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## **A Determination of the Diet Therapy Educational Needs of Registered Nurses in Seven States**

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To the Graduate Council:

I am submitting herewith a thesis written by Julie McMenamin McDaniel entitled "A Determination of the Diet Therapy Educational Needs of Registered Nurses in Seven States." 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.

Jane R. Savage, Major Professor

We have read this thesis and recommend its acceptance:

Irsahd Ahmad, Mary Rose Gram

Accepted for the Council:

Carolyn R. Hodges

Vice Provost and Dean of the Graduate School

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



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We have read this thesis and  
recommend its acceptance:

Richard Ahmed

Mary Rose Ham

Accepted for the Council:

Stith A. Smith  
Vice Chancellor  
Graduate Studies and Research

A DETERMINATION OF THE DIET THERAPY EDUCATIONAL NEEDS  
OF REGISTERED NURSES IN SEVEN STATES

A Thesis  
Presented for the  
Master of Science  
Degree  
The University of Tennessee

Julie McMenamin McDaniel

March 1974

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And my husband, Alan McDaniel, without whose patience, understanding, and support this study could not have been done.



## ABSTRACT

In order to investigate the diet therapy responsibilities of registered nurses in the United States and determine the diet therapy educational needs of professionals, a survey was conducted in 1973 by means of a questionnaire. Questionnaires were sent to 315 registered nurses (RNs) in seven states; Georgia, Idaho, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota with thirty-five questionnaires being sent to RNs working in each of the following areas: hospital, public health, clinic, nursing home, private-duty, school nurse, teaching, industrial, and doctor's office. The questionnaire was developed in an attempt to ascertain

1. trends in diet therapy education in nursing school curricula during the past fifty-four years,
2. registered nurses' attitudes regarding what should be included in current nursing school diet therapy courses,
3. information about the frequency and depth of diet instruction given by registered nurses,
4. registered nurses' knowledge about specified diets.

A total of 43.8 percent of the 315 questionnaires were used in tabulating the data. The data indicate that from 1960 to the present time there has been a decrease in the number of hours devoted to diet therapy education and diet kitchen experience and that the majority (55-56%) of the RNs received their diet therapy education as an integral part of their nursing courses.

Questions pertaining to the RNs' attitudes about their present diet therapy educational needs indicated that

1. 99.3 percent of all the subjects believed that diet therapy has a place in the nursing school curriculum,
2. between 56.0 and 98.0 percent of the participants believe that normal nutrition, anatomy, physiology, chemistry, and fundamentals of nursing should be taken parallel with or as a prerequisite to a diet therapy course,
3. 81.0 percent of the respondents stated that diet therapy should be taught as an integral part of the other nursing courses, both classroom and clinical,
4. 60.9 percent of the RNs indicated that the person best qualified to teach diet therapy was a registered dietitian on the school faculty,
5. between 80.0 and 100.0 percent of those subjects giving diet instruction indicated that a diet therapy course should include the following material:
  - the importance of teaching the patient about his diet,
  - the relationship of diet to disease and diagnosis,
  - specific foods allowed or avoided for a particular diet,
  - shopping and cooking tips for a particular diet,
  - available resources from which the patient may obtain information about his diet,
6. 84.4 percent of all subjects stated that continuing education courses in diet therapy would be beneficial to their patient



interactions with between 58.0 and 61.6 percent indicating a desire for continuing education programs regarding fat-controlled, diabetic, low cost and low sodium diets.

The questions asked to determine the actual amount and depth of diet instruction given by registered nurses indicated that

1. the diets for which the registered nurses gave more than 200 instructions per month concerned the low cost, low sodium, and fat-controlled diets and the diets for which they gave more than 100 instructions per month were the diabetic, bland, iron-rich, and soft diets,
2. graduates from BSN programs gave the highest mean number of diet instructions per month (7.4) followed closely by Diploma (7.2) and Associate Degree (4.3) graduates,
3. the Associate Degree graduates gave a much lower percent (35.3%) of diet instructions than the graduates of the other two programs (56.4% and 83.3%),
4. when the Associate Degree graduates gave the highest percent of in-depth instruction, it was only to hand out diet sheets or teach the relationship of the diet to the patient's disease or diagnosis,
5. the Associate Degree graduates gave no diet instruction for the soft, postgastrectomy, low protein, or low cost diets.

On the 27 question diet therapy knowledge test the mean average percentages scored were 59.1 percent for the Associate Degree, 65.3 percent for the BSN, and 60.2 percent for the Diploma graduates.

Based upon these data recommendations were made and an outline was prepared for a diet therapy course to be taught in nursing school curricula. The outline includes course objectives, methods of teaching and evaluation, course content, learning experiences, a bibliography, and a list of agencies from which literature is available regarding diets.

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## CHAPTER I

### INTRODUCTION

The importance of modified diets in the treatment of diseases was recognized centuries ago by the ancient Greek and Roman physicians. Today, the physician, nurse, and dietitian work as a team sharing the responsibility for the dietary component of patient care. Each brings to this responsibility his own professional functions learned as a part of his professional training.

For the past several years many people have voiced their concern about the amount and quality of nutrition and diet therapy education received by all paramedical personnel. This concern was stated at the 1969 White House Conference on Food, Nutrition, and Health. The problem has also been brought before the United States Senate, and there have been numerous papers in professional journals on this subject. From the commencement of nursing schools in this country, the public has assumed that an understanding of modified diets is an integral part of the nurse's professional qualifications. What about today? Many feel that the dietetic profession has assumed the responsibility for nutrition and diet therapy education. Does today's nurse have diet therapy responsibilities? If so, what are her responsibilities? Does this responsibility vary according to the type of program from which she graduated? If so, does the diet therapy education need to be adjusted accordingly? These are a few of the questions being asked today.

As stated in 1970 by the National Commission for the Study of Nursing and Nursing Education (1), there is increased need for research into both the practice of nursing and the education of nurses. It is the purpose of this study to attempt to determine the actual amount and depth of diet instruction given by registered nurses today in seven states. And, from this information determine the actual diet therapy educational needs of registered nurses and develop core course outlines to be used in teaching diet therapy in nursing schools.



## CHAPTER II

### REVIEW OF LITERATURE

It has been stated recently that some clinicians, physicians, and nurses are very poorly prepared to recognize the nutrition deficiency diseases that exist in our country (2). At the 1969 White House Conference on Food, Nutrition, and Health in Washington, D.C., the health experts who discussed the teaching of nutrition in schools of medicine concluded that "the teaching of nutrition in schools of medicine is most inadequate at the present time; in some schools it is almost nonexistent" (3). Yet, recent articles expound on the importance of nutrition as a part of medical training, "not only because of its role in maintaining health, but also the therapeutic value of adjusting food intake to the altered metabolism in pathological states" (4,5,6). Legislators are also realizing the seriousness of the problems in the medical schools. In 1972, Senator Richard S. Schweiker (D-Pa.) introduced a bill in the United States Senate to appropriate five million dollars per year for five years for nutrition education in medical schools (7). Sen. Schweiker recently expanded his bill (S. 324) to provide "ten million dollars during the next five fiscal years for DHEW grants to one hundred medical and sixty dental schools for the development of nutrition education courses in their curricula" (8). Not only is the lack of nutrition education of doctors and dentists considered a problem, but also that of nurses.

In the midst of several recent reports stating that many people in this country are suffering from nutritional deficiencies (2,9,10), Davis et al. stated in their review of the vitamin and mineral studies in the United States (1950-1968) that

It is an unfortunate and intolerable situation that our nation's nurses may be currently unable to diagnose primary nutritional deficiency diseases at a time when a National Nutrition Survey has revealed that growth and developmental failure, nutritional anemias, clinical and subclinical hypovitaminotic states are appallingly common in lower socioeconomic populations. (9)

From a review of recent literature, it appears as if nutrition (encompassing diet therapy) education in nursing is on the decline even though society expects its nurses to be qualified in the nutrition and dietetics field. As stated by Elliott,

With responsibility to the patient and the physician for the total therapeutic regimen, the nurse must understand the total prescription—the treatments, medicine, diet, and environmental conditions to be maintained. She must also understand the proven relationship to the processes of recovery. (11)

Over the past one hundred years there has been a complete reversal regarding nutrition and diet therapy education in nursing schools. The early 1900's saw the nursing student spend ten weeks (eight hour days) in preparation of total dietary care for the patient (12); while today, diet therapy is often omitted from the nursing curricula (13,14,15). A brief examination of the history of dietetics in nursing education will reveal how this change has developed.



A. NUTRITION AND DIET THERAPY EDUCATION  
IN PROFESSIONAL NURSING SCHOOLS

The importance of the role of nutrition in the total nursing care of the patient was realized as early as the 1850's. Florence Nightengale, the founder of modern nursing, felt it was the physician's place to prescribe the food for the patient, but that the art and science of feeding the ill was an essential part of nursing care. Through her efforts, nutrition was included in the very first nursing programs in the United States (16). In early nursing education programs (1876-1920), nurses were taught nutrition including the basic principles of cookery and obtained experience in the preparation of food (17). The objective was to "give the nurse thorough training in invalid cookery and sufficient knowledge to pass state boards." Time periods devoted to nutrition education varied with schools, but generally ran six to ten weeks, eight hours per day (12). The 1920's ushered in the development of the science of nutrition and profession of dietetics which changed the emphasis of nutrition courses in nursing education. Student nurses were taught the principles of nutrition and diet therapy as well as their practical application (18). In 1925, Smith recommended that student nurses spend less time in learning food preparation and more time in writing and analyzing diets so that they would be able to adapt the usual diet of the individual to meet the requirements of the prescribed therapeutic diet. Nursing was ready to release its responsibility of food preparation to the dietary department. During the 1930's, most approved nursing curricula provided for approximately one hundred hours of nutrition

which included lectures, laboratory, and six to eight weeks experience in the diet kitchen (18,19,20).

