited the input of the unit in program planning and often implementation, since the Director of Nutrition is no longer responsible for attending administrative staff conferences. The Director of Nutrition is now responsible to the Director of Personal Health Services,
whereas before 1970, she related directly to the Commissioner of Health. The organization has limited the channels of communication and the extent to which nutritional services are implemented in departmental programs. The change in organization may be related to the changes which are occurring throughout the entire department of health. The emphasis of services is changing from preventative to primary medical care services.

The change in organization has also brought about some changes in the services offered by the nutrition unit. The nutritionists are now expected to spend a large percentage of time in direct service at the area health centers. Direct nutritional services were first offered in 1970 at the area health center in Freeport. Since this time services have been expanded to three health centers in maternity, pediatric, and family planning clinics.

Since 1959 the Nassau County Department of Health has expanded the staff of public health nutritionists from one to four positions. There are three public health nutritionists in the general program and a fourth in the Office of Hospital and Related Facilities (Figure 3). The public health nutritionist working with the Office of Hospitals and Related Facilities functions as a member of the staff survey team who inspects these facilities. She does not relate directly to the Director of Nutrition since she, like the entire team, is under contract with the New York State Department of Health through the Nassau County Department of Health. Job specifications are found for the nutritionists in the general program in Appendix B. Other than New York City, Nassau County has one of the largest numbers of public health nutritionists employed at the county level in the entire State of New York.
Fig. 3. Organizational chart of the Office of Nutrition, Nassau County Department of Health, 1972.
II. GOALS AND OBJECTIVES

The goal of the Office of Nutrition is to educate citizens of the county in sound nutritional practices in order to encourage the establishment and maintenance of proper eating habits throughout the life span. To meet this goal certain objectives have been established. The objectives are: to integrate a nutritional component within established programs in the department and with other community agencies; to provide consultant services in nutrition to professional personnel in the department and to other agencies; to promote programs of adequate nutrition, food service, and suitable physical facilities by offering technical assistance and training programs to various food service establishments and health related facilities; and to provide therapeutic and preventative services to groups and individuals of the County of Nassau (17).

III. MAJOR PROGRAMS AND ACTIVITIES

The responsibility of the department of health is to maintain, protect, and improve the health of the county residents. The goal of all units, including the nutrition unit, should be to carry out this responsibility by developing services to meet the health needs of the population. The nature of the population, as described in Chapter II, is of great complexity. The nutrition unit in order to function purposefully must respond with program plans to meet the diverse needs. It would be absurd to consider that affluence predicates sound nutritional practices. Community interests, health statistics, and defined needs which have previously been described indicate that malnutrition does exist in Nassau
County. The student observed the extent of obesity which is present among the population, the nutrition quackery which is often brought to the attention of the public health nutritionists through various modes of communication, and the presence of "Health Food" advocates in the community. The misinformation and lack of application of sound nutritional practices even among the staff of the department of health provides proof of the prevalence of malnutrition. The health data and observations depict only a few of the needs for nutritional services in providing community health care. Nutrition is basic to health.

To reach the objectives of the Office of Nutrition, various methods have been established by the staff. Program planning depends upon the priorities established by the entire department. As the emphasis changes to more comprehensive multimedical services so will the priorities and programs. The programs and activities of the nutrition unit have been described in four categories: community activities, in-service education, departmental or staff activities, and professional activities.

Community Activities

The nutrition unit responds to the needs and interests of the community through many channels of communication. Community activities include various lectures presented to groups and organizations and participation in programs for professional and lay persons of the community. Although the unit integrates nutrition into the programs of many established organizations and agencies, the office has a program of its own, a Weight Reduction Program. Other direct services are offered through the main office and at departmental health centers.
Educational programs are offered to community organizations by the public health nutritionists through lectures and community presentations, such as panel discussions where several agencies present information. Groups addressed in the past ranged from school-age children to expectant mothers to senior citizens. In responding to the older community members, the nutritionists in 1970 addressed over 400 senior citizens on such topics as, "Nutrition in Aging," "Nutrition in Heart Disease," and "Sodium Restricted Diets" (17). The student had an opportunity to listen to a tape from a radio broadcast on "Health Foods" where the Director of Nutrition confronted a local "Health Food" advocate. With such an information rich community it is no wonder that varied topics are requested from the nutritionists.

One of the major roles of the public health nutritionist is to attempt to coordinate nutrition programs in the community. The student attended several planning meetings and conferences, where the nutritionists participated, such as the Nutrition Education Workshop for school administrators and teachers and a conference sponsored by the Nassau County Heart Association on "Nutrition in the Community." Because of their knowledge of the community the nutritionists could suggest varied resources and prevent duplication of services.

Obesity is considered to be a risk factor in the epidemiology of many diseases. Much attention in recent years has been paid to the nutritional influence in both heart disease and diabetes mellitus. Both diseases rank high among the leading causes of death in Nassau County. One of the many ways the nutrition unit has responded to these needs is through the Weight Reduction Program. Since 1965 the Office of Nutrition
has been conducting a Weight Reduction Program. Persons are admitted to the program with a diet prescription from a physician. Participants must be between 15 and 50 pounds overweight with no other medical complications and between 20 and 50 years of age. Classes are held for ten consecutive weeks and thereafter every two weeks. Individual diets are prepared by the nutritionists. The first ten classes consist of lectures on using the Exchange Lists system, basic nutrition education, and instruction for increasing physical activity. The remaining lectures are geared to many aspects of normal nutrition. Although weight reduction is the program title, the classes are, in essence, a core course for laymen on balanced eating and living patterns. The office also conducts classes in weight reduction for two senior citizens organizations in the county. Special emphasis at these classes is on nutrition in aging using the same course outline as the other programs. In 1971 50 weight reduction classes were held involving a total attendance of 412.

Services are provided for professionals and lay persons of the county through personal and telephone conferences and through correspondence. This service offers a mechanism for consumer input into program planning as it also keeps the staff alert and informed about the new food fads, new products, and misinformation which are of current interest to the citizens. The student observed many different requests which came through the office ranging in content from a 12 year old wanting information on a fad diet, to persons needing information on modified diets, to a representative from the Office of Consumer Affairs requesting professional assistance with a "Health Spa Diet" which she was investigating. These and numerous requests not mentioned provide an excellent means of learning some of the interests of the consumers in the county.
One of the major priorities of the department is to provide medical services to the indigent and the medically indigent of the county. The nutrition unit responds to this priority by counseling ambulatory patients in the departmental health centers. Clinics which have a nutrition component include maternity, pediatric, and family planning. As a preventative measure, the nutritionist staffing the maternity clinic in one area health center sees all new patients. Most patients attending the clinics are seen by the nutritionists on a referral basis. In 1971 conferences were provided for more than 550 individuals in the health centers (17).

**In-service Education**

With a county population of more than 1,500,000 residents it is impossible for all nutrition services to be provided directly. In-service education provides a mechanism for the nutrition unit to extend more services to the community. By instruction of professionals and para-professionals from the department, the Office of Nutrition can reach a much larger segment of the population. Case conferences for one or more nurses are offered by the unit. This enables the nutrition unit to extend their services by educating the public health nurses.

Since most direct service is provided by the public health nurses, these persons are especially needed to provide nutrition information. Nutrition information is provided to them through orientation programs, case conferences, and classes which they request. The Office of Nutrition presents an orientation to the nutrition unit for all new public health nurses. The program consists mainly of a description of services
offered by the nutrition unit and how the nurse can use these services in her professional work. Typically the nurse requests a case conference with the nutritionist. Most case conferences involve one or more nurses and the patient if possible. Programs are also presented to groups of nurses at their request on any topic concerning nutrition which they choose. Consultation is offered to any professional who may need assistance with nutrition problems.

Paraprofessionals also receive instruction by the nutritionists. The Home HealthAide Training Program contains a nutrition component. The student observed a class presented by a nutritionist for a group enrolled in this program. Basic nutrition information was provided to explain the components of a balanced diet, using the Basic Four Food Groups, and the class was introduced to a few, widely used modified diets. In 1971 there were 12 nutrition classes given to a total of 97 aides (17).

Departmental or Staff Activities

Major activities within the nutrition unit include staff conferences and continuing education. Consideration was also given to an evaluation technique used by the unit.

