Field Experiences with the Division of Nutrition in the Wisconsin State Board of Health

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To the Graduate Council:

I am submitting herewith a thesis written by Joan Elizabeth Dow entitled "Field Experiences with the Division of Nutrition in the Wisconsin State Board of Health." 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.

Beth Duncan, Major Professor

We have read this thesis and recommend its acceptance:

Harold H. Walker, Florence L. MacCleod

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

(Original signatures are on file with official student records.)
This report is based upon observations and experiences during a seven weeks' period of field training with the Division of Nutrition in the Wisconsin State Board of Health in Madison, Wisconsin.

The purpose of the field training was to supplement the on-campus academic education in Public Health Nutrition with practical nutrition experiences and observation. More specifically, the purpose was to help the student-nutritionist gain an understanding of the function of a state nutrition staff that works through a decentralized, district organization.

A varied program was planned by the Director of the Division of Nutrition to help the student accomplish these objectives. Four and one-half weeks were spent in five of the eight district health offices, and the remaining time was spent in the central office in Madison. Information was obtained on organization, history, programs, and services of the Division of Nutrition by reading state publications and reports and by having conferences with the nutrition director and the district nutritionists. The student-nutritionist observed and participated in field visits, in-service education and training classes, interdisciplinary team conferences, and the annual meeting of the Wisconsin Dietetic Association.

The student-nutritionist gained an understanding of the function of a state nutrition staff that works through a decentralized, district organization. She also became aware of the way in which each district nutritionist develops the nutrition program to meet the needs and interests of the people in the district. The student-nutritionist gained an appreciation of how important records and reports are for a continuous nutrition program. It was possible for the student to comprehend some of the changes which have occurred in the nutrition program emphasis since the division was organized in 1938. The student feels that she has a clearer concept of a large state nutrition program than she had before her field experience, and that this experience will enable her to become a better public health nutritionist.
To the Graduate Council:

I am submitting herewith a thesis written by Joan Elizabeth Dow entitled "Field Experiences with the Division of Nutrition in the Wisconsin State Board of Health." 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.

[Signature]
Major Professor

We have read this thesis and recommend its acceptance:

[Signature]
[Signature]

Accepted for the Council:

Dean of the Graduate School
FIELD EXPERIENCES WITH THE DIVISION OF NUTRITION
IN THE WISCONSIN STATE BOARD OF HEALTH

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
Joan Elizabeth Dow
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J. E. D.
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INTRODUCTION

This report is based upon the student-nutritionist's observations and experiences during a seven weeks' period of field training in the Spring of 1961 with the Division of Nutrition in the Wisconsin State Board of Health, Madison, Wisconsin. Wisconsin was selected because the student was interested in gaining an understanding of the function of a state nutrition staff that works through a decentralized, district organization. Before graduate study, the student had worked a year as Public Health Nutritionist in a centralized nutrition organization in a New England state, and it was hoped that this study of the Wisconsin program would supplement her previous experience.

One purpose of the field training was to supplement and support the on-campus academic education in nutrition with practical nutrition experiences and observations. Throughout the field experience, the student attempted to gain an understanding of how a state nutrition program is developed to fit the interests and needs of each district. It was anticipated that she would observe the methods and techniques used by the nutritionists. Another objective was to try to gain an understanding of how and why program emphasis has changed in Wisconsin since the Division of Nutrition was first organized in 1938.

To help the student accomplish these objectives, a varied program was planned by the Director of the Division of Nutrition and her staff. Four and one-half weeks were spent in five of the eight health district offices, and the remaining time was spent in the
central office in Madison. By reading state publications, background information was obtained about the State of Wisconsin. The student read narrative field reports and had conferences with the district nutritionists to obtain background knowledge pertaining to activities which the student would be observing. Selected monthly and annual reports were read to give the student a concept of the overall nutrition program. The kinds of activities observed were individual consultation conferences, group in-service education classes, and interdisciplinary team conferences. The student-nutritionist participated in nutrition program planning, in-service training programs, and conferences to evaluate nutrition materials. The student also attended the two-day annual meeting of the Wisconsin Dietetic Association in Milwaukee.

Throughout the seven weeks' training period, the student recorded information gained through observations, reading, meetings, and conferences. The summarized material is presented under four headings in this report.

Immediately following is a brief description of Wisconsin and its people. The remainder of the report gives information about the Wisconsin State Board of Health, the Division of Nutrition, and an evaluation of the training period.
Wisconsin is a midwestern state bounded by Lake Superior, Lake Michigan, and the states of Illinois, Iowa, Michigan, and Minnesota. Jean Nicolet came to the Green Bay section in 1634 and claimed the area, which is now the State of Wisconsin, in the name of France. France relinquished this area to England in 1760, and England gave it to the United States in 1783. Wisconsin was part of the Northwest Territory and was admitted to the Union as the thirtieth state in 1848. Then, as now, the people were noted for their great independent spirit. (Wisconsin Legislative Reference Library, '48).

The state was settled by many different groups of foreign born. Principal among these were the Germans, Dutch, Danes, Norwegians, Swiss, and Finns. Although there has been a gradual blending of cultures, various locales still show cultural evidence of the foreign born groups by the customs, festivities, and food habits of the people. A group of Swiss people settled in Monroe, and it is known as the "Swiss Cheese Capital of the World." The Germans settled in Milwaukee County, and one can obtain excellent German foods in restaurants in this county.

Approximately 98 per cent of the people are Caucasian with less than 2 per cent of the Negro and Indian races. The number of Negroes is increasing and the majority reside in the city of Milwaukee. The total Indian population has remained at approximately 12,000 (Hansen, '61). There are six distinct Indian tribes in
Wisconsin. They are the Chippewas, Menominees, Oneidas, Potawatomis, Stockbridge, and Winnebago. The Menominee Indians are the wealthiest tribe. They own a profitable lumber mill and garment factory.

Wisconsin varies geographically. Fertile land in the south is used for dairying while the north is a region of forests and lakes. Wisconsin is a favorite recreational area because of the 8,500 lakes, the 33 state parks, and the many miles of streams. The soil in the southwest is not very fertile, and the effect can be seen in a lower economy in the area. The southeast has become a highly industrialized area. This area borders Lake Michigan where good shipping facilities contribute to making it an industrial area. The city of Milwaukee, where approximately one-fifth of the population of Wisconsin resides, is located in this area.

The first important industries of Wisconsin were fur trading, lumbering, and mining. The lumber lands were almost depleted by years of lumbering. Although Wisconsin is not noted as a mining state, there are productive iron mines in Iron County. The State became a big producer of wheat with the development of the reaper and the harvester. As the dairy herds increased, the wheat was replaced by crops for cattle feed (Wisconsin Legislative Reference Library, '48). In 1959, Wisconsin was noted as first in the nation for hay production (Hansen, '61). For many years Wisconsin has been known as the "Dairyland." It is a leading producer in the United States of dairy cows, milk, and cheese. It is major producer of peas, corn, oats, and beets; and leads in the canning of fresh vegetables. Wisconsin is also noted for
cranberries, mint, cherries, apples, mink, and wood pulp.

The trend has been toward bigger farms with more acreage. This and the trend toward urbanization has decreased the number of people living on farms. In 1955, only 18.2 per cent of the total population was living on farms (Wisconsin Legislative Reference Library, '58). Fewer people are growing and preserving their own garden produce.

There is an influx of some 16,000 migrant farm laborers to Door County during the cherry and apple harvesting season. These people are not in one place long enough to receive adequate medical care. Their living facilities have been inadequate and unsanitary. A State Committee on Migrant Labor has been studying the problems and gradually improvements are being made.

There has been a great increase in industry. Wisconsin now ranks eleventh among the States (Hansen, '61). The greatest industrial production is heavy machinery. Next in importance is the manufacturing of beverages and food products. This area of industry employs one worker out of eight. (Wisconsin Legislative Reference Library, '58).

The per capita income in 1958 was $1,936. The average per capita income for the same period in the United States was $2,057. (Wisconsin Legislative Reference Library, '60).