Following this transitional period, the nursing and dietetics professions seem to have gone their separate ways due to the development of their divergent technical interests. This divergence took its toll on nutrition education in nursing. Joint thought and planning by both professions concerning the goals, content, and methods of teaching became a rarity in nursing curricula. This resulted in nutrition being taught in separate time blocks of foods, nutrition, and diet therapy by instructors unfamiliar with the changing objectives of the nurse towards her dietary responsibilities. Nutrition and diet therapy became "busy work" courses. The emphasis in foods was on the science of food preparation—how to maintain the highest nutritive value of the food while making it aesthetically pleasing to the patient. The dietary department had by now taken over this task. In nutrition, the emphasis was on the properties and functions of nutrients; and in diet therapy, on memorizing and calculating modified diets. Unfortunately, diet kitchen experience was one of repeated food preparation with most of this work being carried out without any planned relationship to patient care (18). Is it any wonder that nurses developed unfavorable attitudes towards their role in the nutritional care of patients! Everyone was ready for the changes in diet therapy education in nursing curricula which occurred in the 1950's.

The trend was to eliminate the diet kitchen experience. It was believed that the student's time was better spent observing patients'



dietary habits at mealtime; discussing their food likes and dislikes; helping the patient understand the reasoning behind the prescribed changes in his diet; and giving informal and formal diet instruction to the patients. These experiences enabled the student to see the results of therapeutic diet in relationship to a specific disease. The 1950's also ushered out the teaching of diet therapy in a separate block. Diet therapy began to be taught paralleling the subject matter presented in medical-surgical nursing, obstetrics, pediatrics, and psychiatry. This necessitated the need for a teaching dietitian on the faculty of each school to integrate diet therapy teaching (classroom and clinical) with the nursing subjects taught (21,22,23,24,25,26,27). The practice of integrating diet therapy with the nursing subjects seemed to be successful in the 50's and 60's as students were better able to correlate the dietary needs of the patient with the physiological condition and prescribed treatment being taught in the classroom (28,29,30,31). This has seemed to be an excellent learning procedure for the student. However, in the past several years, the diet therapy section of many integrated programs has become nonexistent (13).

Unfortunately, the deletion of nutrition and diet therapy from nursing school curricula appears to be the trend nation-wide. The legal quota of class hours devoted to diet therapy required by State Boards of Nursing has diminished. In fact, if looked at in the broadest sense, this course may be omitted. For example, in the 1968 revision of the "Rules and Regulations of the Tennessee Board of Nursing Concerning the Licensure and Education of Registered Nurses" neither a nutrition or a

diet therapy course are mentioned in the curriculum content that should be common to all schools (32). However, the Tennessee State Board exam does contain diet therapy questions which requires a certain level of competence by the nursing student. A report made in 1967 by the Western Council on Higher Education for Nursing stated that in thirty-four baccalaureate nursing programs located in thirteen western states, 78.1 percent of the programs listed a course in normal nutrition while only 15.6 percent listed a course in diet therapy (13,14,15). This deletion of diet therapy from the nursing school curricula is highly inconsistent with the changing role of today's nurse and with what society expects of its nurses.

#### B. DIET THERAPY RESPONSIBILITIES OF TODAY'S REGISTERED NURSE

The role of the nurse today is to function as a responsible member of a health care team by interpreting and carrying out the instructions of others, by collaborating with her professional colleagues in the planning and delivery of total health care needs, and by acting independently when the needs of the patient so require (11,33,34,35). Today's nurse is becoming more involved in diagnosis which requires a good understanding of the cultural, psychological, and nutritional aspects relevant to the patient. Many nurses are also doing advanced work in specialized areas in which they need depth in understanding the relationship of the diet to the chemical process of the disease (36).



Several studies revealed that nurses, themselves, indicate that nutrition and diet therapy are a valuable and important aspect of nursing care. A report in 1958 (37) based on a questionnaire sent to 1,381 nurses with responses from 703 public health and school nurses, 46 industrial nurses, and 27 private-duty nurses coming in contact with approximately two million people a year stated that nurses in all these areas constantly received inquiries about nutrition in general and about diets and foods in particular from many adults seeking advice on how to follow special diets prescribed by their physician. The nurses reported that people expected them "to know the latest theory about the relationship between heart disease and fatty acids, and to have read articles about nutrition in current issues of popular magazines." Regarding the public health nurse, specifically, it has been stated that she, "more than any other public health professional, assumes the responsibility for nutrition education in direct contact with individuals, families, and groups" (38). In a California-based study (39) in which 347 hospital nursing personnel and 95 physicians were interviewed, it was reported that

1. the further the nurse was away from the patient and the higher the staff position she held, the greater was the verbal priority she placed on nutrition in patient care;
2. surgeons delegate much responsibility for diet orders to nursing personnel.

The nurse working in the geriatric or convalescent home also finds herself involved in diet therapy. A study conducted in 1971 by the

Oregon State Board of Health (40) showed that in 32 percent of the nursing homes surveyed, nurses were responsible for planning the special diets. Not only on the job, but in her private life, the nurse is expected to answer diet-related questions. As stated by Mary Davern (41),

Frequently neighbors and friends, as well as patients, turn to a nurse for advice. We are looked on as experts and are expected to have the knowledge. It behooves us to keep up to date on nutrition so that we can give reliable and intelligent answers to the questions we are asked.

This comment was made in 1956. It is hard to believe that over the past fifteen to twenty years, such a drastic change in nursing practice and the role of the nurse could have taken place to allow for the deletion of diet therapy from nursing curricula as indicated in the literature.

A review of literature has revealed no studies to assess the quantity or depth of diet therapy education received by registered nurses in the United States and very few studies have been done to determine the diet therapy responsibilities of registered nurses. Due to the many advances and changes in the field of dietetics and the role of the registered nurse in today's health care delivery system, there is a need to collect information to determine the actual quantity and quality of diet instruction given by professional nurses. The objectives of the study are

1. to collect information regarding the diet therapy educational needs of registered nurses by means of a questionnaire sent to registered nurses in selected regions in the United States;
2. to ascertain what the nurses believed should be included in a diet therapy course;



3. to develop core course outlines from which diet therapy may be taught integrated in with the other nursing courses in each of the three programs from which registered nurses graduate, i.e., associate degree, baccalaureate, and diploma.

The Tennessee Board of Nursing defines these programs as follows.

Associate Degree: A program in nursing leading to an associate degree is conducted by an educational unit in nursing (department or division) within the structure of a junior or community college or as a segment of a senior college or university.

Baccalaureate: A program leading to a baccalaureate degree is conducted by an educational unit which is an integral part of a senior college or university.

Diploma: A program leading to a diploma in nursing is conducted by a single purpose school under the control of a hospital. (32)

## CHAPTER III

### EXPERIMENTAL PROCEDURE

In order to investigate the diet therapy responsibilities of registered nurses in the United States and determine the diet therapy educational needs of professional nurses, a questionnaire was developed and sent to registered nurses. The questionnaire was designed to be as brief as possible and yet provide the necessary information with the least imposition on the participants. The majority of the questions on the questionnaire were multiple-choice with a few fill-in-the blank.

A random sample of 315 registered nurses was used for the study. It was advised that 300 questionnaires be mailed out because

1. the average return for such a survey is approximately 33.3 percent which would mean about 100 questionnaires should be returned, and
2. the validity of statistics for any returns above 100 would be approximately the same as for 100 returns.<sup>1</sup>

On the other hand, it is realized that sending questionnaires to 315 registered nurses represents a small percentage of the nurses working in the United States as there were 680,000 working nurses in the U.S. in 1969 and the projected need for 1975 is 1,000,000 (42). On the basis of the large population of registered nurses, a replication of the

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<sup>1</sup> Ahmad, Irshad. Personal communication, April 6, 1973.



study at a somewhat later date might be suggested to verify the data obtained from this survey.

Copies of the questionnaire were sent to 315 registered nurses in seven regional areas of the continental United States which had been randomly selected based on a regional division of the United States found in Goode's World Atlas (43). In each region, a state was randomly chosen to participate in the study; the seven states selected were Georgia, Idaho, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota. Figure 1 presents a clear picture of the regions. Because the nurses' dietary responsibilities vary with the field of practice, questionnaires were sent to thirty-five registered nurses working in each of the following settings: hospital, public health, clinic, nursing home, private-duty, school nurse, teaching, industrial, and doctor's office. The American Nurses' Association (ANA) state office was contacted in each state and was asked to provide the address and the name of the person to contact in the state's largest ANA district. The addresses of the state offices were obtained from the January, 1973 issue of American Journal of Nursing (44). Upon receipt of this information, each district was asked to send a copy of their computerized membership list containing the members' names, addresses, and places of employment. The participants in the study were randomly selected from these lists. Copies of the letters sent to the state and district officers of the ANA are found in Appendix B.