The nutritionists are engaged in several activities within the unit. Staff conferences are held periodically to discuss priorities, programs, and activities of the office. Each nutritionist continuously updates her information with literature from local to international concern in foods, nutrition, and public health to remain cognizant of the current developments in the field. In the Office of Nutrition study is a typical daily activity. With an affluent community that has many resources there is a great deal of exposure to all types of "Recent
Findings." It is therefore vital for the nutritionists to be constantly alert so that they can act as resource persons for the people of Nassau County.

Ongoing evaluations are an important consideration in all programs. The Office of Nutrition collects and uses data to improve the decision making process in program planning and evaluation. Each nutritionist keeps a day book of her activities. These activities are coded by a system devised by the Director of Nutrition. The codes are presented in Appendix B. The clerks tabulate these activities at the end of each month so that they can be used as a means of evaluating all activities of the staff. These figures are compiled both monthly and annually for reporting to the Commissioner (Table 1). This is an efficient means of evaluation in terms of the time allocations for activities, individual staff members, and the entire unit.

Professional Activities

In an effort to keep the nutrition unit informed, to coordinate activities with other organizations, and to contribute to the profession, the staff are actively involved in many professional organizations. The department of health through the nutrition unit is represented at the Nassau County Nutrition Council, the New York State Nutrition Council, the Long Island Dietetic Association, and the New York State Dietetic Association, and the American Dietetic Association. Members of the staff are also involved with the New York Public Health Association and the American Public Health Association.

The student had an opportunity to learn some of the responsibilities of the President of the New York State Dietetic Association, since the
### TABLE 1

TIME SPENT ON ACTIVITIES, 1971 ANNUAL TABULATION,
OFFICE OF NUTRITION

<table>
<thead>
<tr>
<th>Activity</th>
<th>No. of Hours</th>
<th>% of Total Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Conference</td>
<td>77.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Consultation</td>
<td>353.8</td>
<td>11.0</td>
</tr>
<tr>
<td>Weight Reduction Program</td>
<td>171.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Other Community Education Programs</td>
<td>152.5</td>
<td>4.7</td>
</tr>
<tr>
<td>Community Organizations</td>
<td>36.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Professional Organizations</td>
<td>258.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Departmental In-service and Orientation</td>
<td>55.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Departmental Clinics</td>
<td>941.5</td>
<td>29.3</td>
</tr>
<tr>
<td>Administration</td>
<td>1148.8</td>
<td>35.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>99.2</strong>*</td>
<td></td>
</tr>
</tbody>
</table>

*Based on 3214 actual hours worked by nutritionists during the year.

Director of Nutrition presently holds this office. Activity was centered about the annual meeting where the director planned to do a multimedia presentation for the business meeting.

IV. COORDINATION OF NUTRITIONAL SERVICES WITH OTHER AGENCIES

During the seven week field experience the student realized that it was not possible to become acquainted with all agencies that offer nutritional services in or surrounding the County of Nassau. Nassau is "next door" to a megalopolis, New York City. Because of this geographic location many persons of the county are able to use the numberless facilities of the City of New York. For example, all phenylketonuric infants are referred to the New York University Medical Center in Manhattan for treatment. Therefore the nutrition unit has little contact with these children. Only those agencies related to the field experience namely, the Department of Social Services, Cooperative Extension Service, Nassau County Heart Association, Nassau County Nutrition Council, and the Meals on Wheels Program will be discussed.

Department of Social Services

The Department of Social Services directs the public assistance program in Nassau County and handles services such as Medicaid, food assistance programs, and other services for low-income families. Within the Department of Social Services is the Office of Home Economics and Management. The responsibilities of this unit encompass all aspects of home management for low-income families in the county. Because one of the major problems in the county is housing much emphasis in this office
has been with home furnishings. The staff is involved with a variety of other activities including an in-service training program for home management aides who serve families on a one to one basis. Editing a monthly newsletter serves to provide consumer information to the staff and to families in the community. The staff in the past has prepared cookbooks for families in the county. One of the home economists is involved in some of the administrative aspects of the food service at the county day care centers. Menus for the three centers are prepared by the home economists from this office and evaluated by the Office of Nutrition for nutritional adequacy.

The Office of Home Economics and Management works closely with the nutrition unit in other services. Whenever a home economist locates a client needing help with a modified diet they are referred to the nutrition unit for assistance. Referrals are also made by the nutrition unit when a patient needs financial assistance.

Cooperative Extension Service

The Cooperative Extension Service is comprised of three divisions: Home Economics, 4-H, and Agriculture. The student visited the Division of Home Economics. Cooperative Extension functions by helping persons help themselves. The Division of Home Economics responds to this goal with major programs in nutrition and health, consumer competence, human resources development, housing and home improvement, and community development. The home economics division functions to provide nutritional services to the community through the Expanded Nutrition Education Program (ENEP). Persons mainly from the indigent population are trained
as Extension Aides of ENEP. These paraprofessionals work on a one to one basis with homemakers and families in low-income areas. The program is supervised by an extension agent. The student observed an in-service education program for the Extension Aides. She learned that the aides were instructed to search out the needs of an individual as seen by that individual. Because individual priorities may not begin with nutrition, the aides are briefed on a number of topics. Weekly meetings are held to give the aides an opportunity to update information on community resources and to discuss problems. Agency representatives are often invited to these classes to share with the aides the services of their organization. A public health nutritionist from the department of health was invited to speak to the group on the services of the Office of Nutrition.

The division of home economics also conducts a Family Day Care Program. An extension specialist in family day care has just recently been added to the staff. She will be planning and carrying out a training program for the day care mothers in Nassau County.

Nassau County Heart Association

The Nassau County Heart Association is affiliated with the New York State and American Heart Association. The organization provides information, referral services, and literature for preventative education and for heart patients. The agency works closely with the nutrition unit in providing many of its services. Referrals of patients needing assistance with modified diets are made to the nutritionists at the department of health. The nutrition unit also works closely with the agency
in conducting educational programs for professional and lay groups of the county.

The student on several occasions observed the nutritionists working with the staff of the association. A local senior citizens club contacted the association requesting a person to lecture on the topic of "Diet and Heart Disease." This request, like most received by the association related to nutrition, was referred to the Office of Nutrition. The student accompanied the nutritionist on a visit to the heart association to preview a film to be used for the program. Thus the lecture might be considered a "community project" since the resource materials were from the voluntary agency and the lecture was presented by a professional from the official agency. The Office of Nutrition also assisted the association in planning and presenting their 1972 Annual Meeting program on "Community Nutrition in Nassau County."

Nassau County Nutrition Council

Although the student did not have the opportunity to attend a meeting of the Nassau County Nutrition Council both conferences with other professionals and supplementary readings provided the information on the organization. The goal of the council is to promote optimum nutrition for the residents of Nassau County. The methods used to attain this goal are to maintain an awareness of current nutritional problems and needs by providing reliable nutrition programs and activities. Membership involves persons from organizations who are concerned with nutrition education. The Director of Nutrition serves on the council as a representative from the Nassau County Department of Health.
Meals on Wheels

There are two meals on wheels programs functioning in Nassau County at the present time. The student had the opportunity to visit one of these programs.

Catholic Charities of Rockville Center has established a nutrition program to provide two meals daily, Monday through Friday, to aged persons in need of a balanced diet in the community. Certain criteria have been set up; the recipient must be over 59 years of age, capable of feeding himself, immobile, living alone or shut-in, and within the ten mile "catchment area" of the hospital. Under the supervision of the dietitian in a local hospital, the food is prepared and packaged. The food is delivered to local parishes where volunteers pick up and deliver the meals to the homes of the recipients. The cost of the meal is established according to the financial ability of the recipient with a maximum charge of $2.25 daily. The hospital is now preparing 30 packages and has the facilities to prepare meals for 20 more recipients.
CHAPTER IV

ANALYSIS OF SPECIFIC ACTIVITIES

I. ANALYSIS OF ABILITIES THROUGH OBSERVATION AND EXPERIENCE

During the field experience the student observed and participated in many activities of the public health nutritionist. Through these experiences many functions of the public health nutritionist were demonstrated. These roles enabled the nutritionist to carry out the goals which are established by the department of health and the nutrition unit. An analysis of several situations illustrates these experiences.