Wisconsin ranks as the fourteenth state in population with approximately four million people. The population of the state increased 14.1 per cent between 1950 and 1960. In 1959, the number of resident births was 98,518; the number of resident deaths was
The leading causes of death are diseases of the heart, cancer, vascular lesions, and accidents. Certain diseases of infancy, influenza and pneumonia, general arteriosclerosis, diabetes mellitus, suicides, and congenital malformations are also in the leading ten causes of death. (Wisconsin State Board of Health, '60). Tuberculosis is no longer one of the ten leading causes of death in Wisconsin. Chronic diseases are now one of the major health problems in Wisconsin (Wisconsin State Board of Health, '60).

The mortality rate for the Indian infants is approximately three times the average infant mortality rate for Wisconsin. The Indian death rates from diseases of the heart, cancer, and cerebral hemorrhage are less than the rates for the State by approximately one-half, while the death rate from tuberculosis is three times as great.

It was stated by the Governor's Commission on Human Rights ('52) that the diets of Indians with good economic status are as poor as those on the lowest income level. Dental health is also a problem among the Indians. Although some have the opportunity to attend trade school, the average formal educational level is the eighth grade. Housing is substandard and only a few homes have electricity or running water. Many of the houses were built by the Work Projects Administration. The Indians did not build their homes, and they do not feel responsible for repairing them. (Governor's Commission on Human Rights, '52).

When planning a public health program it must be remembered that there is variation in geography, industry, income, and in the people
themselves. Thus, each health district must plan its program to meet the needs of the people. It was impossible in seven weeks for the student-nutritionist to determine the impact these factors have on the public health nutrition program. Although they cannot always be clearly defined, the Wisconsin program is influenced by them. For example, in communities where there is economic stress due to unemployment or to poor crops, more consultation is provided on low cost food planning. In areas where the birth rate is high, emphasis is given to educational programs concerning the needs of mothers and children. Where older people predominate, there are more requests for consultation on the nutrition problems of the chronically ill and aging.
I. ORGANIZATION

The Wisconsin State Board of Health was created by the Wisconsin Legislature in 1876. It was the eleventh state health department in the nation and the third in the middle west (Wisconsin Legislative Reference Library, '60).

The State Board of Health is administratively organized into five main sections which are: General Administration, Sanitary Engineering, Preventable Diseases, General Services, and Maternal and Child Health (Figure 1). Programs are planned and administered through the various divisions, bureaus, and units of these five sections.

The Official Board of the State Board of Health determines the broad policies that will be followed by the five sections. The Official Board approves existing programs and programs that are to be developed. The Official Board consists of seven members and the Secretary. The seven members are appointed by the governor, one each year, and approved by the state senate for seven-year terms. The Official Board members elect a Secretary who is both Executive Officer of the Official Board and the State Health Officer. Thus, selection of the State Health Officer is not political and does not change with each new administration. Since 1904 there have been only two State Health Officers. At the present time the Official Board has seven physicians and one dentist as members. (Wisconsin State Board of Health, '58).
Fig. 1 Organizational Chart of the Wisconsin State Board of Health
The overall objectives of the Wisconsin State Board of Health are the prevention of disease, prolongation of life, and the promotion of physical and mental health. The State Board of Health was given the following powers to obtain these objectives: to make and enforce rules and regulations, to hold hearings, to issue orders on subjects under its jurisdiction as established by statute, and to execute whatever authority is reasonable and necessary for the prevention and suppression of disease (Wisconsin State Board of Health, '60).

Each month the State Health Officer has a staff meeting with the heads of sections, bureaus, and divisions. One person is responsible for presenting an explanation of his program and services. A question and answer period follows the presentation. The meeting is recorded by tape and later the material is mimeographed and sent to all staff members of the State Board of Health.

Wisconsin is divided into eight health districts (Figure 2). When the districts were organized each had approximately the same population. Thus a district that was sparsely settled was larger in area than a district in an urban section. However, in past years increases in population in some areas have changed this picture. These eight health districts function as branch offices of the central office of the State Board of Health in Madison. The functions of a branch office are to expand and improve local health services and to provide general supervision of public health activities throughout the district. The eight district health offices provide advisory services to the more than 1,800 part-time local health officers in
Fig. 2 Wisconsin State Board of Health District Offices
the towns, villages, and cities of Wisconsin. The staff in each district includes a public health physician, an advisory public health nurse, a public health engineer, and sanitarians. Some districts may also have one or more of the following: a nutritionist, a dental health consultant, a stream pollution engineer, and a psychologist or a school health consultant. (Wisconsin Legislative Reference Library, '60). In several districts where vacancies exist in health officers' positions, the sanitary engineer is also the acting administrator. There are not enough trained physicians to fill the district health officers' positions.

The staff in each district office has meetings once a month. The time is set when the staff members are not doing field assignments.

II. LOCAL HEALTH SERVICES

There are very few local health departments. Several of the larger cities have health departments with part-time local physicians as directors. There is one city-county health department in the State, located in Eau Claire. Another city-county department is being organized. When there is no official health department, a part-time local health officer is elected by the people. This person usually has no formal training in public health. His functions are limited to reporting diseases and collecting vital statistics.

Each county has a Health Committee. The Health Committee employs the county public health nurse who must meet certification standards. The county nurse gives generalized nursing services within
the county. A large proportion of the nurse's time, however, is often devoted to school health services. The county nurse can consult with the District Advisory Nurse on special problems. Either the District Health Officer or the District Advisory Nurse attends all county health committee meetings within the district.

III. THE SECTION ON MATERNAL AND CHILD HEALTH

The Section on Maternal and Child Health is one of the five main sections (Figure 1) of the Wisconsin State Board of Health. The Bureau of Maternal and Child Health, Division of School Health, Division of Child Guidance, and Division of Nutrition compose this section. Activities of this section are primarily educational and based on the needs and interests of the Wisconsin communities. Emphasis is placed on teamwork within the section, and with all agencies and individuals working with children and their families. (Wisconsin State Board of Health, '60).

There was a shortage of physicians throughout the State during World War II. Direct clinic services were provided during this period to help fill a need. Five pediatricians were employed by the Section on Maternal and Child Health to conduct the clinic work. Well-child supervision is now available throughout the state from private physicians, and this service is no longer needed. There are no direct individual medical referrals to this section.

Staff meetings of the division directors currently are being held every Friday with the new Director of the Section of Maternal and Child Health.
THE DIVISION OF NUTRITION

I. PHILOSOPHY

The philosophy for the nutrition program is essentially the same now as when the Division of Nutrition was organized. It is stated in the Wisconsin State Public Health Plan (Wisconsin State Board of Health, '59) that, "Since good nutrition is a basic health need of all age groups, programs to promote good nutrition should be continuous and should reach people in all areas of the state." Program activities are adapted to the changing interests and needs of the people. The goal is to improve the physical and mental well-being of the people of Wisconsin by improving their food habits.

The nutrition division has always attempted to plan a program that does not overlap nutrition services of other agencies in the State. There is periodic clearance with other agencies giving nutrition services. This type of interagency planning is intended to avoid duplication of services and to provide some coverage of all nutritional needs. Other official agencies with trained personnel are: the State Department of Public Welfare with two dietitians; the School Lunch Program in the Department of Public Instruction with one dietitian; the city of Milwaukee with one public health nutritionist; and the University Agricultural Extension Service with nutrition specialists. The nutrition position in Milwaukee is presently vacant. There is no official nutrition coordinating committee in Wisconsin.
II. HISTORY AND ORGANIZATION

The Division of Nutrition was organized in 1938 in the Section on Maternal and Child Health. It was placed in this section because the available funds came from the Children's Bureau in Washington, D. C., and there was special concern for meeting the needs of mothers and children. While the program emphasis is on maternal and child health, the nutrition division provides a generalized service for all age groups.

The present director of the Division of Nutrition was employed when the division was organized. Plans were made at that time to develop the program as a centralized service until there were four or five nutritionists on the staff. It was proposed that the nutritionists would then be decentralized to the district health offices to develop nutrition programs on a district level. The director was the only nutritionist for the first four years. During this period, she made contacts with professional and lay groups to discern what was already being done in nutrition programs. Four additional nutritionists were employed between 1942 and 1947. The nutrition division was decentralized in 1950. Four nutritionists moved to district health offices, each giving services to more than one district. (Olmsted, '60). The nutrition division staff was increased gradually to eight nutritionists, the director and seven district nutritionists. All positions are filled at the present time. Five of the eight health districts (Figure 2) are covered by a full-time nutritionist. The remaining three districts are covered part-time. One nutritionist divides her
time between District 6 and 8. Another district nutritionist works part-time in District 4 and the remaining time in the central office in Madison.