The questionnaire and answer sheet were developed by the investigator. Changes were made in accordance with the suggestions

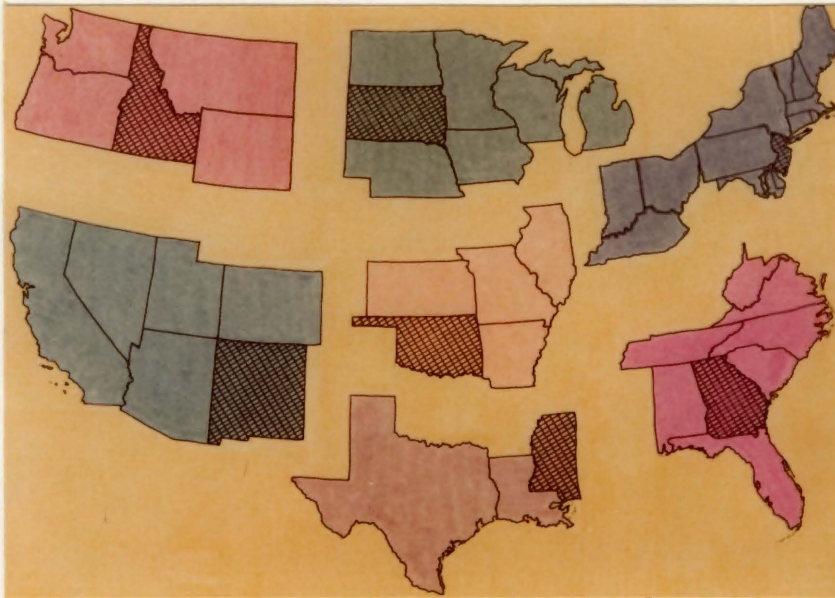


Figure 1. States surveyed from regional division of the United States as separated by Goode's World Atlas (43).<sup>a</sup>

<sup>a</sup>Selected states are indicated by cross-hatching.



of ten registered nurses participating in a pilot study; several colleagues in the dietetic field; a specialist in test composition; and a computer consultant. The questionnaire consisted of three main parts, each designed to provide specific information about an area. The first part asked for background information about the participant's nutrition and diet therapy education as a nursing student. It also asked about attitudes regarding what should be included in current nursing school diet therapy courses. Answers to the second group of questions provided information about the frequency and depth of diet instruction given by each participant. The third set of questions tested each participant's knowledge about specific diets and was used to cross-check the answers given in the second set of questions. A copy of the cover letter, questionnaire, and answer sheet mailed to the participants is found in Appendix C.

A stamped, self-addressed return envelope was mailed to each person along with a cover letter briefly explaining the purpose of the survey, the questionnaire, and answer sheet. Ten days after the initial mailing, a reminder postcard was sent to all participants. After an additional two weeks, it was assumed that all answer sheets that would be returned had been received and the results were compiled.

The information from each answer sheet was transferred in numerical order to IBM punched cards for compilation utilizing the IBM 360/65 of the University of Tennessee Computing Center. Subprograms designed by Nie et al. (45) for one-way to n-way distributions (chi-square tests) and t-tests were used to obtain summaries and the

associated statistics. Chi-square values and t-statistics obtained were compared at the .05 probability level with figures found in tables in a statistics book by Steel and Torrie (46). Chi-square calculations were made using the observed responses. However, the data in the tables is presented as percents rather than observed responses to facilitate reading. Whenever the chi-square value of the observed frequencies was found to be significant, the symbol (\*) will follow the chi-square value printed below the table.



## CHAPTER IV

### RESULTS AND DISCUSSION

A return of 48.6 percent was received from the questionnaire as compared to a 33.3 percent return which is considered to be satisfactory by statisticians.<sup>2</sup> Of the 315 questionnaires mailed out, a total of 153 were returned. However, 15 were discarded as the participants had left many questions unanswered. A total of 43.8 percent or 138 of the 315 questionnaires were used in the tabulation of the data. These 138 questionnaires were returned by nurses living in 13 states.<sup>3</sup> As can be seen in Table 1, responses from registered nurses (RNs) employed in all types of positions were obtained with those in teaching, hospital, and public health positions returning the highest percentage of questionnaires. Table 2 lists the participants according to the type of program, i.e., Associate Degree, BSN Degree, and Diploma, from which they graduated in relation to the number of registered nurses in the United States that were graduated from each of the three programs in 1967-1968 (42). The figures for the 1967-1968 academic year as found in the 1969 Facts About Nursing were used for this comparison as it was the last annual report the library had catalogued. While the percentage of Associate Degree graduates participating in the study is below the percentage

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<sup>2</sup>Ahmad, Irshad. Personal communication, April 6, 1973.

<sup>3</sup>Refer to Table 30 in Appendix D for the number of participants from each state.

TABLE 1

NUMBER AND PERCENT OF RETURNS FROM REGISTERED NURSES  
LISTED ACCORDING TO THEIR TYPE OF EMPLOYMENT

Type of Employment	Size of Sample	Number of Returns	Percent Return
Teaching	35	29	82.8
Hospital	35	26	74.3
Public Health	35	23	65.7
Doctor's Office	35	15	42.8
School	35	11	31.4
Private Duty	35	11	31.4
Nursing Home	35	9	25.7
Occupational Health	35	9	25.7
Clinic	35	5	14.3
Totals	315	138	43.8

TABLE 2

NUMBER AND PERCENT OF SUBJECTS ACCORDING TO TYPE OF PROGRAM  
FROM WHICH THEY GRADUATED IN RELATION TO NUMBER AND  
PERCENT OF REGISTERED NURSES WHO WERE GRADUATED  
IN THE UNITED STATES IN 1967-1968

Program Type	Diet Therapy Education Study		Graduations in 1967-1968 of RNs in the U.S.	
	Number of Subjects	Percent	Number of Graduates	Percent
Associate Degree	6	4.3	6,213	15.0
BSN Degree	39	28.3	7,145	17.0
Diploma	85	61.6	28,197	68.0
Diploma/BSN	8	5.8		
Totals	138	100.0	41,555	100.0



graduated from this type of program in 1967-1968, it was decided that there was a sufficient number of returns to validate inclusion of their data in the results. The percentage of students graduated from BSN programs in the study exceeds the percentage graduated in the United States in 1967-1968 while the percentage of Diploma graduates participating in the study almost matches those graduated in the United States in 1967-1968. Eight of the participants stated they had received BSN degrees after receiving their diplomas. Because it could not be determined from which program these subjects received their diet therapy knowledge, the data from the questionnaires of these participants were omitted when any comparisons were made involving the three types of programs.

#### A. TRENDS IN DIET THERAPY EDUCATION IN NURSING PROGRAMS

The first section of the questionnaire asked for background information about the subject's diet therapy education as a student nurse. Several trends were noted after this information was tabulated. Examination of Table 3 reveals that the majority of the nurses graduated from the three types of nursing programs received between one and nineteen hours of formal classroom diet therapy education. The highest percentage (63.2%) of participants spending between one and nineteen hours in diet therapy class were the BSN graduates whereas the highest percentage (16.7%) of students with no formal diet therapy education were graduated from Associate Degree programs. A higher percentage of

TABLE 3

PERCENT OF REGISTERED NURSES GRADUATED FROM THREE TYPES  
OF NURSING PROGRAMS SPENDING EITHER 0, 1-19,  
OR 20-40+ HOURS IN DIET THERAPY CLASS

Type of Program	Hours Spent in Diet Therapy Class		
	0	1-19	20-40+
	%	%	%
Associate Degree	16.7	50.0	33.3
BSN Degree	13.2	63.2	23.6
Diploma	5.0	54.5	40.5

$$\chi^2 = 5.0968 \text{ with } 4 \text{ df, ns } (.05 = 11.14)$$



Diploma students (40.5%) spent between twenty and forty hours or more in diet therapy class in comparison with the other two programs. One might anticipate that the BSN student would have more hours of diet therapy education since this is a four-year program and the Associate Degree and Diploma programs are only two and three years, respectively. However, the observed chi-square value 5.0968 did not exceed the critical chi-square value of 11.14 at the .05 level of significance. Therefore, the null hypothesis cannot be rejected as no significant difference was found between the type of program from which RNs graduated and the hours they spent in diet therapy class.

Studies in the literature show that the number of hours spent in diet therapy have decreased in the past decades. The data presented in Tables 4 and 5 show there has been a decrease in the number of hours devoted to diet therapy education from 1960 to the present time. As seen in Table 4, the majority of nurses graduated between 1920 and 1973 spent between 1 and 19 hours in diet therapy class. The highest percentage of RNs not receiving any formal diet therapy education graduated between 1970 and 1973 while the lowest percentage of students spending between 20 and 40 hours or more graduated during these same years. Although it appears from the data that from 1960 to the present a higher percentage of graduates spent fewer hours in diet therapy class, the chi-square test indicates there is no significant difference between the date of graduation and the number of hours spent in diet therapy class. The observed chi-square value 12.4512 was lower than the critical chi-square value of 18.31 at the .05 level of significance. Therefore, the



TABLE 4

PERCENT OF REGISTERED NURSES SPENDING EITHER 0, 1-19,  
OR 20-40+ HOURS IN DIET THERAPY CLASS IN RELATION  
TO GRADUATION DATE

Date of Graduation	Hours Spent in Diet Therapy Class		
	0	1-19	20-40+
	%	%	%
1920-29 (n = 4) <sup>a</sup>	0.0	50.0	50.0
1930-39 (n = 17)	11.1	61.1	27.8
1940-49 (n = 38)	7.0	53.5	39.5
1950-59 (n = 28)	3.3	53.3	43.4
1960-69 (n = 20)	0.0	65.0	35.0
1970-73 (n = 16)	25.0	56.3	18.7

$$\chi^2 = 12.4512 \text{ with } 10 \text{ df, ns } (.05 = 18.31)$$

<sup>a</sup>A total of 15 respondents did not answer this question.

TABLE 5

PERCENT OF REGISTERED NURSES GRADUATED FROM AN ASSOCIATE DEGREE  
PROGRAM SPENDING EITHER 0, 1-19, OR 20-40+ HOURS IN DIET  
THERAPY CLASS IN RELATION TO GRADUATION DATE

Graduation Date	Hours Spent in Diet Therapy Class		
	0	1-9 <sup>a</sup>	20-29 <sup>a</sup>
	%	%	%
1920-29 (n = 1)	0.0	0.0	100.0
1960-69 (n = 3)	0.0	66.7	33.3
1970-73 (n = 2)	50.0	50.0	0.0

$$\chi^2 = 4.6666 \text{ with } 4 \text{ df, ns } (.05 = 9.49)$$

<sup>a</sup>No respondents from this program type received between 10 and 19 hours or more than 30 hours of diet therapy instruction.

null hypothesis was accepted that the hours spent in diet therapy class are independent of the date of graduation.