Conferences with Other Professionals

The student gained insight into the field of public health in conferences with other professionals. These persons broadened the student's understanding of the purpose of the department and the function of other agencies within the community. By defining the role of the nutritionist, philosophies of community health and community nutrition were strengthened.

During many conferences the student asked individuals for their personal definition of public health and their opinion of the future of the official agency. Many different opinions were expressed in answer to these questions. These differences were among the many indications pointing out the changing role of the department of health in Nassau County and the changing nature of public health.

The student also learned much about the community and the other agencies providing health services in conferences with other professionals. She often found that agencies were duplicating services and that many
agencies in addition to the department of health were experiencing a number of changes in priorities. Emphasis in most county agencies is toward providing more complete medical services through multidisciplinary approaches to health problems. At the present time there is very little coordination of these services. Part of the problem is due to the undefined roles of the organizations and agencies concerned with community health.

In-service Education

The student observed the role of the nutritionist in providing in-service educational programs in nutrition. These observations gave her a better perspective of the activities within the department of health. They demonstrated the relationship of the nutrition unit to other units within the department and the various educational programs which involve the nutrition unit. These activities provided opportunities to learn some of the techniques used by the nutrition staff in teaching groups with different backgrounds and needs.

The student attended an orientation program in nutrition for public health nurses. The nutritionist described the history, objectives, and the services of the Office of Nutrition. She explained to the nurses what information they would need for dietary counseling of their patients. The nutritionist also reviewed some basic nutrition information. When the nurses were asked about Recommended Dietary Allowances, they had no clear concept of the meaning or purpose of the established allowances. They had little understanding of the Basic Four Food Groups and less about the system of Exchange Lists. This astounded the student. Because
the nurses demonstrated such a weak background in nutrition, the importance of both individual and group conferences which the nutritionists have with the public health nurses was recognized.

Another experience was observing the nutritionist present the nutrition component in the Home Health Aide Training Program. The student became familiar with the paramedical training program directed by the department of health through the nursing unit. She was able to observe the nutritionist teaching information to a group soon to become members of the paramedical profession. Because the class consisted of adults, quite a different approach had to be made by the nutritionist. The nutritionist presented information using common terms to teach very basic and practical information. They were instructed primarily about the normal diet. Some attention was given to the common diets such as the soft, bland, and sodium modifications. The student observed which choices were made for teaching aids to enhance the lecture and to emphasize the main points. The flannel board was used to show the Basic Four, and graphs of nutrient composition of certain common foods were used for comparing food values. The nutritionist also arranged for group participation by asking them to plan menus. Adults appear to have increased learning interests if the information is presented in terms of practical use. Learning is enhanced by the use of group interaction and participation.

Licensure and Inspection

The student observed the Hospital and Health Facilities staff as they inspected two different facilities. The staff filed all of their
individual reports and all correspondance for each facility in one folder. This enables them to work with a total package and to develop coordinated recommendations. The student observed the approaches used by the staff team in carrying on a survey. Although this was not a true interdisciplinary approach as demonstrated at the Child Development Center in Memphis, their techniques appeared to be approaching this concept. The entire survey staff met with the administrators of the facilities to discuss past and current changes in regulations and changes which have and should be made in the facility. The staff then takes a tour of the facility, each member inspecting the area of his own responsibility. Each member appeared to complement the other disciplines present so that the facility was inspected as a whole rather than as many units composing an institution.

The nutritionist has the responsibility of inspecting the entire food service operation in each facility. The student was introduced to the New York State Code for Hospitals and Related Facilities. By observing the nutritionist during the survey the academic knowledge of the responsibilities and activities of the public health nutritionist was reinforced and broadened. The student has had little exposure to the role of the dietitian other than through academic experience. Observing the nutritionist and the dietitian in consultation broadened the student's perspective of each of their roles. Opportunity was provided to visit the "floors" with the staff dietitian and the nutritionist to read the patients' charts and also to observe the food served to the patients. By going through these processes the student was able to become familiar with some of the responsibilities of the hospital dietitian as well as
the food operations in the hospital. For instance, the nutritionist reviewed the adequacy of the diets and also the accuracy of the therapeutic diets. She checked the time span between the feeding times and inspected the menus. All of these activities are responsibilities of the hospital dietitian. The staff inspected a nursing home where similar procedures were encountered.

Consultation

During the experience the Regional Nutritionist was observed in consultation with the Director of Nutrition. The student had previously encountered the theory of consultation during her academic experience, but observing the process reemphasized the total concept. The Regional Nutritionist visits the nutrition unit periodically. Both nutritionists shared experiences and new information and discussed problems which each of them had encountered since their last meeting. The student observed the Regional Nutritionist's approach to problem solving. She appeared to take a very optimistic outlook on problems and had an outstanding ability to diagnose and solve problems from an objective point of view. By sharing information the Regional Nutritionist updated the Director of Nutrition on recent news and legislation. There was also some role reversing. The Regional Nutritionist requested assistance with a pamphlet which had recently been printed in the state office. The pamphlet had not been approved by the Division of Nutrition before being printed and consequently there were many errors.

Not only does the public health nutritionist work with other professionals as a consultant, she often uses the expertise of other
professionals. The student observed the nutritionists working with the other professionals within the department. The Director of Nutrition planned with the technical assistance of an audiovisual specialist a multimedia presentation for the annual meeting of the New York State Dietetic Association. Many of the teaching materials used by the public health nutritionists have been prepared with consultation from the Office of Public Health Education.

Planning Conferences

The student during the field experience was exposed to a variety of planning conferences. These meetings often demonstrated the role of the nutritionist in the department, in the community, and in professional organizations.

During the field training there were two conferences held for the unit directors of the Division of Personal Health Services. Future plans for the division and budget procedures were explained by the division directors. Observation was made on how the budget meeting was conducted as well as the extensive planning which must take place before each unit director prepares his budget proposal. Because the health centers are not fully decentralized administratively, additional conferences must take place between unit directors and the administrators of the health centers. Planning for 1973 will make this task more extensive. The trend is for clinic services to be expanded to multiservice medical centers. The priorities of each unit must coordinate with the department's priorities in terms of budget and program planning. For instance, at one of the meetings the director of the division announced to the
Director of Nutrition that in the near future the department would be opening adult health clinics. Naturally before any budget is submitted to the division director items to provide for additional services would have to be included in the proposal. There must be a close communication and coordination between the health center administrators and the unit directors because each will be budgeting some of the same time and personnel. For example, the Director of Nutrition will submit a budget request for personnel according to manhours. A large percentage of manhours will be going to clinic services. It is these services which will have to coincide with the budgeted services requested by the health center directors.

Other planning meetings demonstrated how services are related and coordinated with other agencies in the community. As mentioned previously, the Nassau County Heart Association and the nutrition unit shared teaching materials and professional expertise in presenting a lecture to a senior citizens club. This demonstrated how agencies can successfully share resources. Other meetings showed how various agencies in the community plan to offer the county residents a gamut of services. Often these meetings pointed up the undefined roles each agency had in the community and the frequently overlapping of services which occurs because of these undefined responsibilities. This demonstrates one of the problems which occurs in a county with such an array of health resources and little coordination.

**Group Work with Nonprofessionals**

The student was given opportunities to participate in group work with nonprofessionals from various age groups and with varied interests.
These activities aided in fulfilling several of the objectives of the field experience. They increased self-confidence and provided an opportunity for the student to evaluate her performance as a public health nutritionist. Observation, participation, and presentation of several lectures to community groups gave opportunities to increase knowledge of nutrition, to make practical application of nutrition information, to broaden understanding of the needs and interests of the residents of Nassau County, and to evaluate performance.