The broad program areas are basically the same in all districts. The emphasis varies to meet the health problems, interests and needs of the people in each district. Another influential factor is the available health personnel in the district. As was mentioned previously, the health districts differ in size which also has an effect on the execution of the district nutrition program.

III. STAFF

Staff Qualifications

The position of Director of the Division of Nutrition is classified as a Nutritionist III. The requirements for this position are the same as for a Nutritionist II plus five years or more of experience in public health. This experience should include two years of supervisory and consultation work.

The qualifications for a district consultant nutritionist, Nutritionist II, include a Bachelor's Degree in Foods and Nutrition, a dietetic internship, a Master's Degree in Foods and Nutrition or in Public Health Nutrition, and three years or more of work experience. The work experience should include hospital dietetics and community nutrition work. A district nutritionist needs the dietetic training because she provides consultant services to small hospitals and nursing homes as a part of the generalized nutrition program.
Although there is a Nutritionist I classification, no positions are now set-up for this classification. This classification may be used in the future when the number of nutritionists is increased in a district. The Nutritionist I position was established for persons who might lack the necessary experience for assuming responsibility in district positions or who might be recruits for graduate training.

A description of the nutrition positions and present salary ranges can be found in the Appendix (see page 45).

Staff Responsibilities

The seven district nutritionists are technically responsible to the Director of the Division of Nutrition and administratively responsible to the District Health Officer. In districts where the sanitary engineer is the administrative officer, the Director of the Division of Nutrition provides administrative direction to the nutritionist. The nutrition director keeps informed about district work through individual field narrative reports, monthly reports, correspondence, direct visits, and staff meetings. The health officer coordinates the nutrition services with other district health programs.

Following is a statement of the duties of the nutrition director as given in the Wisconsin State Public Health Plan (Wisconsin State Board of Health, '59)

... assembles information relative to nutritional needs and problems in the state, develops over-all program plans, coordinates programs with those of other units of the health agency and other state agencies, provides technical guidance and supervision to nutrition field staff; provides consultation to personnel in other divisions of the health department, other state agencies and
organizations; participates in some state-wide and regional meetings; assists in preparation of educational materials for state-wide use; provides limited service in districts without nutritionists and performs other general administrative functions.

IV. THE NUTRITION PROGRAM

Operation of the Nutrition Program

Important to the efficient operation of a nutrition program are holding staff meetings, recording and reporting activities, disseminating nutrition information, recruiting and orienting new staff, and providing opportunities for professional advancement for staff members. The following is an explanation of each activity as it relates to the total nutrition program.

Nutrition division staff meetings. The nutrition division holds a two-day staff meeting approximately every three or four months. The district nutritionists usually meet in the central office in Madison with the Director of the Nutrition Division. Staff meetings are often combined with a program for in-service education. A program or a workshop might be planned on a subject of special interest and need. Last year, one staff meeting was held in District 6 to give the director and the district nutritionists an opportunity to observe the food service operation in a new hospital in Green Bay. At a recent meeting the method to be used for revising the Wisconsin Diet Manual for Small Hospitals was discussed.

To prepare for the staff meetings, the nutrition director writes to all district nutritionists and asks for topics they wish discussed.
Their suggestions are presented at the beginning of the staff meeting. The group discusses subjects of priority and arranges a tentative agenda. Arrangements are made in advance for special programs.

**Records and reports.** Records and reports are a very vital part of the nutrition program. These provide information which is used for evaluating and planning a continuous nutrition program.

The nutrition director is responsible for planning and writing the section on nutrition for the Wisconsin State Public Health Plan which is sent every two years to the Children's Bureau and to the Public Health Service in Washington, D. C. The nutrition section is now a separate topic under Supportive Services, but nutrition is also integrated into the plans of other programs. The director is also responsible for the nutrition section of the State Budget Justification and of the State Board of Health Biennial Progress Report. The nutrition director writes narrative reports of individual field visits, as do the district nutritionists.

The district nutritionists write narrative reports of each field visit, and monthly and annual narrative reports. A monthly statistical activities report is also written. The narrative field report gives a detailed account of each field visit. The following information is included: purpose of the visit, observations made, educational materials used, evaluation of the visit, and plans for follow-up activities. A copy of the narrative field report is sent to the district offices concerned with the visit, the central office, and to any department that would be interested in the visit. The
student-nutritionist wrote narrative reports of two field visits which she made in District 4 (see Appendix, pages 46 and 47). The monthly narrative reports are a summary of the month's activities. Copies are sent to the Director of the Division of Nutrition and to the District Health Officer to keep them informed of recent developments. The District Health Officer can use this information when writing the monthly report of district activities. The annual narrative reports are written by program areas. The categories most often used are nursing services, schools, hospitals, nursing homes, community, and other activities. A statement of the needs and plans for the next year is included after the program summary. The statistical activities report will be revised to comply with a new state-wide program accounting system. The new report form will give more information about the activities which will be helpful in evaluating the nutrition program.

Dissemination of nutrition information. The central office stockroom fills requests for health materials. Each nutritionist answers the individual inquiries received in her office. The inquiries may be for information on food faze, food preparation, foods for various age groups, therapeutic diets, dishwashing, or any subject related to foods or nutrition. Directors of other related programs may request help with the nutrition content of materials being prepared.

The nutrition division prefers to use nutrition materials from other sources if they are suitable and available. If not, the nutrition personnel in the central office work cooperatively with the health
educators to prepare appropriate nutrition pamphlets or leaflets to meet the requests of the people of Wisconsin. The student-nutritionist participated in a conference with the public health educator and the nutrition director to evaluate the artist's interpretation of a pamphlet, "Food for School Boys and Girls." The health educator interprets the suggested changes to the artist. The artist makes the revisions and sends the final form back for the nutrition director to proof-read before it goes to the printer.

The nutrition division has a bimonthly publication, "Nutrition News for Public Health Nurses," which informs the nurses about recent developments and news in nutrition.

Nutrition information articles are written for professional publications. A district nutritionist wrote an article, "Are the Nutritional Needs of the Child Diabetic Being Met?", for the State Board of Health's page in the Wisconsin Medical Journal. This is one method of keeping the physicians informed about nutrition.

Excellent nutrition references are available to all the district nutritionists. Scientific publications are kept in the central office and can be sent on request to a district nutritionist. Good up-to-date references are essential when developing reliable educational materials for both professional and lay groups. The student-nutritionist reviewed several new nutrition books.

Nutrition films are kept by the State Board of Health's Division of Health Education in the general film library. Films are reviewed and comment cards are filled out and put on file for reference.
The nutrition director keeps a file on nutrition filmstrips and films which she has reviewed. The district nutritionists can request films or they may help others select a film for a program. The health education division provides a catalog which has a short description of each available film.

Mass media such as talks, radio programs, newspaper articles, and exhibits are used when the nutritionists feel they will be effective in education.

**Recruitment and orientation of new staff.** Recruiting nutrition personnel is a continuous job in Wisconsin as in other states. Each year, Wisconsin provides field training for two or three public health nutritionists, and the nutrition division has been successful in recruiting qualified people from these students.

The orientation period for new personnel varies in length depending on previous individual experience. A new district nutritionist will spend from three to six months in the central office and some of the districts becoming acquainted with the overall state health and nutrition program. She may assume some district responsibilities before she goes to her district to start a full-time nutrition program. If another nutritionist on the staff has developed any nutrition programs in this district, she helps the new nutritionist become familiar with the program to assure a successful transition. As the new district nutritionist develops the program, she keeps the director informed and consults with her on any problems.
Professional advancement. Professional advancement is achieved through in-service education at staff meetings, by reading professional journals, and by attending and participating in professional meetings. All the nutritionists take an active part in the local and state Wisconsin Dietetic Association meetings. Opportunity to attend the annual meetings of the American Dietetic Association and the Middle States Public Health Association is rotated among the nutrition staff. Several nutritionists attend the annual meetings of the Wisconsin Home Economics Association and the Wisconsin Association for Public Health. The nutrition director attends the Association of State and Territorial Nutrition Directors' meeting. Other programs that have been attended are the American Public Health Association Annual Meeting; the Community Nutrition Institute at Syracuse, New York; an Institute for Dietary Consultants and Shared Dietitians sponsored by the American Hospital Association and the American Dietetic Association; and a nutrition symposium at the University of Wisconsin in Madison. All in-service education contributes to the professional advancement and competencies of the staff members.