The data in Tables 5 through 7 also indicate that from 1960 to 1973 the majority of RNs graduated from all three programs had between one and nineteen hours of diet therapy education, with an increasing percent of graduates from the Associate Degree and BSN programs not having any class time devoted to diet therapy education. The data presented in Table 6 indicate the increasing percent of BSN students who no longer receive diet therapy education during their nurses' training and agree with the 1967 report made by the Western Council on Higher Education for Nursing which found that only 15.6 percent of the BSN programs in thirteen western states required diet therapy. Fortunately, the percentage (25%) of the BSN graduates surveyed in this nationwide study who do not receive diet therapy education is much lower than the figure reported from the west coast study (84.4%) (15). There is a higher number of Associate Degree graduates in this sample lacking diet therapy experience than BSN graduates. As with the data in Table 4, the observed chi-square values for the data presented in Tables 5 through 7 did not exceed the critical chi-square values at a probability level of less than .05. Therefore, the null hypothesis can not be rejected as no significant difference was found between the date of graduation and the number of hours spent in diet therapy class in any of the nursing programs. The omission of diet therapy from the Associate Degree and BSN curricula conflicts with the data presented in Table 8. These figures show that the majority of BSN (63.6%) and Associate Degree (80%)



TABLE 6

PERCENT OF REGISTERED NURSES GRADUATED FROM A BACCALAUREATE PROGRAM SPENDING EITHER 0, 1-19, OR 20-40+ HOURS IN DIET THERAPY CLASS IN RELATION TO GRADUATION DATE

Graduation Date	Hours Spent in Diet Therapy Class		
	0	1-19	20-40+
	%	%	%
1930-39 (n = 2) <sup>a</sup>	0.0	50.0	50.0
1940-49 (n = 7)	14.3	57.1	28.6
1950-59 (n = 9)	11.1	66.7	22.2
1960-69 (n = 8)	0.0	62.5	37.5
1970-73 (n = 12)	25.0	66.6	8.4

$$\chi^2 = 4.2276 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

<sup>a</sup>One respondent did not answer this question.

TABLE 7

PERCENT OF REGISTERED NURSES GRADUATED FROM A DIPLOMA PROGRAM SPENDING EITHER 0, 1-19, OR 20-40+ HOURS IN DIET THERAPY CLASS IN RELATION TO GRADUATION DATE

Graduation Date	Hours Spent in Diet Therapy Class		
	0	1-19	20-40+
	%	%	%
1920-29 (n = 3) <sup>a</sup>	0.0	66.7	33.3
1930-39 (n = 15)	13.3	66.7	20.0
1940-49 (n = 31)	6.5	54.8	38.7
1950-59 (n = 19)	0.0	42.1	57.9
1960-69 (n = 9)	0.0	66.7	33.3
1970-73 (n = 2)	0.0	0.0	100.0

$$\chi^2 = 10.7805 \text{ with } 10 \text{ df, ns } (.05 = 18.31)$$

<sup>a</sup>Six respondents did not answer this question.



TABLE 8

PERCENT OF REGISTERED NURSES GIVING AT LEAST ONE DIET INSTRUCTION  
PER MONTH IN RELATION TO THEIR GRADUATION DATE AND THE TYPE  
OF PROGRAM FROM WHICH THEY GRADUATED

Type of Program	Date of Graduation		
	1920-39	1940-59	1960-73
	%	%	%
Associate Degree (n = 5)	20.0	0.0	80.0
BSN Degree (n = 22)	9.1	27.3	63.6
Diploma (n = 30)	16.7	70.0	13.3

$$\chi^2 = 18.9085^* \text{ with 4 df } (.05 = 9.49, .01 = 13.28)$$

graduates giving at least one diet instruction per month, graduated in the last fourteen years. The computed chi-square value of the observed frequency was 18.9085. Since this value exceeds the critical chi-square value,  $.05 = 9.49$  and  $.01 = 13.28$ , we may reject the null hypothesis, indicating that there is evidence that the type of program from which those RNs who gave instruction graduated was very much related to their graduation date. These data give evidence of the need for inclusion of diet therapy education in all nursing school curricula and reiterate the point made in the literature that the public, as well as doctors and other members of the medical team, expect the nurse to be able to answer questions and teach facts about modified diets (32,33,34,35,36).

Several methods of instruction have been used for teaching diet therapy in the past as seen in Table 9. From 1930 to 1959 a higher percentage of RNs were taught diet therapy in combination with a nutrition course rather than as a separate course or as an integral part of their nursing courses, i.e., medical-surgical nursing, obstetrics, and pediatrics. From 1960 to the present, the majority of the RNs stated their diet therapy education was an integral part of their nursing courses. When the chi-square test was made on these data, it indicated that the method of teaching diet therapy was strongly dependent on the date of graduation. The chi-square value of the observed frequencies was calculated to be 35.5340. This value exceeds not only the critical chi-square,  $.05 = 18.31$ , but also  $.01 = 23.21$ , therefore, the null hypothesis was rejected. Just as teaching diet therapy as a separate course or in combination with nutrition appear to be teaching methods

TABLE 9

PERCENT OF REGISTERED NURSES INSTRUCTED IN DIET THERAPY  
BY SEVERAL TEACHING METHODS IN RELATION  
TO GRADUATION DATE

Date of Graduation	Method of Teaching Diet Therapy		
	Separate	Combined	Integrated
	%	%	%
1920-29 (n = 4) <sup>a</sup>	0.0	50.0	50.0
1930-39 (n = 19)	0.0	85.0	10.0
1940-49 (n = 44)	22.2	60.0	15.6
1950-59 (n = 33)	27.3	48.5	24.2
1960-69 (n = 20)	5.0	40.0	55.0
1970-73 (n = 13)	12.5	12.5	56.3

$\chi^2 = 35.5340^*$  with 10 df (.05 = 18.31, .01 = 23.21)

<sup>a</sup>Five respondents did not answer this question.



of the past, diet kitchen experience also appears to be an out-dated educational tool.

As can be seen in Table 10, during the last fourteen years a small percent of the nurses surveyed reported having diet kitchen experience included in their training and these hours were minimal. The chi-square value of the observed responses in Table 10 was computed to be 35.5340. Since this value exceeds the critical chi-square values,  $.05 = 18.31$  and  $.01 = 23.21$ , the null hypothesis was rejected. There is strong evidence that the hours student nurses spent in diet kitchen experience are strongly dependent upon when the nurses graduated. Based upon the data presented in Table 10 it is recommended that all diet kitchen experience be dropped from the curriculum. The student should have sufficient knowledge for patient education if the diet therapy course outline includes shopping and cooking tips, suggestions for eating out and addresses of recipe booklets, cookbooks, and so forth about the various modified diets. If time and budget allow, the student might be given the opportunity to taste some of the specialized foods prescribed for the various diets such as gluten-free bread, commercial tube/supplemental feedings and low sodium tomato soup. Often these items may be obtained free of charge from the local sales representative. The data from Tables 9 and 10 are in accord with the information presented in the literature stating that the educational trends developed in the 1950's were to integrate diet therapy teaching with the nursing subjects taught and to eliminate the diet kitchen experience (21,22,23, 24,25,26,27).

TABLE 10

PERCENT OF REGISTERED NURSES SPENDING EITHER 0, 1-19,  
OR 20-40+ HOURS IN DIET KITCHEN EXPERIENCE  
IN RELATION TO THEIR GRADUATION DATE

Date of Graduation	Hours Spent in Diet Kitchen Experience		
	0	1-19	20-40+
	%	%	%
1920-29 (n = 4) <sup>a</sup>	25.0	25.0	50.0
1930-39 (n = 19)	15.8	36.9	47.3
1940-49 (n = 45)	6.7	20.0	73.3
1950-59 (n = 33)	12.1	39.4	48.5
1960-69 (n = 20)	70.0	20.0 <sup>b</sup>	10.0
1970-73 (n = 16)	93.8	6.2 <sup>b</sup>	0.0

$$\chi^2 = 78.3317^* \text{ with 10 df } (.05 = 18.31, .01 = 23.21)$$

<sup>a</sup>One respondent did not answer this question.

<sup>b</sup>Participants indicated only 1-9 hours were spent in diet kitchen experience.

B. REGISTERED NURSES' ATTITUDES TOWARD  
DIET THERAPY EDUCATION

After completion of training for a profession and several years work experience, many professionals have very definite opinions about what they believe should have been included or excluded as part of their training. For this reason the nurses' attitudes towards diet therapy education was obtained.

1. Prerequisite Courses

An overwhelming 99.3 percent of all the subjects indicated that diet therapy had a place in the nursing school curriculum, while 100.0 percent of those who actually gave diet instruction indicated an affirmative response for the inclusion of diet therapy in their training.

Table 11 shows the percent of nurses indicating those courses which they believed should be taken parallel with or as a prerequisite to a diet therapy course. Based upon these figures, it appears the nursing student should be strongly advised to take the following courses in parallel with or as prerequisites to diet therapy study in order that the fullest educational opportunities may be derived from the course; normal nutrition, anatomy, physiology, chemistry, and fundamentals of nursing.

Normal nutrition will enable the student to understand and respect more fully not only the relationship between good nutrition and good health, but also the cultural, socioeconomic, religious, regional, and psychological influences that determine the patient's eating habits. The course will also help the student evaluate the patient's eating



TABLE 11

PERCENT OF REGISTERED NURSES WHO STATED AFFIRMATIVE RESPONSES  
TO COURSES WHICH THEY BELIEVED SHOULD PARALLEL OR BE  
PREREQUISITES FOR A DIET THERAPY COURSE

Course	Percent
Normal Nutrition	94.8
Anatomy and Physiology	83.7
Chemistry	74.8
Fundamentals of Nursing	56.3
Pharmacology	48.1
Microbiology	43.0
None	2.2

habits and make suggestions to ensure the patient is meeting all nutritional requirements of his modified diet. A discussion of the digestion, absorption, and metabolism of all the nutrients is also included and the ground work is laid for the student's comprehension of gastrointestinal and pediatric diseases involving malabsorption syndromes, inborn errors of metabolism and so forth. These are just a few of the topics generally covered in a nutrition course.