**Senior citizens.** To make an observation of a program presented by the nutritionist on diet and heart disease more meaningful, the student prepared a lesson plan as though she were to actually make the presentation. A film previewed from the heart association was used during the program. Without consultation with the nutritionist, the student gathered information and developed the lesson for the group of senior citizens from the county who wanted the program on the subject of nutrition and heart disease. This experience was especially rewarding to the student for several reasons. It gave her an opportunity to increase her confidence in gathering information and developing a lesson plan. After observing the group reaction to the film, she decided that it would be better for use with a middle aged group rather than with a senior citizens group as it did not relate directly to the groups' lifestyle. Reviewing and reorganizing the scientific material was helpful, and the experience provided a mechanism for evaluation; the student observed that the material she had planned for the group was similar to that presented by the nutritionist.
Adolescent girls. One experience involved working with over 100 adolescent girls in home economics classes in a local junior high school. The students' home economics teacher contacted the Office of Nutrition requesting a nutritionist for a guest speaker. The home economics teacher had prepared a nutrition package or unit, "Nutrition and the Basic 4," at Cornell University last summer. The package included arranging for a guest speaker from the community to address the classes on the topic of "Adolescent Nutrition."

The student developed, planned, and presented a lesson for the classes. This involved background reading and review of adolescent nutritional needs. The student then organized the material and selected and created teaching materials to emphasize many points to the group.

Insight was gained into the attitudes, behavior, and knowledge which the adolescent possesses. With the opportunity to repeat the lesson to four different groups, the student felt that her skills of communication were greatly improved. By observing their reactions to the material which was presented the lesson was rearranged after meeting with the first group. Application was made of several learning principles in the lecture: maintaining eye contact, encouraging participation, establishing a good climate for learning, and good listening. The noise level in the classroom was low which was a good indication that the desired contact with the group had been accomplished and that the groups' attention had been held. The student found it necessary to be extremely responsive whenever one asked a question so that the rest of the group would be encouraged to participate. There should have been more encouragement offered to the group. The student learned that her personal reaction
to the group and her enthusiasm was affected by the group. Certain groups stimulated the student while others hindered her presentation.

The student was observed by the home economics teacher, the district supervisor, and the Director of Nutrition who contributed to the evaluation of the presentation. Comments related to the rapport with the group because of age and to appropriate educational level of the information. The student needs to improve her hand gestures and her tone of voice to promote a more effective presentation of material.

This experience increased the self-confidence in the areas of nutrition and community work. The knowledge and experience gained from this activity provided information from a local adolescent group. This information was applied to the major project. By applying past experience to new situations, greater appreciation for the value of experience has evolved.

**Weight reduction classes.** Several weight reduction classes were observed. The concepts of successful weight reduction were applied to groups. Settings were usually informal in order to promote class involvement. An appreciation for group therapy was gained after observing the support members offered to each other and the sharing of information which took place during the classes. The student also learned how the nutritionist was often responsible for creating this atmosphere. The group was always given an opportunity to ask questions. These questions gave the student and the nutritionist a better understanding of the concerns of the group. Food faddism was the most popular topic of the groups. These classes are reaching many persons other than those enrolled
in the program and although they are called "Weight Reduction Classes," they are teaching a vast number of persons sound nutritional information.

A lecture was presented by the student to the "Carrot TOPS" group, a local chapter of the national TOPS organization. The lecture was based on sound nutritional practices in weight reduction. The information was presented using principles of successful weight reduction as a base. Several teaching materials were prepared for the presentation. A flannel board was used to show the Basic Four Food Groups, and food models were chosen to illustrate the portion sizes of the average servings. The food models greatly enhanced the lecture since most of the group did not realize how much more food that they had been eating as compared to the average serving. A flip chart was used to summarize the principles of successful weight reduction and to show such information as the relationship of caloric intake versus output in losing weight, since the group used the calorie counting method. The flip chart illustrated how 1400 calories five per week and 3000 calories two days per week would average to more than 1800 calories over the entire week. This information corrected their misunderstanding of energy balance. The lecture was scheduled for one hour but the enthusiasm of the group lengthened the session to two hours. An informal atmosphere was created but it was often difficult to control their attention. Although this was distracting to the lecturer, the noise level was often a good indication that the lecturer had communicated with the group. An uproar after the average serving was shown indicated that the group was attentive and that the food models had been used successfully.

It was difficult to communicate several points to the group. The
Director of Nutrition was called upon to clarify these points. By ob­
serving the approach taken by the nutritionist, a better understanding
of how to convey information to the group was gained.

The organization, its guides for weight reduction, and the prob­
lems when such a group meets with very little or no professional guidance
was investigated. The staff of the nutrition unit had provided some
background information of the organization and the student observed the
business section of the meeting so that an understanding of the princi­
ples of weight reduction which the group practiced could be better
understood. The weight of each person was called out by the group leader
who also announced whether that person gained or lost weight. Each per­
son who had lost weight received a red felt carrot to pin on themselves
during the entire meeting while those who gained weight were given a
green felt turtle. A fee of $.25 per pound was charged to each person
who gained weight. The group praised those who lost and hissed those who
had gained weight during the past week. The group then stood and recited
a pledge. The plan for weight reduction was based on calorie counting
and often did not provide for a balanced diet. Most of the group did
not eat before attending the meeting so that their weight would be
minimum. The group usually went to a local restaurant after the meeting
to eat dinner.

The session was enjoyable and most rewarding during and after the
class with the verbal communications and letters which followed. The
facial expressions observed when the student brought attention to several
misconceptions created a great sense of accomplishment in reaching the
group. The enthusiasm which the group displayed upon correcting these
misconceptions indicates possible changes in their dietary patterns. If this assumption is valid, this was one of the most rewarding experiences of the field training.

The student also presented a lecture to a senior citizens weight reduction class. Several mineral elements required in the diet were introduced, their function explained, and several food sources for the mineral were given. The experience was most meaningful in that opportunity was provided to work with another age group; one with which the student had not previously had experience in the classroom setting. The lecture was part of an ongoing program of nutrition education. The lesson was directed to those minerals of particular importance in the dietary of the elderly, specifically calcium, iron, and sodium. That the major aim of the lesson had been accomplished was demonstrated by the questions asked. For instance: Is salt harmful in large amounts? What are salt substitutes? Is the calcium in skim milk the same as that in whole milk? Are red beets a good source of iron? Materials were selected for handouts so that the group could have a written reinforcement of some of the information which was presented. A flip chart using animated cartoons was also used to show how some minerals function in the body.

As many persons were observed at more than one meeting, their reactions indicated an increased understanding of nutrition. Repeating these experiences broadened the knowledge of the methods which are used in teaching adult groups. Observation was made of how vitally important it was to keep the sessions informal for group interaction and how necessary it was to limit materials so that the information would not seem overwhelming to the group. The student learned some of the typical
problems encountered in weight reduction such as the problems of holidays in an urban community, eating with the family, and attending social gatherings.

Counseling Nonprofessionals

The student observed and participated in several activities involving direct service. These activities provided a better understanding of the many ways the nutrition unit responds to the needs of the community. These experiences also gave an opportunity to observe the multidisciplinary approach in clinical care.

Several days were spent at the health centers observing and participating in the guidance and counseling of individuals. Although direct service is not always the best use of professional time, one of the priorities of the department is to provide medical services to those persons who would not otherwise receive medical care. The observations at the clinics demonstrated the role of the nutritionist in providing direct service and the need for team effort in providing services. The fact that many disciplines are present at a clinic does not guarantee that a team effort is taking place. In most clinics each discipline used only his own professional skill to provide care for the patient. There was little communication between professionals about the patients. At one health center the student observed the nutritionist "making the rounds" with the physician. The nutritionist had two purposes in following the physician through the clinic. Primarily the nutritionist felt that her services were not being utilized effectively and that by seeing the patients with the physician others would learn of her presence and
her services. This also was an attempt to provide team medicine. During the clinical work the student learned of the necessity for paramedical personnel. The student observed a health guide from the department translating for many Spanish-speaking families.

The student had the opportunity to counsel several patients which increased self-confidence in her ability to relate to individuals as a public health nutritionist. These opportunities gave the student the experience necessary for her to formulate her own concepts of the role of the nutritionist in the clinic situation. The best situation would be for the nutritionist to see all new patients for assessment and to continue seeing those needing follow-up, but this is too idealistic for one or a few nutritionists. The nutritionist should provide for other professionals criteria for identifying needs which require nutritional care. Thus the nutritionist could function by seeing referrals which the professional personnel such as the public health nurse had made to her.