Coordination of State and District Nutrition Activities by Program Areas

The Division of Nutrition provides a generalized nutrition program. Following is an explanation of some of the state and district activities arranged by topic headings according to the program areas of the nutrition services. The topic headings are: nursing agencies, educational institutions, hospitals, nursing homes, child-caring
institutions and recreational camps, community health programs, and a special program in promoting iodized salt.

**Nursing agencies.** There are approximately 203 separate, official and non-official, public health nursing agencies in Wisconsin. On the local level, nurses are employed by towns, cities, counties, school systems, industries, and the Visiting Nurses Association which has agencies in seventeen cities. Each of the eight health districts has a District Advisory Nurse who gives consultation to all local public health nursing agencies within her district. The district nutritionist confers with the advisory nurse before she visits one of the nursing agencies in the district. This keeps the advisory nurse informed of the present interests and problems in nutrition. The advisory nurse is often the one who refers the nurses to the nutritionist. Cooperation between the district nutritionist and the advisory nurse is essential for a good nutrition program. The nutritionist is a consultant to the nurses and depends on the nurses to take nutrition information directly to the people. The district nutritionist is responsible for promoting the nutrition program and developing a comfortable working relationship with the nursing groups. She discusses the services of the nutrition division with a new nurse as soon as she becomes oriented to her nursing duties. The nutritionist writes a letter to the nurse requesting an appointment. Appointment letters are always sent before the nutritionist makes any visit.

Nutrition in-service education for the public health nurses was once planned at the state level and presented at scheduled meetings.
for all nursing personnel in a district. Now the local nursing personnel make direct requests to the district nutritionist when they want nutrition information. A series of nutrition in-service education meetings often develops from a specific request. Various nursing agencies within an area may plan to have meetings together, or one nurse may want help on an individual problem.

Many nurses ask for help with prenatal nutrition materials. The nutritionists consult with the nurses about nutrition information for prenatal classes and on occasion may assist the nurse in teaching a nutrition class as a demonstration. The nurse will teach the classes as she becomes familiar with the nutrition material.

The nurses have frequent questions about infant and child feeding problems. They also ask the nutritionist to help them select nutrition materials to be used with the parents in "Readiness for School" programs. Therefore, the nutritionist must be aware of the latest available nutrition information to be of help to the nurses.

Many requests are received concerning problems with therapeutic diets. Frequent questions are asked about modified diets such as, diabetic diets, restricted-sodium diets, and low-fat diets. These topics are often discussed at in-service education meetings. Some groups request that the nutritionist present the material as a lecture. However, the group discussion method is used most frequently. Some nurses prefer to have the information applied to actual case problems.

The nurses are receiving more requests for assistance in planning adequate diets for families with low incomes and for recipes using
surplus foods. Thirteen counties and four cities are now distributing surplus foods to individuals and families in Wisconsin.

The Director of the Division of Nutrition in the central office gives nutrition consultation on the state level to specialized nursing consultants in the Section on Maternal and Child Health, the Division of Occupational Health, and the Section on Preventable Diseases.

In the area of pre-service education, the nutritionists have provided assistance in planning the therapeutic diet classes for schools of nursing and for practical nurses' courses in the vocational schools. They also have assisted with field experiences for public health nursing students.

**Educational institutions.** Elementary and secondary school requests for assistance with nutrition education or school lunch problems come most frequently from the local administrator or the school nurse to the district nutritionist. At the state level the State Department of Public Instruction and the Division of School Health in the State Board of Health are developing policies through an Interagency Committee which may lead to more cooperative work in all health areas, including nutrition. Consultation on school lunch by public health nutritionists is mainly to parochial schools which request assistance. Consultation to public schools is provided on a limited basis by the School Lunch Division dietitian.

Food habits surveys have been made in elementary schools in communities where an interest is expressed and there is an indication of planned follow-up activities. The selected children in the third,
fourth, and fifth grades write down everything they eat for three days. This information is kept on Pupil Food Record forms (see Appendix, pages 48 and 49). A summary of the three-day food records is made (see Appendix, page 50). Teachers and mothers are often asked to participate in making these summaries. The directions to the teacher for making the food habits survey may be found in the Appendix (see page 52). The number of records depends on the total enrollment in the school, the desired number of food records, and the cooperation and interest of the teachers. An evaluation of approximately 6,000 food records during the last ten years has consistently shown the same weaknesses in the dietary habits of the students. These records indicate that Wisconsin families are not eating the recommended amounts of dark green and deep yellow vegetables or the foods rich in vitamin C. Educational activities which are planned to follow the surveys may include one or more of the following: discussions with parent-teacher groups by the nutritionist or the school nurse; letters to parents explaining the results of the survey; in-service nutrition education for the teachers on basic nutrition and nutrition education in the classroom; formation of a community or school nutrition committee to continue nutrition education programs. The Division of Nutrition and the Division of Dental Education developed a leaflet, "Food for Fun," to help teach parents and personnel in elementary schools which foods could be fun and also nourishing (see Appendix, page 54). The district dental health consultants have worked in cooperation with several of the district nutritionists in planning and conducting food habit and
dental health surveys. The findings from these joint surveys have been evaluated separately.

A list of current nutrition materials is made available for teachers to use as a guide when selecting nutrition pamphlets or posters for classroom use.

The nutrition director and the nutritionist in District 4 are presently participating in an experimental health project in the schools. The purpose of the project is to find ways in which an interdisciplinary team can work together to aid schools in their health education program. Two teams, one on the state level and one on the district level, are making a series of observations. The four disciplines represented on each team are nutrition, school health, nursing, and child guidance. The first phase involves an extended series of general observations in a selected school system, including all activities in which children are involved. An interchange of ideas will take place among the team members and between the team and the school personnel. No consultant services will be given to the schools until these first general observations are completed by the teams. It is hoped that the teams can then assist the schools in planning coordinated health activities and programs.

Nine state teachers' colleges and seventeen county teachers' colleges, with two-year programs, are assisted with their nutrition programs on a request basis. The first-year nutrition course in the county colleges places emphasis on improving eating habits of the individual students. During the second year, the students learn how
to conduct a food habits survey in the demonstration school. Cadet-teachers may choose a nutrition project when they are student teaching. The nutritionists have been requested to conduct class discussions and to help plan the nutrition program in the county colleges.

The nutrition division has participated in summer workshops at the state teachers' colleges. An experimental workshop in nutrition for elementary teachers was planned for the summer of 1961. This three-week workshop is a cooperative project which includes personnel from nutrition, school health, and child guidance in the Section on Maternal and Child Health. The purpose of this interdisciplinary approach is to explore ways in which the teaching-learning process can be more effective in nutrition education. The workshop students will observe and participate in general classroom activities in the demonstration school. This will give them a basis for discussing teaching methods and the learning process in nutrition education.

**Hospitals.** Nutrition and dietary consultation on an individual and group basis to hospital administrators and other personnel is another important part of the total nutrition program. Approximately 115 small hospitals without dietitians are given consultation service. The district nutritionist cannot visit all hospitals in her district on a regular basis. After the nutritionist makes the first visit and explains to the administrator the available services, the administrator then requests consultation when there is a need. Services requested are usually concerned with the management of therapeutic diets, nutritional needs of the patient, patient education, training
of personnel, scheduling personnel work hours, sanitation, food service, or remodeling of the kitchen. The nutritionist may make specific recommendations or she may suggest several possible solutions to a problem. The administrator can use the suggested information in making the final decision on how the problem will be solved.

The nutrition division has written a booklet, *Diet Manual for Small Hospitals*. The manual was planned for small hospitals where the services of a dietitian are not available. The district nutritionist encourages the hospitals to use the diet manual. Frequently the nutritionist is invited to meet with the medical staff to discuss the use of the manual or possible modifications to meet the particular needs of the hospital. This manual serves as a guide for the nurses and the employees responsible for food preparation and service. The diet manual is being revised by the nutrition staff to comply with current information about therapeutic diets. Each nutritionist has a section of the manual to revise. The suggested revisions are discussed at staff meetings so that each part of the manual is acceptable to the entire staff. This is a time-consuming procedure, but is one method that can be used to give everyone an opportunity to express her ideas. The student-nutritionist participated in a planning conference with two of the district nutritionists for revising the sections on the general diet, pregnancy and lactation diets, and diets for children.