Prior study of anatomy, physiology, and chemistry should facilitate and strengthen the student's understanding of the digestion, absorption, and metabolism of the nutrients, malabsorption syndromes, and drug and nutrient reactions to mention a few.

Fundamentals of nursing introduces the student to the basic nursing needs of the patient helping her to fit the patient's dietary needs into the total nursing care of the patient.

## 2. Method of Teaching Diet Therapy

Of the subjects surveyed, 81.0 percent stated that diet therapy should be taught as an integral part of the other nursing courses, both classroom and clinical rather than as a separate block. These attitudes are in agreement with the data presented in Table 9 and with reports made in the literature. Therefore, it is strongly recommended that diet therapy should be taught as an integral part of the other nursing subjects, i.e., medical-surgical nursing, obstetrics, and pediatrics rather than as a separate subject. It is much easier for a student taking care of a patient with congestive heart failure to correlate the principle or

objective behind the use of a sodium-restricted diet when the student actually observes the patient's edema alleviated. Or, perhaps the same patient is being given one of the thiazide diuretics to alleviate edema and while receiving daily treatment develops paralysis, tetany, and postural hypotension. Immediately the student learns the importance of instructing patients undergoing prolonged diuretic therapy to eat daily those fruits and vegetables high in potassium in order to prevent hypokalemia. The opportunity to provide instruction to a patient about a particular diet while the student is studying that disease condition in the classroom helps to reinforce the material studied.

### 3. Instructor for Diet Therapy

The majority of the respondents (60.9 percent) believed the person best qualified to teach diet therapy was a registered dietitian on the school faculty, 29.7 percent indicated they believed a registered dietitian from an affiliating hospital's dietary department would be best qualified for the position, while the remaining 9.4 percent were in favor of a registered nurse teaching the course. Based upon these figures it is recommended that a registered dietitian (RD) who is a member of the school faculty should be responsible for both the classroom and clinical instruction of diet therapy. Ideally, an RD who is solely responsible to the school and the students should be more effective than a part-time instructor because (1) she should have more time to coordinate her teaching, both method and content, with the philosophy of the school, (2) she should have more time to cooperatively work with other



faculty members integrating diet therapy into their courses or up-dating what is presently being taught as newer research is published, (3) she should have more time to spend in the clinical area with the students, giving them more practice recognizing and helping meet the dietary needs of their patients. Often when a dietitian teaching the student nurses is from an affiliating hospital's dietary department, she feels pressured by both responsibilities, not having sufficient time to spend with the student who is having a problem understanding a diet because she must get back to the hospital to fulfill her obligations there. Both the student and the dietitian should gain when the RD is solely responsible to the school.

#### 4. Material to Be Included in Diet Therapy Course

As can be seen in Table 12, there was no significant difference among the graduates of the three programs as to the material they believed should be included in a diet therapy course. Only the opinions of the RNs who give diet instruction were included in this table as it was believed they would have a better recognition of their diet therapy educational needs than the RNs not instructing patients. The observed chi-square value for Table 12, page 35, was calculated to be 1.7602 and did not exceed the critical chi-square value of 15.51 at the .05 level of significance. Therefore, the null hypothesis must be accepted that there is no significant difference among the attitudes of the graduates from the three nursing programs as to the material to be included in a diet therapy course. Thus it can be concluded that nurses from these

TABLE 12

PERCENT OF REGISTERED NURSES GIVING DIET INSTRUCTION WHO INDICATED  
AFFIRMATIVE RESPONSES TO THE MATERIAL THEY BELIEVE SHOULD BE  
INCLUDED IN A DIET THERAPY COURSE IN RELATION TO THE  
TYPE OF PROGRAM FROM WHICH THEY GRADUATED

Material to be included in diet therapy course	Type of Program		
	Associate Degree	BSN Degree	Diploma
	%	%	%
Importance of teaching patient about his diet	100.0	95.5	96.7
Relationship of diet to disease/diagnosis	100.0	100.0	93.3
Foods to be permitted and/or avoided	100.0	90.9	96.7
Shopping and cooking tips for the diet	80.0	86.4	90.0
Available resources for the patient to utilize about diets (agencies, literature, etc.)	100.0	95.5	90.0

$$\chi^2 = 1.7602 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$



programs believe that all five information categories are valuable and should be included in a diet therapy course.

### C. FREQUENCY AND DEPTH OF DIET INSTRUCTION

#### GIVEN BY REGISTERED NURSES

Nurses' opinions as to how diet therapy should be taught and what should be included in the course is very beneficial in deciding what to include in a diet therapy course outline for nursing schools. But even of more value would be the determination of the actual amount and depth of diet instruction given by the registered nurses. Questions to ascertain this were also included in the questionnaire for it is this information that should determine what diet therapy preparation the nurse must have to interact efficiently with patients.

The figures in Table 13 indicate that 43.9 percent of the nurses sampled stated they give at least one diet instruction per month. This table shows that a high percentage of Associate Degree (83.3%) and BSN (56.4%) graduates give diet instruction. These facts are incompatible with the facts presented in Tables 5 and 6 (pages 22 and 24) which show that there are an increasing number of RNs graduating from these two programs with no hours devoted to formal classroom diet therapy education. Table 13 presents a positive position for the inclusion of diet therapy in all nursing school curricula. Another figure which suggests the need for nurses to have some knowledge concerning modified diets is that 45.6 percent of those RNs indicating they do not give diet instruction to patients stated there is no dietitian or ~~nut~~ritionist at their



TABLE 13

NUMBER AND PERCENT OF REGISTERED NURSES IN EACH PROGRAM THAT  
GIVE AT LEAST ONE DIET INSTRUCTION PER MONTH

Type of Program	Number of Subjects Answering Questionnaire	Number of Subjects Giving Diet Instruction	Percent
Associate Degree	6	5	83.3
BSN Degree	39	22	56.4
Diploma	85	30	35.3
Total	130	57	43.9

place of employment to assume this responsibility. In institutions where a dietitian or nutritionist is not available for patient instruction, it is imperative that the nurse(s) present have the ability to teach the patient about his dietary modifications in order for all of the patient's health care needs to be met.

The figures in Table 14 show that BSN graduates give the highest mean number of diet instructions per month (7.4) followed closely by Diploma (7.2) and Associate Degree graduates (4.3) although the chi-square test indicates there is no significant difference in the mean number of diet instructions given per month by the graduates of the three programs. Immediate observation of the total means for all the diets might lead one to conclude that the Associate Degree graduates gave a significantly lower mean number of diet instructions than the graduates of the other two programs. However, the observed frequency for the number of instruction given by the Associate Degree graduates did not differ significantly from the probability number that they would be expected to give. For computing the mean totals, the means were weighted by multiplying the mean number of diet instructions given by the number of RNs graduated from the specified program giving instruction for each particular diet. The means were weighted to take into account the small number of Associate Degree graduates giving diet instruction (5) in relation to the other two programs, BSN (22) and Diploma (30). The mean totals are not a part of the chi-square value. The highest mean number of diet instructions were given for the low cost, low sodium, and soft diets, while the lowest mean number of diet instructions were given for the diabetic, low protein, and postgastrectomy diets.

TABLE 14  
 MEAN NUMBER AND MEAN TOTAL OF SELECTED DIET INSTRUCTIONS  
 RELATED TO TYPE OF PROGRAM

Type of Diet Instruction	Mean for All Programs	Type of Program		
		Associate Degree	BSM Degree	Diploma
Low Cost	14.6	6.0	11.6	19.8
Low Sodium	8.3	4.3	8.4	7.9
Soft	7.4	1.0	7.1	7.9
Iron Rich	6.7	1.0	7.9	5.1
Fat-Controlled	6.4	8.0	8.2	5.4
Bland	6.4	4.5	5.1	7.3
Diabetic	5.1	3.3	4.1	6.0
Low Protein	4.7	4.0	4.7	4.7
Postgastrectomy	3.0	1.0	5.5	2.3
Mean for All Diets	7.1	4.3	7.4	7.2

$$x^2 = 14.9327 \text{ with } 16 \text{ df, ns } (.05 = 26.30)$$



Table 15 lists the number of instructions given per month for various diets by RNs who indicated they gave at least one diet instruction per month. There were more diet instructions given per month concerning the low cost, low sodium, and fat-controlled diets than any other diets. The fewest number of diet instructions were given for low protein and postgastrectomy diets. It should be pointed out that there are far more people living with low incomes trying to cope with the rising cost of food and more people suffering from coronary heart disease whose doctors have prescribed a low sodium or a fat-controlled diet than there are people with renal diseases or gastrectomies. Therefore, it seems logical that fewer low protein and postgastrectomy diet instructions would be given. Other diets for which the RNs indicated they gave instruction are listed in Table 31 in Appendix D. The information obtained from Tables 15 and 31 was an important factor in the construction of the diet therapy course outlines presented in Appendix A.

Tables 16 through 24 present information regarding the depth of diet instruction given by the registered nurses. For clarification of discussion of Tables 16 through 24 "in-depth" diet instruction is defined as including teaching the relationship of the diet to the disease or diagnosis, foods permitted and avoided for the diet, shopping and/or cooking tips for the diet, and available resources (agencies, literature, and so forth) where the patient may obtain information about the diet. Handing out diet sheets is included in this study as a means of giving in-depth diet instruction, however it is not considered by this investigator to be in-depth diet instruction because it does not take into consideration the individuality of the patient.