The clinic seems to be an ideal place to use audiovisual aides while the patients are waiting to be seen by the staff. Tapes and slides would provide nutrition information and would be least demanding on the time of the nutritionist so that she can extend her professional services.

II. ANALYSIS OF PARTICIPATION IN A HEALTH FAIR

As part of the experience obtained during the field training, the student participated in a health fair which she has chosen to discuss in further detail. A description of the project, background and planning information, participation, and evaluation of the performance are included.
Description of the Project

The Levittown School District Number Five of Nassau County, under the direction of the district health coordinator, planned a health fair cooperatively with 20 health and welfare organizations. The student along with a public health nutritionist assisted in the multimedical screening program which was incorporated in the fair. Participants included persons over the age of 12, primarily from the area in and around Levittown, New York. Anthropometric measurements including height, weight, and skinfold thickness determinations were used as a screening device for an on-the-spot assessment of weight. In addition, a self-administrable questionnaire was prepared by the student with the professional and clerical assistance of the nutrition staff and provided for the participants. The questionnaire was used primarily to obtain a preliminary evaluation of food intake and secondly to obtain an indication of some of the typical eating habits of the population surveyed. Activities included preparation of several teaching materials to be used at the health fair.

Background and Planning

Shortly after the student arrived, she and the Director of Nutrition discussed several possibilities for a major project which the student was to conduct during her experience. Among the possibilities was to participate in the Levittown School Health Fair at Division Avenue High School in Levittown, New York. The theme of the fair was "Health is Happiness." This project was chosen because working with both adolescent and adult groups would offer a wide range of experience and also would
provide opportunity to work with a large number of residents from the county.

Preliminary planning had already taken place before the student arrived in New York. The school health service coordinator from District Number Five, who acted as chairman of the health fair, had contacted the Director of Nutrition requesting assistance with a nutrition component for the mass screening at the health fair. Several planning meetings of the Medical Advisory Committee had been held. At one of the meetings the Director of Nutrition had sent word that she would be interested in distributing a questionnaire on eating patterns for individuals to complete at the registration. It was anticipated that this form could be reviewed with participants at the time they were being weighed. In addition, the Director of Nutrition relayed to the committee that she would like to use the opportunity to publicize the services available from the nutrition unit. Although there was no one present at the meetings from the nutrition unit, there was a good line of communication between the committee and the Director of Nutrition. The medical director of the health fair was also the medical director at the Planview Health Center, a county health center. There were also detailed minutes of the Medical Advisory Committee meetings made available from each meeting.

The preliminary step in all program plans is to establish objectives and the methods necessary to carry out these objectives. The objectives were:

1. to do a nutritional screening on each of the fair participants who chose to attend the nutrition unit,

2. to evaluate some of the eating habits of the population surveyed,
3. to show the nutritional component of some of the community health problems which are related directly to foods and nutrition,

4. and to make known to the participants the services available from the nutrition unit at the Nassau County Department of Health.

To carry these objectives through certain methods were chosen. To screen the fair participants clinical, anthropometric, and dietary techniques were selected which included hematocrit determinations; height, weight, and skinfold measurements; and a food consumption questionnaire. Visual aids were planned to display typical nutritional problems and interests. For instance, the student planned to prepare a display of snacks for the adolescent and for the adult groups and a chart on reading labels correctly. Plans were also begun to show the "hidden fat" in a meal on poster board. A design was begun for a pamphlet to describe the services offered by the nutrition unit of the department of health.

After determining the objectives and methods for implementation, several conferences followed with both professional and lay persons. During a conference with the medical director at Plainview Health Center, the student learned that an estimated 300 persons were to participate in the fair. At this time publications on the use of the skin calipers in determining obesity were provided. The physician also offered to teach the technique of using the skin calipers. There were both formal and informal conferences with the nutrition staff throughout the planning stages of the project. These included discussion of the type of questionnaire to be used, its content, and the possibilities for using the results. The criteria to be used in the screening and the staffing for the health fair were considered.
The screening process and the criterion for referral were a major consideration in planning the project. The criterion for obesity was chosen as recommended by Mayer and Seltzer in a table which is presented in Appendix C (18).

Staffing the nutrition unit at the health fair involved contacting persons from the fair and administrative decisions concerning who on the staff should go to the fair. It was decided that a public health nurse would weigh the participants and that the student would take the skinfold measurements. The student would also do the initial nutritional screening and make the necessary referrals to the public health nutritionist. The nutritionist individually counseled the persons who were referred to her by the student. A volunteer was present to record both the weight and skinfold measurements.

Of major concern was the nutrition questionnaire to be used at the health fair. It was determined that the questionnaire would have to be self administered. It was important that the questionnaire be as brief as possible since the health fair was actually a walk-through screening. The form also needed to be organized in such a manner that the student and the nutritionist could easily scan the answers to make the necessary referrals and/or suggestions for attaining a more nutritionally balanced diet. Thus it was decided that the questionnaire be at maximum one-page and that a checklist form would be easier for the respondent to complete. All of the above stipulations had to be considered before a form could be established. It was learned that separate medical forms were to be used for the youth and adult groups. The planning committees had chosen a pink paper for the youth group and green for the adults. It was then
decided that two different questionnaires could be used and easily distributed by following the same color scheme.

In addition to the questions to be used for the initial screening, that is the food frequency checklist, the questionnaire was also used to determine some food patterns. One question refers to the type of milk used most frequently, another to the number of meals and snacks eaten daily. The forms were individualized for the two groups. The student believed that an indication of the time the adolescent left home would give some indication of the eating and living patterns. Also when the adolescent eats and who prepares the food may indicate living and eating patterns of this group. It was anticipated that these questions could provide a base for suggesting specific areas of nutritional need and might be an indication of need for some changes in eating habits with the population surveyed. The questionnaires are presented in Appendix C.

The student had several conferences with persons outside the department of health. The Director of Nutrition and the student went to the school where the health fair was to be held for a conference with the school health coordinator. It was decided during the conference which rooms would be used for the nutritional screening. Also a request was made at this time for a volunteer to assist with the nutritional screening. It was learned at this meeting that students from the high school had volunteered to set-up the display area and man the booth. The student was then anxious to learn of the plans for the display. Since they had chosen the theme "Nutrition and Weight Reduction," the student offered to be ready to give suggestions and advice and to guide the volunteers. A meeting was arranged with several high school students to give them advice in planning a nutritional display.
There were no adequate teaching materials on normal nutrition which could be distributed to individuals at the health fair from the department of health. This was due to budgetary cutbacks at the state health department, the source of most pamphlets in the past. For the conference to be meaningful, some type of handout materials which could be used as a teaching aid for the nutritionist during the counseling sessions was needed. A pamphlet was designed which describes the Basic Four Food Groups. The pamphlet is presented in Appendix C. The student sketched the design and with the approval of the Director of Nutrition she prepared it for printing. With the professional guidance of several members of the staff from the Office of Public Health Education, the techniques and the processes involved in preparing materials for printing were learned. After getting the pamphlet "print ready" it was learned that it had to be sent through certain channels for approval.

Another visual aid was designed for use at the health fair. The idea initially planned for a display describing the services of the Office of Nutrition to be used in the booth area was adapted as a flyer. The flyer is presented in Appendix C.

On the day prior to the fair it was learned that the pamphlet which had been prepared would not be ready for use because it had not been approved in time for printing. The Director of Nutrition and the student then gathered older materials from the office to be used in place of the pamphlet.

Participation

The day of the fair brought many new responsibilities to the student.
The first activity involved establishing a work-flow pattern to facilitate an organized walk-through screening at the nutrition unit. The flow chart can be found in Appendix C. Materials were also displayed thus providing nutrition information for all fair participants.

Overplanning is a necessity when arranging a service, but there were many problems which were not anticipated. The estimated 300 persons who were expected to attend the fair multiplied to over 1,500 individuals. The unexpected crowd caused much confusion.

Only 300 copies of the nutrition questionnaire were printed. Therefore not all fair participants were given the opportunity to participate in the full nutritional screening. The student requested more copies of the questionnaire, but these were not available until late in the day. Also confusion at the registration desk caused many adults to receive youth questionnaires and likewise many youths received the forms which were prepared for the adults.