The nutritionists encourage hospital administrators to employ a trained dietitian, part or full time; or when this is not possible, to send a food service worker to the Michigan Food Service Supervisors'
Wisconsin is one of five states participating in the Michigan Food Service Supervisors' Course. The course is designed for food supervisors from small hospitals without a dietitian or for food supervisors working under supervision of dietitians in large hospitals who can profit from this training. Wisconsin applicants are screened by the district nutritionists. The prospective food service student is evaluated for potential ability and service to the hospital after completing the course. The course is limited in number to approximately thirty students, and there is always a waiting list. The food service student studies nine weeks at the Michigan State University campus in East Lansing, Michigan; returns to the hospital where she is employed for six months; and then she returns to Michigan for a final week of study. A stipulation of the course is that a nutritionist or dietitian must be available to consult on the food service student's project during the six-month interval. The nutritionists are invited to attend part of the first nine weeks' session to be oriented for their part in the follow-up supervision. The project chosen can be one of the following or a similar project: setting up a storeroom system, introducing selective menus, writing job descriptions, or standardizing recipes.

The student-nutritionist was with the District 3 nutritionist when she visited a student who had just returned from the Michigan course. They talked about possibilities for a project and the factors that needed to be considered in choosing the project. The food service students are so enthusiastic when they return that the district
nutritionist often has to help them limit the scope of the project.

The cooks in the small hospitals usually have little or no training in quantity cooking, menu-planning, patient food service, or modified diets. Since cooks in all small hospitals have these same basic problems it is possible to provide group in-service training. Five hospital administrators in southwestern Wisconsin proposed that the nutritionist conduct a series of meetings with the food service personnel. Five meetings were planned to be held at two-month intervals. Each of the five hospitals was to have one of the meetings. The topics covered in the first four meetings were: "The Hospital Dietetic Department—How Important Is It?," "Menu Planning with Emphasis on the Evening Meal," "Menus for the Evening Meal," and "How to Integrate the Modified Diets with the Regular Diet." The student-nutritionist attended the fourth meeting in the series which was held at the Whitehall Community Hospital. The meeting was informal, and the cooks had an opportunity to participate and to discuss the dietary problems in their hospital. The nutritionist will make follow-up visits to these hospitals after the meetings.

The nutritionist made effective use of her time by combining the afternoon cooks' meeting with a morning conference with the administrator of the Whitehall Hospital. The nutritionist had been working on suggestions, which she discussed with the administrator, for remodeling the kitchen which would improve the food service to the patients and to the hospital personnel.

The district nutritionist stated that progress is not easy and
is often very slow, but over the years she could see improvements in these small hospitals.

The nutrition division also gives consultant service to the thirteen tuberculosis sanitoriums in Wisconsin. Several of the tuberculosis sanitoriums now accept other chronic disease patients. This has created new problems in the food service. The student-nutritionist visited a sanitorium with the district nutritionist to observe the food service. In this hospital the other chronic disease patients are served before the tuberculosis patients. Two sets of dishes are used for the food service. Each set is washed and stored separately in this institution.

The county mental hospitals are supervised by the State Department of Public Welfare, but are given nutrition consultation on request by the State Board of Health nutritionists. Many of the food service problems in these institutions are similar to the problems in other small hospitals; however, some problems are different because they produce much of their own food and have patient help in the kitchen. The student-nutritionist visited the Trempealeau County Hospital to observe a conference between the new administrator and the district nutritionist. They discussed the subjects of menu-planning and modified diets. It was stated that management of overweight patients is a major problem in this hospital.

Hospitals with dietitians can also request consultation from the nutrition division. A dietitian may need help when she is returning to a hospital position after a period of absence from her profession.
Special dietary problems can occur in any hospital, and professional consultation may be required. The district nutritionist is available to assist with any dietary problem.

Nursing homes. The Wisconsin Statutes (Division of Hospital and Related Services, '60) defines a nursing home,

... as any building, structure, institution, agency, or other place, for the reception, care or treatment not less than 72 hours of any week of 3 or more unrelated individuals, who by reason of aging, illness, blindness, disease or physical or mental infirmity desire any such service.

The term nursing home, therefore, includes boarding and convalescent homes for the aged. Licensing of nursing homes by the Division of Hospital and Related Services in the State Board of Health began in 1952. Licensing simply means that visits are being made to the homes to determine compliance with minimum standards. The number of nursing homes in Wisconsin is 472 with 13,039 beds. Fifty-two per cent of the homes have eleven to twenty-five bed capacity. (Division of Hospital and Related Services, '60). There are approximately 300 nursing homes outside the city of Milwaukee that may receive consultant services from the nutrition division on a selective basis. The nursing homes in Milwaukee are given dietary consultation by the city nutritionist.

The district nutritionist visits nursing homes with new operators, those requesting help, or those referred from the licensing personnel. It is a difficult task to help the nursing home operators understand the food needs of older people, plan menus in advance, and follow special diet orders. The nutritionist usually works with the operator and the cooks when she makes a visit. The student-nutritionist
visited two nursing homes. The Morrisonville Nursing Home is located in the country and had twelve patients; the Lutheran Home is located in the city of Fond du Lac and had 127 patients. The food service problems in these two nursing homes were different because of their location and size. This affected the method of purchasing foods, the type of food service, and the attention given to individual patient's food likes and dislikes. Neither nursing home, however, was planning menus in advance. The nutritionist encouraged each operator to keep a record of foods served which could be used as a basis for future consultation on planning adequate menus and buying foods in quantity.

The district nutritionist gives help to hospitals and nursing homes that are planning kitchen revisions or new food service facilities. It is important for the operator to consider the method of food service before any plans are made. Arrangement of the kitchen equipment for the most efficient working conditions is one of the primary objectives of working with the operators in the planning stage.

The district nutritionist who is working part-time in the central office has had considerable experience with planning and arranging food service equipment and facilities. She is available to review the architect's plans when they are received by the Division of Hospital and Related Services. Often the plans cannot be completely analyzed because of a lack of specific details as to layout and the food service operation. The nutritionist makes an evaluation of the space allotted to the food service facilities and proposes a list of questions regarding the food service operation. The architect may come to discuss the plans with her. The student-nutritionist participated in evaluating
several plans for hospitals and nursing homes. The review of the plans for food service facilities for a home for senior citizens may be found in the Appendix (see pages 55 and 56).

**Child-caring institutions and recreational camps.** Dietary consultation is given by the nutritionist to child-caring institutions that are referred from the Division on Children and Youth in the State Department of Public Welfare. This initial referral may lead to continuous individual consultation or to a series of group meetings for food service personnel. The student-nutritionist visited Saint Michael’s Home for Children in LaCrosse and Saint Joseph's Home in Green Bay to observe the food service and to gain an understanding of the problems found in child-caring institutions.

The student-nutritionist met with the nutritionists from Districts 3 and 6 to plan the third meeting in a series of four. The student-nutritionist later participated in this third meeting. The meeting was for the cooks from four child-caring institutions in the Green Bay area. Saint Joseph's Home was one of the four institutions which was participating in the meetings and was the location for the third meeting. A similar group is being organized in District 7 for the child-caring institutions in that area.

Day care centers are given nutrition consultation to help improve food standards and feeding practices. The Salvation Army Day Care Center in Madison was visited by the nutritionist and the student. Personnel problems, dishwashing procedures, and advance menu-planning were discussed with the director of the Day Care Center.
The nutritionist in District 1 has been giving consultation, at intervals since 1943, to the Wisconsin School for the Visually Handicapped at Janesville. This school is under the Bureau for Handicapped Children in the Department of Public Instruction.

Recreational camps receive service from the district sanitary engineer and district nutritionist. The nutritionist visits camps which are new, under new management, or referred by the sanitary engineer. She evaluates the food service and suggests ways of promoting good eating habits.

Community health programs. The nutritionists have assisted with programs of local health councils, community nutrition committees, welfare councils, scout groups, parent-teacher associations, church groups, Young Women's Christian Associations, and community service clubs.