TABLE 15

NUMBER OF DIET INSTRUCTIONS PER MONTH GIVEN BY  
REGISTERED NURSES WHO GAVE DIET INSTRUCTION

Diet	Number of Instructions Given Per Month
Low Cost	292
Low Sodium	265
Fat-Controlled	206
Diabetic	187
Bland	186
Iron Rich	184
Soft	177
Low Protein	70
Postgastrectomy	21
Others <sup>a</sup>	357

<sup>a</sup>See Table 31 in Appendix D.

TABLE 16

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR SOFT DIET INSTRUCTIONS IN RELATION TO THE TYPE OF  
PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate	BSN	Diploma
	Degree (n=1) %	Degree (n=8) %	(n=15) %
Handing out diet sheets	0.0	12.5	53.3
Relationship of diet to disease/diagnosis	0.0	37.5	80.0
Foods to omit or avoid	0.0	62.5	73.3
Shopping and/or cooking tips	0.0	25.0	40.0
Available resources about the diet (literature, agencies)	0.0	25.0	46.7

$$\chi^2 = 1.4348 \text{ with } 8 \text{ df, ns } (.05 - 15.51)$$

$$\chi^2 = 1.4348 \text{ with } 4 \text{ df, ns } (.05 = 9.49)$$



TABLE 17

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN THEIR DIABETIC DIET INSTRUCTIONS IN RELATION TO THE TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=3)	BSN Degree (n=14)	Diploma (n=20)
	%	%	%
Handing out diet sheets	100.0	64.3	75.0
Relationship of diet to disease/diagnosis	100.0	85.7	85.0
Foods to omit or avoid	66.7	78.8	95.0
Shopping and/or cooking tips	33.3	35.0	65.0
Available resources about the diet (literature, agencies)	33.3	57.1	70.0

$$\chi^2 = 1.5704 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

TABLE 18

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR BLAND DIET INSTRUCTIONS IN RELATION TO THE TYPE OF  
PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate	BSN	Diploma
	Degree (n=2)	Degree (n=9)	(n=18)
	%	%	%
Handing out diet sheets	50.0	22.2	66.7
Relationship of diet to disease/diagnosis	50.0	55.6	88.9
Foods to omit or avoid	50.0	77.8	88.9
Shopping and/or cooking tips	0.0	33.3	50.0
Available resources about the diet (literature, agencies)	0.0	33.3	50.0

$$\chi^2 = 4.5754 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

TABLE 19

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR POSTGASTRECTOMY DIET INSTRUCTIONS IN RELATION TO THE  
TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate	BSN	Diploma
	Degree (n=1)	Degree (n=2)	(n=4)
	%	%	%
Handing out diet sheets	0.0	50.0	75.0
Relationship of diet to disease/diagnosis	0.0	200.0	75.0
Foods to omit or avoid	0.0	200.0	75.0
Shopping and/or cooking tips	0.0	100.0	50.0
Available resources about the diet (literature, agencies)	0.0	100.0	50.0

$$\chi^2 = 1.2857 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

$$\chi^2 = 1.2857 \text{ with } 4 \text{ df, ns } (.05 = 9.49)$$



TABLE 20

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN THEIR LOW SODIUM DIET INSTRUCTIONS IN RELATION TO THE TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=3)	BSN Degree (n=14)	Diploma (n=17)
	%	%	%
Handing out diet sheets	33.3	42.9	70.6
Relationship of diet to disease/diagnosis	100.0	92.9	94.1
Foods to omit or avoid	33.3	42.9	105.9
Shopping and/or cooking tips	33.3	42.9	64.7
Available resources about the diet (literature, agencies)	0.0	28.6	58.8

$$\chi^2 = 3.6872 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

TABLE 21

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR FAT-CONTROLLED DIET INSTRUCTIONS IN RELATION TO THE  
TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=3)	BSN Degree (n=9)	Diploma (n=20)
	%	%	%
Handing out diet sheets	33.3	22.2	70.0
Relationship of diet to disease/diagnosis	100.0	55.6	80.0
Foods to omit or avoid	33.3	66.7	90.0
Shopping and/or cooking tips	0.0	44.4	55.0
Available resources about the diet (literature, agencies)	0.0	22.2	70.0

$$\chi^2 = 6.9980 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

TABLE 22

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR IRON RICH DIET INSTRUCTIONS IN RELATION TO THE  
TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=1)	BSN Degree (n=16)	Diploma (n=11)
	%	%	%
Handing out diet sheets	0.0	56.3	46.5
Relationship of diet to disease/diagnosis	100.0	81.3	72.7
Foods to omit or avoid	0.0	31.3	54.5
Shopping and/or cooking tips	0.0	50.0	45.5
Available resources about the diet (literature, agencies)	0.0	25.0	45.5

$$\chi^2 = 2.6569 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$



TABLE 23

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN  
THEIR LOW PROTEIN DIET INSTRUCTIONS IN RELATION TO THE  
TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=1)	BSN Degree (n=3)	Diploma (n=11)
	%	%	%
Handing out diet sheets	0.0	33.3	45.5
Relationship of diet to disease/diagnosis	0.0	133.3	45.5
Foods to omit or avoid	0.0	166.7	54.5
Shopping and/or cooking tips	0.0	66.7	9.1
Available resources about the diet (literature, agencies)	0.0	66.7	34.4

$$\chi^2 = 2.0715 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

$$\chi^2 = 2.0715 \text{ with } 4 \text{ df, ns } (.05 = 9.49)$$

TABLE 24

PERCENT OF REGISTERED NURSES WHO INCLUDED THE SPECIFIED MATERIAL IN THEIR LOW COST DIET INSTRUCTIONS IN RELATION TO THE TYPE OF PROGRAM FROM WHICH THE NURSES GRADUATED

Material included in diet instruction	Type of Program		
	Associate Degree (n=1)	BSN Degree (n=11)	Diploma (n=8)
	%	%	%
Handing out diet sheets	0.0	27.3	50.0
Relationship of diet to disease/diagnosis	0.0	63.7	50.0
Foods to omit or avoid	0.0	75.8	37.5
Shopping and/or cooking tips	0.0	63.6	75.0
Available resources about the diet (literature, agencies)	0.0	133.3	62.5

$$\chi^2 = 1.6595 \text{ with } 8 \text{ df, ns } (.05 = 15.51)$$

$$\chi^2 = 1.6595 \text{ with } 4 \text{ df, ns } (.05 = 9.49)$$

Tables 16 through 24 indicate that the depth of diet instruction given for each of the diets is independent of the program from which the RNs graduated. The observed chi-square values of the data in Tables 16 through 24 did not exceed the critical chi-square value at the .05 level of significance. Therefore, the null hypothesis that the depth of diet instruction given is independent of the program from which the RNs graduated can not be rejected. Observation of these tables shows that Associate Degree graduates had not given any instructions about soft, postgastrectomy, iron-rich, low protein, and low cost diets, and thus one would expect to find a significant difference in the depth of instruction given by the graduates of the three programs. An explanation of the chi-square statistic will explain why the data in these five tables were also nonsignificant. The chi-square statistic may be used to test for independence between row and column classifications of a contingency table. The test for independence is based on the differential relationship between the observed elements of any table cell to the corresponding expected frequency which is the product of the combined row and column probabilities for that cell. Since the respondents from the Associate Degree program did not give instruction for the designated diets, the probabilities for any expected use of these techniques are zero as described within the limits of this study, i.e., zero observed frequencies for a whole column causes the expected frequencies to also be zero, and therefore they do not contribute to the final value for the chi-square statistic. Thus a perfect correlation of rows and columns in these tables is impossible.



Table 16 shows that the percent of the Diploma graduates who included all the designated material in their soft diet instructions was higher than the percent of BSN graduates, while the Associate Degree graduates gave no soft diet instructions. Whenever the tables show that no instructions were given by the graduates of one of the programs for a specified diet, chi-square was calculated both including and not including that program, i.e., with eight degrees of freedom and four degrees of freedom, respectively. The second chi-square value was computed in an attempt to prevent biasing the data.

Table 17 shows that a higher percentage of Associate Degree graduates handed out diet sheets and taught the relationship of the diabetic diet to the disease. On the other hand, the Associate Degree graduates ranked lowest and the Diploma graduates ranked highest for including foods to be permitted and avoided, shopping and cooking tips, and available resources in their diabetic diet instructions. As with the soft diets, the percent of Diploma graduates who included all the described material in their bland diet instructions was higher than the BSN and Associate Degree graduates as may be seen in Table 18.

The data in Table 19 show that the BSN graduates gave more in-depth postgastrectomy diet instructions than the Diploma graduates. Whenever the percent stated is greater than 100.0, it indicates that each registered nurse averaged more than one diet instruction for that particular diet. For instance in Table 19, two RNs included teaching the relationship of diet to disease/diagnosis in four diet instructions.

The Diploma graduates gave the highest percent of in-depth low sodium (Table 20) and fat-controlled (Table 21) diet instructions followed primarily by the BSN graduates with the exception of teaching the relationship of the low sodium diet to disease or diagnosis where a higher percent of Associate Degree graduates indicated they included this material in their diet instructions.

Table 22 shows that the Associate Degree graduates taught only the relationship of the iron-rich diet to disease or diagnosis. The graduates of the other two programs ranked closely as to the amount of in-depth instruction they gave for the iron-rich diet.

Tables 23 and 24 show that the Associate Degree graduates gave no instructions about the low protein or low cost diets. The BSN graduates gave the highest percentage of in-depth low protein diet instruction while a higher percentage of Diploma graduates hand out low protein diet sheets. A high percentage of the BSN and Diploma graduates gave in-depth low cost diet instructions with a slightly higher percentage of BSN graduates giving in-depth instruction.