Although not all participants who came through the nutrition unit had received questionnaires, the student planned to have their weight, height, and skinfold measured so that these persons could be screened for obesity and appropriately referred to the public health nutritionist for further counseling.

The student tabulated the questionnaire and submitted the results to the school health coordinator. A copy of the results may be found in Appendix C. Although the results of those screened were meaningful, no valid conclusions can be made about all fair participants. The variation in responses to food preferences and dislikes indicated that a group of persons living in suburbia do not have common dietary patterns.
Malnutrition was present in persons who attended the fair. But the major nutritional problems were not related to under but over nutrition; over 40 percent of the population surveyed were at or above minimum obesity levels. Hematocrit determinations were done by medical professionals of the community. Of 548 persons hematocrit readings showed six below and 45 above the established percentage levels. Levels between 35 and 45 percent were considered normal as established by the medical advisory committee of the health fair.

Evaluation

In evaluating the activity in terms of experience, insight was gained into the needs and interests of many persons from Nassau County. The procedures and techniques for planning and carrying out a nutritional screening were also learned. Personal strengths and weaknesses displayed during the planning and participation stages of the health fair were also analyzed.

The experience was especially meaningful in providing contacts with many professional and lay persons in the community. Although the student could not be present for all planning required to have a multi-medical screening program, she became familiar with many of the procedures. Coordinating services, floor plans, volunteers, and follow-up procedures were necessary in planning the health fair.

Of most importance was the opportunity to participate in a successful health service which served over 1,500 persons in one day. The fact that such a large number of individuals came and stood in lines for as long as seven hours pointed out the great need and/or interest for health
services for the middle income groups in Nassau County. Certainly this is some indication that these persons recognize the need for health care. As one participant said, "I would have to take off three days from work and pay over $100,000 to receive the medical tests available at the fair."

The student designed a questionnaire which was suitable for the fair and planned screening techniques which would quickly point out many persons needing nutritional counseling. The skill obtained in using skinfold calipers will be helpful to the student throughout her professional career.

Preparing the pamphlet and the flyer were also an important part of the project. The student learned that the pamphlet was sent not only to the Commissioner of Health for approval but also to the Executive Deputy Commissioner, the Director of Personal Health Services, and the Director of Nursing for their comments and approval. Although the administrative process caused much disappointment and frustration the student was able to take an alternate route and gather other older materials so that the fair participants would receive some nutritional information. After discussing the problem with the Director of Nutrition and the Regional Nutritionist, the student was able to take a more positive view of the delay. The comments from the staff of the department were helpful and several additions were made after reading their comments to clarify certain points. The student learned to plan in advance when possible for this type project. Although the pamphlet was not used at the health fair, it will be used in the departmental clinics by the nutritionists and in answering the many requests received by the nutrition unit for dietary information. The flyer was used for many other
meetings which the student attended and for several others which the nutritionists attended where there was an opportunity to point out the nutritional services offered at the Nassau County Department of Health.

If the opportunity arose for a similar service the student believes that it should be repeated for several reasons. The 1,500 persons who attended indicated a need for such services. Furthermore the school officials became aware that nutritional services are available in the department of health and that these services are needed and should be used to their advantage. The fair coordinator mentioned to the student that the school health nurses from the school district would benefit from some in-service education from a public health nutritionist. The public health nutritionist can capitalize on activities of this nature. There is a great need to bring an awareness to the community about how to obtain the optimum health which all health professionals are advocating.

The student gained self-confidence in her abilities to perform many of the tasks typical of a public health nutritionist through attending and participating in conferences, planning the activity, participating in the activity, and evaluating both her performance and the activity. Although there was much confusion during the health fair and many original plans were not carried through the student planned and provided a service of value.
SUMMARY AND CONCLUSION

Seven weeks of field training in Nassau County provided opportunities for the student: to observe and participate in a gamut of experiences typical of a public health nutritionist, to study the County of Nassau, to observe the role of the department of health, and to increase self-confidence in personal abilities.

The orientation to the Nassau County Department of Health contributed an understanding of the organization and the role of the department in meeting the needs of the community. Insight was gained through the conferences which the Director of Nutrition arranged for the student. The countless discussions the student had with the Director of Nutrition and her staff brought a greater understanding of the department and the role of the nutrition unit within the agency. These persons provided opportunities for the student to grow and expand in those areas which she showed special interest such as designing teaching materials and working with weight reduction classes. They also led the student to develop other interests in the field in addition to those which she had identified before coming to Nassau County.

The student saw how priorities of each unit must relate to those of the entire department. Thus, program planning is greatly influenced by the overall priorities of the organization. Emphasis is now on two target groups of the population: the indigent and the aged. The nutrition unit functioned to serve these groups. Of more importance is that they did not limit their nutritional expertise to those two groups as
they identified priorities for the nutrition program. Many other county residents are suffering from malnutrition. The main nutritional problems are not related to deficiency but to abundancy, an abundancy of food, food faddism, and food misinformation.

Nassau County has many resources but adequate coordination of these assets has yet to come. The student observed priorities in a community of affluence. Problems are no longer with obtaining services, the resources are present in Nassau County. Coordinating resources should be of major concern to all professionals involved in community health. Many organizations in the county appear to be agency centered rather than problem centered. A major priority of the county should be the coordination of these services into organized health care delivery systems.

The student through her experiences gained an understanding of professionalism. She learned to trust her own judgement and become more self-confident about her analysis of events and people. The student felt a great sense of accomplishment and responsibility through developing materials for various presentations and activities.

Through her experiences the student realizes that there is a great need for self improvement. Areas needing strengthening are in developing patience with the realities of work situations. Also additional examples to illustrate information she presents are needed. These weaknesses will be improved with more professional experiences.

Philosophies of public health and public health nutrition have also been broadened during the experience. Society is becoming aware of the need for more adequate health care. A small number of health agencies
could not provide for all needs of a complex community. The student believes that because of these complexities and the changes which are occurring in health delivery systems, the role of the official agency must change. Health care systems are in great need of better planning, coordination, and evaluation. Who is better equipped to meet these needs than the official health agency? Most departments of health could serve in this capacity to explore and demonstrate new methods and techniques as well as those which have already been established. Thus they could function in planning and evaluating health care delivery systems.

Public health nutrition is also at a crossroads. As a health science it can either lose its place in the field or it can become a most important public health modality. It is a modality acceptable to all persons—everyone eats. Society is reaching out for more adequate health care in many ways. Much attention in recent years has been paid to diet. The "age of rising expectations" is shown once again in the great emphasis which has been placed on "health foods." How is the public health nutritionist to meet the growing needs and demands of the society? She must be an informed activist in health care planning and in political affairs if her services are to contribute to improving community health. The field training has provided the background for the student to begin fulfilling this role.
BIBLIOGRAPHY
BIBLIOGRAPHY


9. Personal communication with Ms. Carlos, Nassau County Department of Social Services, April, 1972.


11. Personal communication with Dr. Plotnick, Director, Office of Dental Health, May, 1972.


14. Personal communication with Dr. Dowling, Commissioner of Health, April, 1972.


APPENDICES
Fig. 4. Designated poverty tracts of Nassau County
Fig. 5. Concentrations of physicians offices in Nassau County.
CONCENTRATIONS OF DENTISTS OFFICES

Fig. 6. Concentrations of dentists offices in Nassau County.
JOBSPECIFICATIONS FOR NUTRITION POSITIONS

NASSAU COUNTY DEPARTMENT OF HEALTH

A. DIRECTOR OF PUBLIC HEALTH NUTRITION

General Statement of Duties

Performs responsible professional public health nutrition work of an administrative and supervisory nature; performs related duties as required.

Complexity of Duties

Under general supervision, the duties require the use of considerable independent judgement in planning, organizing, implementing, and directing the total nutrition program in accordance with public health policy.

Typical Duties

1. Plans, organizes, evaluates the total nutrition program to subordinates and the public.

2. Establishes program objectives consistent with goals of the entire health department.

3. Plans effective budget management and personnel utilization.

4. Plans and advises on the nutritional and dietary aspects of research studies.

5. Conducts in-service training programs.

6. Prepares articles and speaks before community and professional groups.

Qualifications

Knowledge, Skills, and Abilities

1. Extensive knowledge of the principles and practices of dietetics and nutrition.
2. Extensive knowledge of nutritional requirements of individuals of varying ages and occupations and special diet requirements in a wide range of diseases.