They have also worked cooperatively with the Agricultural Extension Service on community projects. One district nutritionist worked with the county home agent and the county nurse on a weight control display for the county fair. The nutritionist also gives consultation to the home agents on specific nutrition questions. One conference the student-nutritionist attended was with the Rock County home agent in Janesville. The nutritionist gave advice on answering questions about diabetic diets.

Special program in promoting iodized salt. The nutrition division is currently carrying out a program which promotes the use
of iodized salt as a means for meeting iodine needs to prevent simple goiter. Until last year, iodine tablets were dispensed regularly in the schools. The county health committees had always allocated money to buy the tablets. The State Board of Health called a committee meeting to investigate the present conditions within the state. The nutrition division helped study the extent to which the iodine tablets were distributed and the amount of money spent for them. It was found that the children in the county schools accepted the iodine tablets well, but the students in high schools and in the city schools did not. On the basis of these findings and the fact that iodized salt had been shown to be an effective method for controlling simple goiter in other states, the committee recommended that iodized salt be used as a means of preventing simple goiter instead of dispensing the iodine tablets. This recommendation was generally approved and adopted. The committee had representatives from the Wisconsin University Medical School, the State Medical Society, the State Board of Health, and the Department of Public Instruction.

A leaflet to be used in an educational program for promoting the use of iodized salt was prepared by the nutrition division (see Appendix, page 58). These pamphlets have been distributed to teachers, county home agents, parent-teacher associations, home economics teachers, and several lay organizations. The public health nurses and nutritionists are encouraging the grocers to have iodized salt on their shelves. The Madison City Health Department, in cooperation with the Zonta Club, has developed bus placards which promote the use
of iodized salt.

A survey was conducted in Calumet County to determine how many families were already using iodized salt. Questionnaires were sent to 437 fifth and sixth grade students in the rural schools. It was found that out of ten families four always use iodized salt, four use it most of the time, and two do not use iodized salt (Kjentvet, '61).

The nutrition division is carrying out this educational program to help the people of Wisconsin become aware of the importance of selecting iodized salt and using it for table use, cooking, and food preservation.
EVALUATION

The student-nutritionist has reported experiences and observations during a seven weeks' period of field training in the Wisconsin State Board of Health. The health department staff cooperated with the nutritionists in giving the student-nutritionist a better understanding of how a state nutrition staff works through a decentralized, district organization. The student observed the work of five nutritionists in their respective districts. Field trips and conferences gave insight into the methods and techniques used by each nutritionist. The student is convinced that more than one method may be used to accomplish similar objectives of a nutrition program. The district nutritionists are aware that the nutrition program can be somewhat similar in all districts, yet they know that each district has different interests and needs and that the program should be planned to meet these interests and needs. Flexibility in the nutrition program is an essential part of an effective decentralized, district organization.

The time which the student-nutritionist spent in the central office gave her an opportunity to learn about the functions of the Director of the Division of Nutrition and the development of the overall state nutrition program. The student also gained some insight into the director's part in advising and supervising the district nutritionists. Good rapport between the nutrition director and the district nutritionists is a significant factor in the success of a
decentralized, nutrition program.

The student-nutritionist is convinced that records and reports of activities are necessary for the development of a continuous nutrition program. The detailed field narrative reports are especially essential as they keep the nutritionist informed of the services which have been previously given in her district. These reports also provide a record of the names of people contacted during a field visit and an evaluation of the effectiveness of each visit. By reviewing and studying these reports, a nutritionist can give continuous nutrition services when she is assigned to a district.

This period of field training has supplemented the student's year of experience with a centralized nutrition program in a New England state and her academic studies at the University of Tennessee. The student feels that this combination of experiences has helped prepare her for future work in public health nutrition.
BIBLIOGRAPHY
BIBLIOGRAPHY

Division of Hospital and Related Services 1960 Directory of Homes for the Aged and Nursing Homes Licensed in Wisconsin. Wisconsin State Board of Health, Madison.


APPENDIX
NUTRITIONIST POSITIONS - Wisconsin State Board of Health

CLASSIFICATIONS

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<th>Classification</th>
<th>Base Salary Range</th>
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<td>NUTRITIONIST I</td>
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<td>NUTRITIONIST III</td>
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Qualifications:

NUTRITIONIST I:
A Bachelor's Degree in foods and nutrition, a dietetic internship and one year of graduate training but no experience in community nutrition work or (for temporary employee) several years of special experience without graduate training. (In the latter case, eligibility for entrance to graduate school would be necessary.)

This classification has been established for candidates who may lack the necessary experience for assuming responsibility in district positions or who may be recruits for graduate training.

NUTRITIONIST II:
A Bachelor's Degree in foods and nutrition, a dietetic internship, a Master's Degree in foods and nutrition or in public health nutrition and three years or more of experience including hospital dietetics and community nutrition work.**

This is a district consultant nutritionist position where the employee functions independently, with general technical guidance from the Director of the Nutrition Division.

NUTRITIONIST III:
A Bachelor's Degree in foods and nutrition, a Master's Degree in foods and nutrition or public health nutrition and a dietetic internship or additional graduate training applicable to the work, five years or more of experience in public health nutrition including two years of supervisory and consultative experience.

This is the position of program director, hence there is only one position.

*A cost of living bonus ($81 per month at present time) is added to the base salary. All travel expenses, hotel and meal costs are paid for field work.

**A dietetic internship (or equivalent) and some experience in hospital dietetics are required as the district nutritionists provide consultative service to small hospitals and nursing homes as a part of the generalized program.

Wisconsin State Board of Health, Nutrition Division 5/61
This visit was made to see the progress on the kitchen improvement project and to give the student-nutritionist a chance to see the food service in a children's institution.

Since the nutritionist's last visit several outstanding improvements have been made in the main kitchen. The outside wall is lined with built-in cupboards giving counter work space and storage. A small hand sink is in one section. A desk is in the process of being completed as part of this area. The old stoves have been replaced by two new institution size ranges. Future plans include renovation of the dish machine area and purchasing a new Hobart mixer to be used by the bakery as well as the kitchen preparation area. Sister W. had some good ideas about placing the mixer in a convenient location to both areas. Sister is very happy with the reach-in refrigerators and finds they cut down on many trips. Another storage cabinet is in process of being built for the kitchen.

Watched the food service at the range for the six family groups. Each food is put in a separate aluminum pot, covered, and put on the cart for the family group. The service was fast and efficient with no wasted motions or steps. The carts are taken up at one time to the families and served family style at the table. Each unit has a kitchen which is used by the children to make their own breakfasts. We had dinner with the older girls' group. The food was very tasty and hot.

Sister had a question about deep fat frying egg croquettes and the reason for the fat bubbling up. Also wanted some suggestions for permanently marking the aluminum pots.

The administrator is easy to work with and would like to have the nutritionist keep in touch.

Nutrition Student

Nutritionist
This visit was made to observe the noon meal service. One wing has now been converted to a chronic disease unit and these patients are served from the same kitchen.

The Superintendent is satisfied with things as they are and so stated that we would find nothing wrong. All six kitchen employees were present for the noon service. They all work split shifts starting at 5 a.m. so breakfast can be served at 6:15 a.m. Some of the women live in.

The kitchen is poorly arranged and the equipment is very old. Two complete sets of dishes are used, one set for the chronic disease wing and one set for the TB patients. The trays for the chronic disease wing are served first (11:15 a.m.). The other trays go out after 11:30 a.m. Each tray is served with that particular patient's likes and dislikes in mind. Trays look attractive. There are no special diet orders for the diabetic diets (3-4), restricted sodium (2), or low residue (1). There appeared to be considerable waste of time and motion in setting up these trays.

It is felt that it might be possible to work with the head cook, but doubt any improvements will develop as long as the Superintendent approves of the present system.