To better summarize the data from Tables 16 through 24, Table 25 ranks the frequency of the depth of diet instruction given for each diet in relation to the type of program from which the RNs graduated. The frequency of depth of diet instruction was ranked from the lowest percent of nurses to the highest percent of nurses, 1 to 3 respectively, who included the specified material in their diet instructions for each of the specified diets. Thus with five possible types of material to include for each diet, the rankings would range from 5, indicating the



TABLE 25

A RANKING OF THE FREQUENCY OF THE DEPTH OF INSTRUCTION GIVEN  
FOR EACH DIET IN RELATION TO THE TYPE OF PROGRAM  
FROM WHICH THE REGISTERED NURSES GRADUATED<sup>a</sup>

Type of Diet Instruction	Type of Program		
	Associate Degree	BSN Degree	Diploma
Soft	5	10	15
Diabetic	9	9	12
Bland	6	9	15
Postgastrectomy	5	14	11
Low Sodium	7	9	14
Iron Rich	7	12	11
Fat-Controlled	8	8	14
Low Protein	5	14	11
Low Cost	5	13	12
Total	57	98	115

<sup>a</sup>The frequency of depth of diet instruction was ranked from the lowest percent of nurses to the highest percent of nurses, 1 to 3, respectively, utilizing each of the described materials in their diet instructions. With 5 possible types of material to include for each diet, rankings range from 5, the lowest percentage of in-depth instruction given, to 15, the highest percentage of in-depth instruction given.



lowest percentage of in-depth diet instruction given, to 15, indicating the highest percentage of in-depth diet instruction given.

The data from Table 25 show that Diploma graduates gave the most in-depth diet instruction, followed by the BSN graduates with the remaining contributed by the Associate Degree graduates. The figures in Tables 14 (page 39) and 16 through 25 appear to indicate a need for more detailed, in-depth diet therapy education in both the Diploma and BSN curricula and correlates with these graduates' beliefs as shown in Table 12 (page 35) that this type of information should be included in a diet therapy course.

Those Associate Degree graduates who gave diet instruction also indicated as shown in Table 12 that they believed this material should be included in a diet therapy course which would permit the graduate to give "in-depth" diet instruction. However, the data from Tables 14 and 16 through 25 indicate that

1. the Associate Degree graduates gave a much lower percentage of diet instructions than the other graduates, and
2. when the Associate Degree graduates gave the highest percentage of diet instruction, it was to hand out diet sheets or teach the relationship of the diet to the patient's disease or diagnosis.

The data in Table 5 (page 22) which indicated a decrease in the number of hours spent in diet therapy class in Associate Degree programs might lead one to suspect that Associate Degree graduates did not include this information in the diet instructions because they never obtained this

knowledge in nurses' training due to insufficient class time or omission of diet therapy from the school curriculum. The results of this survey show a definite need for the inclusion of a diet therapy course in all nursing school curricula. The fact that the Associate Degree program requires only two years of formal education must be considered when determining what material should be covered in a diet therapy course for this curriculum.

#### D. NURSES' RESPONSES TO DIET THERAPY KNOWLEDGE TEST

While the second set of questions in the questionnaire provided the information about the frequency and depth of diet instruction given by the participants, the third set of questions was a diet therapy knowledge test designed to cross-check the nurses' responses to the second set of questions. For instance, if a participant indicated that she included teaching the patient about foods to be permitted and/or avoided and shopping and cooking tips for the low sodium diet, the questions pertaining to this information in relation to a low sodium diet were checked to determine if the participant answered them correctly. If the questions were answered incorrectly, it might be attributed to one of the following:

1. the nurse did not have knowledge about the specific food items designated in the question, but she might be giving correct information to the patients about the foods with which she was familiar, or



2. the nurse's knowledge about the foods in question was incorrect and she was passing along incorrect information to the patient.

Table 26 shows the mean test scores of the registered nurses on the 27 question diet therapy knowledge test in relation to the type of program from which they graduated and whether they were giving diet instruction or not. Column two lists the mean scores of all the participants by type of program. A t-test was computed for the data which indicated that the mean scores made by the Associate Degree and Diploma graduates were significantly lower than the mean score made by the BSN graduates. Considering the test contained 27 one-point questions, the mean scores for all respondents were very low when compared to a percent grading scale. The mean percents scored on the test were 59.1 for the Associate Degree graduates, 65.3 for the BSN, and 60.2 for the Diploma. These figures indicate a need for continuing education programs for RNs to keep up-to-date with recent changes made in modified diets. In column three, the sample is reduced in size to include only those RNs who give diet instruction. When the t-test was computed for the data in this column, it showed that a significantly lower mean test score was made by the Associate Degree graduates compared to the BSN and Diploma graduates. There was no significant difference in the mean test scores of the BSN and Diploma graduates. One might conclude from these data that while the BSN student has fewer hours devoted to formal diet therapy education than the Diploma Student (Table 3, page 20), the diet therapy education she receives is of a higher quality. Column four



TABLE 26

MEAN TEST SCORE ON DIET THERAPY KNOWLEDGE TEST OF  
REGISTERED NURSES IN RELATION TO THE TYPE  
OF PROGRAM FROM WHICH THEY GRADUATED

Program	All Respondents	Instructing Respondents	Noninstructing Respondents
Associate Degree	<sup>a</sup> 16.00 a	15.40 a	<sup>b</sup> 19.00
BSN Degree	19.64 b	19.95 b	19.24 a
Diploma	18.32 a	19.30 b	17.78 a

<sup>a</sup>Means within columns followed by the same letter are not significantly different at  $P < .05$ , t-statistic.

<sup>b</sup>Only one value in mean precluding mean separation possibility.

was included in Table 26 for the purpose of comparing the mean test scores of the nurses who give diet instruction with those that do not give diet instruction. The calculations from the t-test showed that there was not a significant difference between the mean test scores of the instructing and noninstructing nurses graduated from any of the programs.

Table 27 shows the percent of registered nurses stating they teach the relationship between diet and disease/diagnosis and the principles/objectives behind dietary modifications for the diets specified in relation to the questions answered correctly about those diets. RNs giving instruction for low protein, diabetic, and low sodium diets appear to have more knowledge about these diets than the other diets. Only two-thirds or less of the nurses answered the questions correctly pertaining to the fat-controlled, soft, postgastrectomy, and bland diets. Table 28 lists the percent of RNs stating they teach specific foods to be allowed or avoided and also shopping and cooking tips for specified diets in relation to questions answered correctly concerning those diets. Those nurses instructing patients about low protein, diabetic and soft diets appear to have relatively accurate information about these diets. However, less than 50 percent of the RNs answered correctly the questions pertaining to the iron-rich, low sodium, postgastrectomy, and bland diets. As is true with all areas of the medical profession, there have been many recent advances in the dietary field concerning modified diets. One of the most recent advances has been the American Dietetic Association's 1971 "Position Paper on Bland Diets in the Treatment of Chronic



TABLE 27

PERCENT OF REGISTERED NURSES STATING THEY TEACH THE RELATIONSHIP  
BETWEEN DIET AND DISEASE/DIAGNOSIS FOR THE SPECIFIED DIETS IN  
RELATION TO QUESTIONS ANSWERED CORRECTLY ABOUT THOSE DIETS

Type of Diet	Number of Test Questions Relating to Diets	Percent of Nurses with Correct Answers	Number of Nurses
Low Protein	28, 31, 41	93.3	9
Diabetic	29, 39	91.7	32
Low Sodium	28, 41	88.6	33
Fat-Controlled	33, 40	66.7	25
Soft	44	58.3	15
Postgastrectomy	35, 43	57.1	7
Bland	32, 37, 38	43.5	22

TABLE 28

PERCENT OF REGISTERED NURSES STATING THEY TEACH SPECIFIC  
FOODS PERMITTED/OMITTED AND/OR SHOPPING AND COOKING  
TIPS FOR SPECIFIED DIETS IN RELATION TO QUESTIONS  
ANSWERED CORRECTLY CONCERNING THOSE DIETS

Type of Diet	Number of Test Questions Relating to Diets	Percent of Nurses with Correct Answers	Number of Nurses
Low Protein	52	100.0	6
Diabetic	51	87.5	23
Soft	45, 47	87.5	9
Fat-Controlled	49, 50	62.1	16
Low Cost	53	52.9	14
Iron-Rich	45, 43	45.0	14
Low Sodium	47, 48, 52	43.8	19
Postgastrectomy	46	22.7	4
Bland	46	22.7	12



Duodenal Ulcer Disease" in which they advise a departure from the use of the traditional milk-rich, low roughage, bland diet and suggest "individualization of the dietary plan, since patients differ as to specific food intolerances, living patterns, life styles, work hours, and education" (45). It is difficult enough for registered dietitians and nutritionists to keep up-to-date with these new dietary modifications, new food items being marketed for therapeutic diets, and recently published recipe booklets for modified diets, let alone for the registered nurse. The data from Table 27 and Table 28 in particular indicate a need for dietitians, RNs involved in nursing education, and hospital in-service departments to encourage, among other things, continuing education courses for RNs regarding recent advances made in the field of diet therapy and the need for publication of new dietary modifications in professional nursing journals.

#### E. CONTINUING EDUCATION IN DIET THERAPY FOR REGISTERED NURSES

Of all the registered nurses surveyed, 84.4 percent gave an affirmative response to the belief that continuing education courses would be beneficial to their patient interactions. There are several points which contribute to the need for continuing education. The first two have been previously discussed:

1. the continual changes taking place in the dietary and medical fields as recent research is published and

2. the fact that 45.6 percent of the RNs not giving diet instruction indicated there was not a dietitian or nutritionist available at their place of employment thus placing the responsibility for the dietary aspect of patient care on the nurse.