3. Thorough knowledge of community health organizations and resources.

4. Ability to organize and direct the activities of others.

5. Ability to establish and maintain cooperative relationships.

6. Ability to express ideas, both orally and in writing.

Training and Experience

1. Master's degree with a major in nutrition or public health nutrition; and

2. Satisfactory completion of an approved dietetic internship; and

3. Five years of successful paid experience in nutrition or public health nutrition, three years of which should include administrative and supervisory responsibility.

B. PUBLIC HEALTH NUTRITIONIST I

General Statement of Duties

Assists in the conduct of a public health nutrition program; performs related duties as required.

Complexity of Duties

Under general supervision, the duties are professional and require the use of considerable judgement.

Typical Duties

1. Conducts case conferences with public health nurses to calculate diets prescribed by physicians.

2. Assists in nutrition education program for professional and lay groups.

3. Advises citizens in individual matters relating to nutrition.
4. Prepares digests of articles from current literature.
5. Assists in the conduct of an in-service training program.
6. Keeps records and prepares reports.

Qualifications

Knowledge, Skills and Abilities

1. Considerable knowledge of the principles and practices of dietetics and nutrition.

2. Considerable knowledge of nutritional requirements of individuals of varying ages and occupations and special diet requirements in a wide range of diseases.

3. Knowledge of community health organizations and resources.

4. Ability to develop educational and instructional materials.

5. Ability to express ideas orally and in writing.

6. Ability to keep records and prepare reports.

Training and Experience

1. Bachelor's degree with major courses in foods and nutrition and substantial preparation in the basic sciences; and

2. Completion of 30 graduate credit hours including public health nutrition, nutrition education, foods and nutrition or institutional management; and

3. Satisfactory completion of an approved dietetic internship; and

4. Two years of experience as a nutritionist in public health or as a specialist in foods and nutrition.

C. PUBLIC HEALTH NUTRITIONIST II

General Statement of Duties

Plans and conducts a public health nutrition program; performs related duties as required.
Complexity of Duties

Under the general supervision of the Commissioner of Health, the position is professional and administrative and the duties require the exercise of independent planning and judgement.

Typical Duties

1. Develops, conducts and evaluates all phases of a local public health nutrition program.

2. Coordinates nutrition services with other appropriate services within the Department of Health.

3. Provides a nutrition education program for professional and lay groups.

4. Cooperates with other agencies in establishing and conducting nutrition programs.

5. Conducts an in-service training program.

6. Prepares reports and articles for publication.

Qualifications

Knowledge, Skills and Abilities

1. Thorough knowledge of the principles and practices of dietetics and nutrition.

2. Thorough knowledge of nutritional requirements of individuals of varying ages and occupations and special diet requirements in a wide range of diseases.

3. Considerable knowledge of community health organizations and resources.

Training and Experience

1. Bachelor's degree with major courses in foods and nutrition and substantial preparation in the basic sciences; and

2. Completion of 30 graduate credit hours including public health nutrition, nutrition education, foods and nutrition or institutional management; and

3. Satisfactory completion of an approved dietetic internship; and
4. Four years of successful paid experience in nutrition work including at least two years in public health or community nutrition service.
Coding System for Time Spent on Activities in the Office of Nutrition

I. CASE CONFERENCES

A. Diabetes
   1) c.c.  2) prep.  3) plan. conf.  4) read.  5) other
B. Obesity
   1) "  2) "  3) "  4) "  5) "
C. TB
   1) "  2) "  3) "  4) "  5) "
D. G.I. Diseases
   1) "  2) "  3) "  4) "  5) "
E. Cardiac
   1) "  2) "  3) "  4) "  5) "
F. Other
   1) "  2) "  3) "  4) "  5) "
G. AP&PP
   1) "  2) "  3) "  4) "  5) "
H. Family Food Mgt.
   1) "  2) "  3) "  4) "  5) "

II. OTHER CONSULTATIONS

A. Normal Nutr.
   1) c.c.  2) prep.  3) plan. conf.  4) read.  5) other
B. Ntr. dur. Preg.
   1) "  2) "  3) "  4) "  5) "
   1) "  2) "  3) "  4) "  5) "
D. Ntr. dur. Adol.
   1) "  2) "  3) "  4) "  5) "
E. Ntr. of Aged
   1) "  2) "  3) "  4) "  5) "
F. Food Comp.
   1) "  2) "  3) "  4) "  5) "
G. Weight control
   1) "  2) "  3) "  4) "  5) "
H. Ntr. in Disease
   1) "  2) "  3) "  4) "  5) "
J. Food Fad & Fallac.
   1) "  2) "  3) "  4) "  5) "
K. Career Guidance
   1) "  2) "  3) "  4) "  5) "
L. Ntr. Prob.&Prog.
   1) "  2) "  3) "  4) "  5) "
M. Don. Foods&Food Stp.
   1) "  2) "  3) "  4) "  5) "
N. Food Ser.
   1) "  2) "  3) "  4) "  5) "
   1) "  2) "  3) "  4) "  5) "
P. Service of P.H. Ntr.
   1) "  2) "  3) "  4) "  5) "
R. Prof. Empl.&Train.
   1) "  2) "  3) "  4) "  5) "
S. Dental Health
   1) "  2) "  3) "  4) "  5) "
T. Culture&Rel. Food Patterns
   1) "  2) "  3) "  4) "  5) "
III. COMMUNITY & PROFESSIONAL ACTIVITIES

A. WRP
   1) session  2) prep.  3) Planning  4) read.  5) other
B. H.H. Aides
   1) "  2) "  3) "  4) "  5) "
C. Homemaker
   1) "  2) "  3) "  4) "  5) "
D. Head Start
   1) "  2) "  3) "  4) "  5) "
E. Health Guides
   1) "  2) "  3) "  4) "  5) "
F. Other
   1) "  2) "  3) "  4) "  5) "
G. Talks
   1) "  2) "  3) "  4) "  5) "
H. Part. in Program
   with others
   1) "  2) "  3) "  4) "  5) "
   1) mtgs. a)att. b)cond. c)spkr. 2) confs. 3) corres.
   4) prep. 5) other (NCNC&NYSNC)
K. Prof Org.
   1) mtgs. a)att. b)cond. c)spkr. 2) confs. 3) corres.
   4) prep. 5) other

L. Training Courses for
   Prof. Adv.
   1) session a)att. b)cond. c)spkr. 2) confs. 3) corres.
   4) prep. 5) other

IV. DEPARTMENTAL ACTIVITIES

A. Staff Education
   1) session  2) prep.  3) Plan. Conf.  4) other  5) obs.
B. Orientation
   1) "  2) "  3) "  4) "
C. Field Experience
   1) Plan. Conf. 2) "  3) conf. w. stud. 4) repts. 5) corres.
   6) other
D. Meetings
   1) att.  2) cond.  3) prep.  4) corres. 5) other
E. Conferences
   1) dept.pers. 2) Reg.Ntr. 3) other  4) secy.  5) dept.ntr.
   6) stud.
F. Reports
G. Correspondence
H. Memos
J. Mail
K. Reading

L. Clinic  1) well child  a) conf. w. pts.  b) consult. to MDs  c) consult to PHNs  d) observation  e) prep.
                      2) maternity  a) conf. w. pts.  b) consult to MDs  c) consult to PHNs  d) observation  e) prep.
                      3) pediatric  a) conf. w. pts.  b) consult. to MDs  c) consult to PHNs  d) observation  e) prep.
                          4) medical  5) geriatric  6) chest diagnostic  7) dental  8)  9) other

M. Miscellaneous
APPENDIX C

TABLE 2

OBESITY STANDARDS IN CAUCASION AMERICANS

<table>
<thead>
<tr>
<th>Age (Years)</th>
<th>Minimum Triceps Skin-fold Thickness Indicating Obesity (Millimeters)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
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<td>7</td>
<td>13</td>
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<td>27</td>
<td>21</td>
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<td>28</td>
<td>22</td>
</tr>
<tr>
<td>29</td>
<td>22</td>
</tr>
<tr>
<td>30-50</td>
<td>23</td>
</tr>
</tbody>
</table>

NUTRITION QUESTIONNAIRE

To be filled in after examination:

Weight _____ Skinfold thickness _____ Hematocrit ______

Please complete the following carefully. Keep this with you until you have finished all the tests.