Nutrition Student

Nutritionist
PUPIL FOOD RECORD FORM

General Information

Record No. ______

1. Name ___________________________ 2. Boy, Girl (Circle one)

3. Grade ______ Age: years _________

4. Date record was started ________________________________

5. Name of school _________________________________

6. Address of school ________________________________

7. Where do you live? Check (X) On a farm ______
   In a village or city ______

8. At what time do you leave home in the morning to go to school? _____

9. Are the meals on your record the kind which you usually eat? _____
   If not, explain ________________________________
   _______________________________________________
   _______________________________________________

10. Were any of the meals on your record eaten away from home? _____
    If so, explain ________________________________
    _______________________________________________
    _______________________________________________

ADDITIONAL INFORMATION

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Nutrition Division, STATE BOARD OF HEALTH, Madison 2, Wisconsin, Rep. 11/60
PUPIL FOOD RECORD FORM

THESE ARE THE FOODS I ATE AND DRANK ON

(Be sure to name foods and give amounts, as white bread-1 slice, butter-1 teaspoon)

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## SUMMARY OF THREE-DAY FOOD RECORD

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### FOOD GROUPS

1. **Dark green and yellow vegetables**—Good vitamin A sources (raw, cooked, canned, frozen)—Count ½ cup as 1 serving: Carrots, winter squash, sweet potatoes, broccoli, spinach, Swiss chard, mustard greens, collards, pumpkin, asparagus, Brussels sprouts, green peas, green beans. (Also deep yellow fruit as peaches, apricots, cantaloupe. Liver, rich in vitamin A, may be counted as a serving of both "green and yellow vegetables" and "meats").

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2. **Oranges, tomato, grapefruit, raw cabbage and other vitamin C foods**—1 serving equivalents:

- 1 medium orange or ½ cup juice (fresh, frozen, canned), ½ grapefruit, ½ cup juice or pulp (fresh, frozen, canned), 1 cup tomatoes or 1 cup tomato juice, 1 cup cole slaw or raw cabbage, ½ cup strawberries-sliced with juice (fresh, frozen), ½ small cantaloupe or 1 cup melon balls.

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</table>

3. **Other vegetables and fruits** (raw, dried, cooked, canned or frozen) 1 serving = ½ cup:

- Beets, celery, corn, turnips, onions, apples, bananas, head lettuce, pineapple, plums, cooked cabbage, potatoes, fruit pie, etc.

- (potato chips, 2 cups = 1 serving)

<table>
<thead>
<tr>
<th>Day</th>
<th>No. of servings (3 days)</th>
<th>Servings needed (3 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total*</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

4. **Milk and milk products** (fluid, dried or evaporated) 1 serving = 1 cup

- 1 scoop ice cream—count as ½ cup milk
- 1 serving milk pudding—count as ½ cup milk
- 1 cup milk soup—count as ½ cup milk

<table>
<thead>
<tr>
<th>Day</th>
<th>No. of servings (3 days)</th>
<th>Servings needed (3 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
<td>9-12**</td>
</tr>
<tr>
<td>2nd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3rd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9-12**</td>
<td></td>
</tr>
</tbody>
</table>

5. **Meat, fish, poultry, dried peas and beans, peanut butter, eggs and cheese**

- 1 serving = 2-3 oz. cooked lean meat, fish, poultry or ½ cup cooked dried beans or peas,
- 1 cup chili with beans
- ½ tablespoons peanut butter
- ½ tablespoons cottage cheese
- 2 oz. cheddar cheese (2 inch cube)
- 1 egg

(Count 1 cup custard as ½ serving)
### SUMMARY OF THREE-DAY FOOD RECORD (continued)

#### FOOD GROUPS

<table>
<thead>
<tr>
<th>Food Group Description</th>
<th>No. of servings (3 days)</th>
<th>Servings needed (3 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Bread, flour, cereals (whole grain or enriched)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 serving = 1 slice bread or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>⅔ cup cooked cereal</td>
<td>1st</td>
<td></td>
</tr>
<tr>
<td>1 cup prepared cereal</td>
<td>2nd</td>
<td></td>
</tr>
<tr>
<td>⅔ cup rice, macaroni, noodles or spaghetti</td>
<td>3rd</td>
<td></td>
</tr>
<tr>
<td>1 waffle, 1 griddle cake, 1 biscuit (medium size)</td>
<td>Total</td>
<td>9</td>
</tr>
<tr>
<td>Miscellaneous foods and sweets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 serving: 1 piece cake, 2 cookies, 1 doughnut, 1-8 oz. bottle soft drink, 1 sweet roll,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 candy bar, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Extra servings in Groups 1 and 2 may be counted in Group 3

**9 servings sufficient for children 9 years and younger

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Nutrition Division, STATE BOARD OF HEALTH, Madison 2, Wis. Rev. 11-60
DIRECTIONS TO THE TEACHER FOR MAKING A FOOD HABIT SURVEY

Usually food records over a 3-day period will give an overall picture of eating habits. Each teacher can best judge how to introduce to her class this project of keeping food records, but the following explanations and suggestions, based upon long experience in making similar studies, may be helpful.

1. The keeping of food records should come before class discussions of food and health habits. Otherwise there is an inclination on the part of some children to list what they think the teacher wants them to eat instead of what they actually have eaten. No child should be embarrassed or made to feel self-conscious or guilty about his eating habits.

2. Children should know that they are participating in a meaningful group activity and their cooperation should be solicited. No child should be compelled to keep a record, but it is hoped that all will want to do so. Names may be omitted from the records and, instead, each record may be given a number.

3. Let the food survey be a part of the regular school day, integrating the various activities concerned with it where they seem most logical. It is essential that the children understand the directions, otherwise the records will be useless. Go over the record form with the children. It helps to have them do the recording at school each day.

4. It helps to have the recording done at school at two different intervals each day; first, when the children arrive in the A. M. and again before they are dismissed at the end of the day. (The foods eaten at home for the evening meal and later may be listed on a slip of paper and transferred to the record the following morning.)

5. Be sure that the children know that they are to list all foods that are eaten or drunk, such as butter, candy, nuts, bottled drinks, etc.

6. Help children to judge amounts. Demonstrate using measuring cups, tablespoons, etc. Urge them to do some measuring at home to see, for example, if the vegetables they have on their plates amount to one-half cup, one-fourth cup, or three-fourths cup. Such activities can be worked out as problems in arithmetic.

7. Stress the necessity of naming kinds of foods instead of calling them by dish-names, such as "salad", "hot dish", "sandwich", or "soup". List the kind of salad, such as apple and celery; the kind of hot dish, such as potatoes and ham; the kind of sandwich, such as peanut butter, jelly or egg and the number of slices and
kind of bread in it, such as two slices of rye bread; and the kind of soup, such as tomato soup made with milk. Learning to spell some of the words can be a functional activity in language arts.

8. A letter to the parents explaining about the survey is an excellent means of acquainting the parents with accurate information instead of depending upon the children to interpret. This letter may be duplicated and bear the teacher's signature or it may be written by the pupils.

9. Since food habit improvement depends upon home cooperation, a good follow-up procedure after the results of the survey are known, is a meeting with the parents to discuss improvements needed and school activities planned.

(Adapted from material of General Mills, Inc., Minneapolis, Minn.)
Food
For
Fun
Food
For
Fun

STATE BOARD OF HEALTH
1 WEST WILSON STREET
MADISON 2, WISCONSIN
Choose

Better between-meal foods for health, vitality, and appearance. Too frequently the between-meal snack consists of concentrated sweet foods. The "sweet tooth" does not need developing.

You can help

Boys and girls learn to eat more foods which will contribute to their best physical development and improved dental health.

Plan and work together

With young people toward better food choices. The child who is given an opportunity to have adequate amounts of protective foods and a limited amount of highly sweetened foods will be amply repaid with:
1. An improved appetite
2. Better physical development
3. Less tooth decay
4. A more attractive appearance
5. Increased vitality
6. The best possible health
Many of you—parents, teachers, and recreational leaders—are doing an excellent job of teaching nutrition and dental health. You have helped young people become acquainted with new foods; you have interested them in many phases of the production and processing of foods; you have helped young people appreciate the value of strong, healthy teeth and the need to protect and care for them.

You've recognized the value of correlating health teaching with good health practices. Many of you have used the special occasion—the party—to practice some of the factual information and attitudes acquired by young people. The party provides a happy, relaxing setting which can be developed into a real learning situation.

Most of you realize the social value of a party. Young people need the experience of sharing with others, of learning the social graces, of feeling good fellowship, and of learning that the value of a social occasion does not depend on the serving of sweet food.

Children, teachers, and parents can learn together in planning foods for special events. The occasion may be a "tea" sponsored by a high school home economics class, a birthday party in the first grade or a special occasion elsewhere. Foods can be planned to include fruits, dark green or deep yellow vegetables and milk.
Foods can do double duty.

PLAN AND CHOOSE BETWEEN MEAL FOODS WHICH ARE...

DRINKS

Children love beverages served in paper cups or in small individual cartons with straws.

Here are some suggestions:

Juices - orange, grapefruit, tomato, grape, apple, pineapple

Milk - regular or homogenized

FINGER FOODS

Raw vegetables are a favorite snack food with children. Some of the most popular are:

Carrot sticks
Celery sticks
Cabbage wedges
Rutabaga sticks
Turnip sticks
Cauliflower flowerettes
Tomato wedges
Green pepper squares
FRUIT

Fruits can be given special "glamour" with an individual cellophane wrap.

Apples, bananas, peaches, plums, grapes, Bing cherries, tangerines, pears, and strawberries may be used in season.

Orange boats may be made by cutting the whole orange into wedges and using a toothpick for a mast and a small piece or paper for the sail.

CHEESE

Cheese cubes speared with a colorful toothpick are a novelty and very easy to handle. Serve them with whole wheat wafers.
**SANDWICHES**

Sandwiches can be real "party fare."

"Special" shapes may be made with cookie cutters.

"Faces" may be made using raisins, carrot curls, sliced olives, nuts, and other nutritious tidbits.

For the birthday cake—a sandwich loaf, decorated like a cake—will be the hit of the day. Cut an unsliced loaf of day old bread the long way into three or four slices. Use two or three different kinds of spreads between layers and frost the outside with cream cheese, (tinted if you like). Birthday candles will give the full effect. Slice into attractive ribbons when ready to eat.

Favorite sandwich spreads are peanut butter, egg or meat combinations or cheese.

Fruit and nut breads are very good spread with butter or cream cheese.

Don't forget!!! Use enriched or whole grain bread for sandwiches.
PEANUTS, POPCORN, POTATO CHIPS

These snack foods are easily served in their own cellophane packages. Peanuts and other nuts are excellent protein foods and most children love them.

COOKIES AND CAKE

If you wish to serve a sweet food, be sure that the cookies and cake served are the kind that carry a protective food such as fruit, molasses, whole grain cereal or peanut butter.

Omit the frosting—it's easier on mother and much better for the child.

Cookies—oatmeal, molasses, and peanut butter are popular and nutritious.

Cakes—gingerbread, applesauce, prune, sponge, and angel food are all plain cakes that are very tempting served without icing.

ICE CREAM

This is an easy food to serve when bought and served in individual containers.

Let's encourage "plain" ice cream or sherbert rather than a sundae made with highly sweetened syrup.
A salute for the birthday child

Many kindergarten and primary teachers and recreational leaders focus attention on the "birthday" child in ways which make the experience satisfying one. The child is granted special privileges in school for that day such as helping to distribute the milk lunch, choosing the songs for the day, collecting the work books, carrying a banner which proclaims to all "This is my birthday."

If parents wish to provide something in recognition of this day, perhaps they would contribute a record, a book or some gold fish or turtles for everyone to enjoy.

If an electric corn popper is available, on special occasions such as a birthday party, the children may pop corn. Children like to prepare their own birthday treats for their classmates. They learn to work together in a happy fashion and they enjoy the product of their efforts.

If food is provided for birthday parties, the children, the mothers, and teacher will want to plan together for the "treat" by choosing from the recommended list. This provides an excellent learning experience for all. What better opportunity can we find for good health teaching?

* * * * * * * * *
March 24, 1961

REVIEW OF PLANS FOR FOOD SERVICE FACILITIES IN A HOME FOR SENIOR CITIZENS

An engineer in the Division of Hospital and Related Services brought into the Nutrition Division on March 23, 1961, a set of plans for this proposed 99 room home for senior citizens for a review of food service facilities.

The nutritionist in District #1, the student nutritionist and the writer reviewed the plans. Though some parts of the plans are detailed, this is not true for all of the dietary facilities. Therefore, a detailed analysis was not possible.

In general, this will be a two story V-shaped structure, accommodating 46 units on the main level, and 53 units on the upper level. Each unit appears to be set up as a private apartment—which would include the following:

1. Combination living and bedroom
2. Entrance vestibule
3. Dressing room
4. Bathroom
5. Built-in dresser
6. Closet
7. Dwyer package kitchen
8. Built-in storage shelving

The food service facilities are located in the basement and include the following:

- Main kitchen: $24' \times 52' = 1,248$ square feet
- Main dining room: $26' \times 88' = 2,288$ square feet
- Staff dining room: $24' \times 16' = 384$ square feet
- Kitchen storage: $24' \times 32' = 768$ square feet
- Cooler and freezer storage: $24' \times 16' = 384$ square feet
- Coffee shop: $? = 3,072$ square feet

Plans were drawn up by John W. Steinmann, Architects of Monticello, Wisconsin.

A number of questions were raised—these were sent to the engineer (see letter dated March 24, 1961). It is hoped that it will be possible to discuss these plans with the architect as it was not possible to list other points about which we were wondering.

Nutritionist
To: Engineer
Division of Hospital and Related Services

From: Nutritionist, Central Office
Nutritionist, District #1

March 24, 1961

In reviewing the plans of the food service facilities of the proposed Home for Senior Citizens, it was difficult to make a complete analysis of the layout as specific details of the food service operations were not available. The blue prints for the kitchen area showed no specific equipment layout. It appears that the total space allocation for food service facilities is more than adequate.

Some of the questions regarding food service operations are as follows:

**Food Service for Residents**

What method of food service will be provided for residents—cafeteria style? -- table service style?
What arrangements will be made for food service to residents who are unable to come to the main dining area?
What are the components of the Dwyer package kitchen?
What is the purpose of the commissary in the lounge?

**Food Service for Staff**

What method of food service will be provided for staff—cafeteria or table service style?
It is assumed that the small room off the staff dining room is a lavatory. Opening directly off into the dining area does not seem desirable.

**Main Kitchen Area**

Few comments can be made about main kitchen as equipment placement in kitchen is not drawn in on this set of plans.

**Dishwashing**

Where will dishroom be located? Will the dishroom service the resident dining area, staff dining area, and coffee shop?
Garbage and Trash Disposal

What provisions will be made for garbage and trash removal from food service facilities?
Will a can washing room be available?

Housekeeping Facilities

Will separate space be provided in the food service department for janitor's closets—for brooms, mops, mop buckets, and cleaning supplies?

Office Space

Where will space be provided for the food service supervisor for planning, counseling, storing records, recipes, etc.?

We would be very much interested in discussing in detail the proposed methods of food service operations.
Why IODIZED SALT?
in Wisconsin!
IODIZED SALT

WHY DO WE NEED IODINE?

Everyone needs small amounts of iodine for normal body functioning — for normal growth and development, for healthy hair and skin, and for mental and physical alertness. It is particularly important in early childhood, in adolescence, and in pregnancy.

Without enough iodine, the thyroid gland tends to enlarge. This swelling is known as simple goiter.

WHY IS THIS A PROBLEM IN WISCONSIN?

Wisconsin soil and water are so low in iodine that the foods grown here and the drinking water do not supply us with the iodine we need. We must get this iodine from other sources.

Of course, sea foods and foods shipped in from other states do provide iodine, but we cannot be sure of getting enough of them to meet our needs. The easiest source to use, and the most economical, is iodized salt.

WILL THE USE OF IODIZED SALT MEET OUR NEED FOR IODINE?

Yes, the regular and continuous use of iodized salt — in cooking, in canning, and at the table — will meet our need for iodine.

Some years ago, states in the "goiter belt" looked for a solution to the goiter problem. Several of them began to develop and use iodized salt. However, the iodine content of the salt was not standardized or stable. Much iodine was lost in storage and in cooking. Therefore, Wisconsin chose to recommend the distribution of iodine tablets to school children.

Now the quality of iodized salt is better and it can be easily obtained in all areas of the state. Our neighboring states have demonstrated that the use of iodized salt is a simple, inexpensive, and effective method of meeting iodine needs. Simple goiter can be prevented by the regular and continuous use of iodized salt by all Wisconsin people.
IODIZED SALT

SALT
IODIZED

the easiest and most economical way to prevent simple goiter
when buying salt, be sure to check the label on the box for the word "IODIZED"

... because not all salt contains this helpful substance.

Ask your grocer for iodized salt if you do not find it on his shelves.