Age ______ Sex (circle) M F Height without shoes ______

How often do you eat these foods? Check answer.

<table>
<thead>
<tr>
<th>Food</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hard Cheese or Cottage Cheese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ice cream, pudding</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breads, Cereals</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Citrus fruits or fruit juices</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. orange juice, grapefruit)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other fruits or raw vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green leafy or yellow vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat, poultry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Eggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peanuts or peanut butter</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Dried beans or peas</td>
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</tr>
<tr>
<td>Butter of cream cheese</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweet rolls, donuts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cake, pie, cookies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soda, Koolade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee, tea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Most liked foods:

1. ________________________________
2. ________________________________

Most disliked foods:

1. ________________________________
2. ________________________________

Which form of milk do you usually use? Circle.

Whole     Skim or non-fat dry     98-99% fat-free     None

How many meals do you usually eat daily? ____________________________
How many times do you snack daily?

What time do you leave for school everyday?

What time do you eat your first food everyday?

Who usually prepares this food?
NUTRITION QUESTIONNAIRE

*******************************************************************************
To be filled in after examination:

Weight ______ Skinfold thickness _______ Hematocrit ________

*******************************************************************************

Please complete the following carefully.  Keep this with you until you
have finished all the tests.

Age (circle) 21-29  30-39  40-49  50-59  60+

Sex (circle) M  F

Height without shoes______________

How often do you eat these foods?  Check answer.

<table>
<thead>
<tr>
<th>Food</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Never</th>
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<td>Milk</td>
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<td>____</td>
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<td>____</td>
<td>____</td>
<td>____</td>
<td>____</td>
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<tr>
<td>Coffee, tea</td>
<td>____</td>
<td>____</td>
<td>____</td>
<td>____</td>
</tr>
</tbody>
</table>

Most liked foods:

1. ____________________________  1. ____________________________
2. ____________________________  2. ____________________________

Most disliked foods:

Which form of milk do you usually use?  Circle.

Whole    Skim or non-fat dry  98-99% fat-free  None
How many meals do you usually eat daily?__________________________

How many times do you snack daily?____________________________
NO MATTER
WHAT SHAPE

FOOD

MAKES A DIFFERENCE
No matter what shape you're in, food makes a difference.
YOUR FAVORITE FOODS
HAVE VARIETY IN YOUR DIET BY EATING DIFFERENT
FOODS FROM EACH OF THE
BASIC FOUR GROUPS DAILY

MILK GROUP

SERVINGS:
2 or more—Children under 9
3 or more—Children 9 to 12
4 or more—Teens
2 or more—Adults
ONE SERVING = 1 CUP
OR 1 OUNCE HARD CHEESE

Foods in this group are good sources of CALCIUM needed for healthy bones and teeth. These foods also supply PROTEIN, RIBOFLAVIN, and VITAMIN A.

MEAT GROUP

SERVINGS:
2 or more for all ages
ONE SERVING = 2 OUNCES SMALL
3 OUNCES AVERAGE
4 OUNCES LARGE

Foods in this group are good sources of PROTEIN needed for body growth and repair and maintenance. These foods also supply IRON, B VITAMINS - THIAMINE, RIBOFLAVIN, and NIACIN.

FRUIT AND VEGETABLE GROUP

SERVINGS:
4 or more—Children under 9
5 or more—Children 9 to 12
6 or more—Teens
2 or more—Adults
ONE SERVING = 1 CUP COOKED

Foods in this group are good sources of both vitamins and minerals. Citrus fruits and tomatoes are especially rich in VITAMIN C; the leafy greens and yellow vegetables are good sources of VITAMIN A.

BREAD AND CEREAL GROUP

SERVINGS:
4 or more for all ages
ONE SERVING = 1 SLICE BREAD
OR 1/2 CUP COOKED CEREAL

Foods in this group are good sources of IRON and B VITAMINS - RIBOFLAVIN, THIAMINE, and NIACIN.

PLUS...
OTHER FOODS:

Some foods are not listed in the BASIC FOUR such as butter, margarine, other fats, oils, sugar and other sweets. These foods are added during preparation or at the table to enhance flavor. These "other foods" supply calories and can add to the total nutrients in meals.
WHAT'S IT ALL ABOUT?

Need Sound Food Advice?

Help With A Special Diet?

WHO: Contact an expert - A qualified Public Health Nutritionist

WHY: To help solve your nutritional problems

WHERE: NASSAU COUNTY DEPARTMENT OF HEALTH
OFFICE OF NUTRITION
210 Old Country Road
Mineola, New York 11501
Telephone: 535-3373
Fig. 7. Work flow chart used at the Levittown Health Fair, Nutrition Unit, 4-72.
Summary Results from Nutrition Unit at the Health Fair.

The nutrition questionnaire used at the Health Fair was designed for a dual purpose:

1. As a screening device for persons attending the nutrition unit.

2. As a survey to define some of the eating habits of the population attending the Health Fair.

Each individual who came through the Nutrition Unit was measured for weight, skinfold thickness, and height (if unknown). There were over 200 persons to receive the anthropometric screening measurements. All measurements were not recorded on each individual's nutrition questionnaire because of shortage of forms at the entrance station. Many of these measurements are on file with the medical history sheets at Mrs. Forer's office. Because these were not easily accessible for group evaluations they will be kept on individual record sheets and not tabulated for group results. The nutrition section has tabulated those results which they were able to record. Report follows of a summary of their results.

SUMMARY RESULTS

Of the 500 questionnaires that were distributed, 27 percent were completed and returned. Only 119 were completed and returned. This is less than 10 percent of the fair participants.

Youth Group

A total of 26 forms were returned from the youth population who attended the fair. Only 12 of these attended the nutrition unit for a primary anthropometric screening. We found 42 percent of these individuals measured to be at or above minimum obesity levels. These persons were referred to a Public Health Nutritionist for conference.

Adult Group

A total of 93 questionnaires were completed by the adult population who attended the Health Fair. Of these 65 attended the Nutrition Unit for screening. We found 45 percent of this population to be at or above minimum obesity levels. These persons were also provided with information and/or conferences with the Public Health Nutritionist. Information was tabulated concerning some of the eating habits of those persons who completed the questionnaires.
Youth Group

**Breakfast**  
79 percent had food before leaving for school; 74 percent of these persons had food which was prepared by their mother.

**Food preferences**  
More individuals chose foods from the "meat group" as their preference over any other food group for both 1st and 2nd choice. The "bread group" response was the next most frequently noted.

**Food dislikes**  
More individuals responded to disliking fish than any other food. Vegetables were second most popular in response. No youth responded to disliking milk or fruit in either choice. Most individuals responded to taking food (meals and snacks) 5 or more times daily, except those persons who were at or above minimum obesity levels. These individuals all responded to taking food 3 or less times/day.

---

Adult Group

**Meals**  
86 percent ate 3 meals/day

**Milk**  
In response to type of milk: 59 percent use whole milk, 23 percent use skim milk, 9 percent use 98-99% FF, 9 percent use no milk.

**Food preferences**  
More individuals (63 percent) chose foods from the "meat group" as their first choice. For second choice foods were most often selected from "vegetable and fruit groups" (39 percent), "milk group" (30 percent).

**Dislikes**  
Most individuals responded to disliking fish and liver over any other food.

**Comments**  
With such a small population who participated in the survey, it is impossible to make any legitimate conclusion from the total population that attended the Fair.
VITA

Suzanne Repnicki was born in Philadelphia, Pennsylvania on May 16, 1949. She attended elementary school in Western Springs, Illinois. Her junior and senior high school years were spent in Huntingdon Valley, Pennsylvania attending Archbishop Wood High School. The following fall she entered Huntingdon College in Montgomery, Alabama and in May 1971, she received a Bachelor of Science degree in Home Economics. She was honored by being selected for Who's Who in American College and University Students. During the summer of 1971 she began graduate study for a Master of Science degree in Nutrition with a minor in Public Health.