A third point is that 45.6 percent of the RNs indicated they had been responsible for planning modified diets since graduation, and 9.7 percent stated they are doing so at the present time. These nurses should definitely be kept abreast with the recent changes in dietetics. Table 29 shows the diets for which RNs indicated they would like to have continuing education programs. It is interesting to note that the first four diets listed in Table 29, fat-controlled, low cost, diabetic, and low sodium, are the four diets listed in Table 15 (page 41) for which the RNs indicated they gave the most diet instructions. Based upon the frequency with which these diet instructions are given, it is easy to understand why the RNs believe they should have continuing education programs to keep up-to-date regarding these diets. Another interesting point is that a relatively low percent of the nurses answered the questions correctly about the postgastrectomy and bland diets as seen in Tables 27 and 28. While it is true that fewer postgastrectomy diet instructions were given than for any of the other diets listed in Table 15, one might suspect that the nurses are not aware of the inaccurate knowledge they have about these two diets. Perhaps local (district) dietetic association members could contact in-service departments in area hospitals or the local (district) chapter of the American Nurses' Association or the

TABLE 29

PERCENT OF REGISTERED NURSES DESIRING CONTINUING  
EDUCATION IN RELATION TO A PARTICULAR DIET

Diet	Percent
Fat-Controlled	61.6
Diabetic	60.2
Low Cost	60.2
Low Sodium	58.0
Iron-Rich	47.7
Postgastrectomy	35.1
Low Protein	33.9
Bland	25.9
Soft	17.0
Others <sup>a</sup>	23.0

<sup>a</sup>See Table 32 in Appendix D.



League of Nursing to offer their services in presenting a program regarding recent advances in the dietary field, or the Department of Nutrition in nearby universities and colleges might conduct workshops at night.

#### F. RECOMMENDATIONS

Based upon these data the following recommendations are made:

1. diet therapy should be included in all nursing schools' curricula;
2. the student should be strongly advised to study normal nutrition, anatomy, physiology, chemistry, and fundamentals of nursing prior to studying diet therapy;
3. diet therapy should be taught as an integral part of other nursing courses;
4. a registered dietitian who is a member of the school faculty, and solely responsible to the school, should be the instructor for a diet therapy course;
5. information relating to the relationship of the diets to disease/diagnosis, foods to be allowed or avoided and shopping and cooking tips for the diets, and available resources from which the patient may obtain information concerning the diets should be included in the diet therapy course of all nursing schools;
6. the amount of material covered in a diet therapy course should be the same for the BSN and Diploma programs

and should incorporate less material for the Associate Degree program;

7. thus, there would be fewer hours devoted to a diet therapy course in the Associate Degree program in relation to the other two programs;
8. employers should offer the RNs the opportunity to take continuing education programs regarding recent changes and advances in diet therapy.

Based upon these recommendations and other results presented in this chapter, the outline found in Appendix A has been prepared for a diet therapy course to be taught in Associate Degree, BSN Degree, and Diploma programs.

## CHAPTER V

### SUMMARY

A review of literature revealed that in the 1960's many nursing schools began deleting diet therapy from their curricula as the legal quota of class hours devoted to diet therapy required by State Boards of Nursing diminished. It was hypothesized that the deletion of diet therapy from nursing school curricula was inconsistent with the role of today's nurse.

In order to investigate the present diet therapy educational needs of registered nurses in the United States, a survey was conducted by means of a questionnaire. The questionnaire and answer sheet were developed, pretested, and changed in accordance with the suggestions of the ten RNs participating in the pilot study. The questionnaire consisted of three main parts. The first part asked for background information about each participant's nutrition and diet therapy education as a nursing student and her attitudes regarding what should be included in present nursing school diet therapy courses. Part two attempted to ascertain information about the frequency and depth of diet instruction given by each participant while the third part was a diet therapy knowledge test used to cross-check the answers given in the second set of questions. Each questionnaire and answer sheet was accompanied by an explanatory cover letter and a stamped, self-addressed return envelope.



Copies of the questionnaire were sent to 315 registered nurses who had been arbitrarily selected from seven states; Georgia, Idaho, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota. Because nurses' dietary responsibilities vary with the type of employment, questionnaires were sent to thirty-five RNs working in each of the following areas: hospital, public health, clinic, nursing home, private-duty, school nurse, teaching, industrial, and doctor's office. A reminder postcard was sent to each participant ten days after the initial mailing. After an additional two weeks, it was assumed that all answer sheets had been received that were going to be returned and the results were computed.

A total of 43.8 percent or 138 of the 315 questionnaires was used in the tabulation of the data. Responses from registered nurses employed in all types of positions were obtained with those in teaching, hospital, and public health positions returning the highest percentage of questionnaires. Of the 138 participants, 6 graduated from Associate Degree programs, 39 from BSN programs, 85 from Diploma programs, and 8 stated they had received BSN degrees after receiving their diplomas.

#### A. TRENDS IN DIET THERAPY EDUCATION IN NURSING SCHOOLS

The first section of the questionnaire attempted to ascertain information regarding trends in diet therapy education in nursing school curricula during the past fifty-four years. Data from the questionnaires revealed that the majority of nurses graduated from the three types of

nursing programs received between one and nineteen hours of formal classroom diet therapy education. A higher percentage of Diploma graduates (40.5%) had spent between twenty and forty hours or more in diet therapy class in comparison with graduates of the other two programs. The data from this survey reveal that from 1960 to the present time there has been a decrease in the number of hours devoted to diet therapy education, with an increasing number of graduates from the Associate Degree and BSN programs receiving no formal diet therapy education. However, the majority of BSN (63.6%) and Associate Degree (80.0%) graduates giving diet instruction, graduated in the last fourteen years.

Several methods of instruction have been employed for teaching diet therapy in the past. While a high percentage of RNs were taught diet therapy in combination with a nutrition course from 1920 to 1959, the trend from 1960 to the present appears to be to teach diet therapy as an integral part of their nursing courses, i.e., medical-surgical nursing, obstetrics, and pediatrics. Just as teaching diet therapy as a separate course or in combination with normal nutrition appears to be passe, diet kitchen experience appears to be an out-moded educational tool. Only a small percentage of those nurses graduated in the last 14 years reported having any diet kitchen experience included in their training, and these hours were minimal. The trends noted from this survey coincided with reports presented in the literature.



## B. REGISTERED NURSES' ATTITUDES TOWARDS

### DIET THERAPY EDUCATION

An overwhelming 99.3 percent of all the respondents indicated that diet therapy had a place in the nursing school curriculum, while 100.0 percent of those who actually gave instruction indicated an affirmative response for the inclusion of diet therapy in their training.

Over 56 percent of the participants indicated they believed normal nutrition, anatomy, physiology, chemistry, and fundamentals of nursing should be taken parallel with or as a prerequisite to a diet therapy course in order that the fullest educational opportunities may be derived from the course.

Of the subjects surveyed, 81.0 percent stated that diet therapy should be taught as an integral part of the other nursing courses, both classroom and clinical rather than as a separate block.

The majority of the respondents (60.9%) believed the person best qualified to teach diet therapy was a registered dietitian on the school faculty, 29.7 percent indicated they believed a registered dietitian from an affiliating hospital's dietary department would be best qualified for the job, and the remaining 9.4 percent were in favor of a registered nurse teaching the course.

There was no significant difference among the graduates of the three programs as to the material they believed should be included in a diet therapy course. Between 80.0 and 100.0 percent indicated the following information was valuable and should be included in a diet therapy course:



1. the importance of teaching a patient about his diet,
2. the relationship between diet and disease and/or diagnosis,
3. foods to be allowed or avoided for the diets,
4. shopping and cooking tips for diets,
5. resources available from which the patient may obtain information about his diet.

### C. FREQUENCY AND DEPTH OF DIET INSTRUCTION

#### GIVEN BY REGISTERED NURSES

Of the nurses surveyed, 43.9 percent stated they gave at least one diet instruction per month. Of those RNs who indicated they did not give diet instruction to patients, 45.6 percent stated there is no dietitian or nutritionist at their place of employment to assume this responsibility. In institutions where a dietitian or nutritionist was not available for patient instruction, it is imperative that the nurse(s) present have the ability to teach the patient about his dietary modifications in order for all his health care needs to be met.

The data show that a high percentage of Associate Degree (83.3%) and BSN graduates (56.4%) gave diet instruction. These facts are incompatible with the previous statement that there are an increasing number of RNs graduating from these two programs with no diet therapy education.

The results of the survey indicated that BSN graduates gave the highest mean number of diet instructions per month (7.4) followed closely by Diploma (7.2) and Associate Degree graduates (4.3). There were more diet instructions given per month concerning the low cost, low sodium,

and fat-controlled diets than for any other diets. The fewest number of diet instructions were given for low protein and postgastrectomy diets.

"In-depth" diet instruction is defined for the purpose of this study as handing out diet sheets, teaching the relationship of the diet to the disease or diagnosis, foods to be permitted and/or avoided for the diet, shopping and/or cooking tips for the diet, and available resources (agencies and literature) where the patient may obtain information about the diet. The data collected regarding the depth of diet instruction given by the graduates of each program indicated that

1. the Associate Degree graduates gave a much lower percent of diet instructions than the other graduates,
2. when the Associate Degree graduates gave the highest percent of in-depth diet instruction, for a particular diet, it was to hand out diet sheets or teach the relationship of the diet to the patient's disease or diagnosis,
3. the Associate Degree graduates gave no diet instruction for the soft, postgastrectomy, low protein, or low cost diets.

#### D. NURSES' RESPONSES TO DIET THERAPY KNOWLEDGE TEST

The third part of the questionnaire was a 27 question diet therapy knowledge test designed to cross-check the answers given in the second set of questions. For instance, if a participant indicated that her diabetic diet instructions included teaching the patient about foods permitted and/or avoided on the diet and shopping and cooking tips for the diabetic diet, the questions pertaining to this information were



checked to see if the participant answered them correctly. The mean percents scored on the test were 65.3 for the BSN, 60.2 for the Diploma, and 59.1 for the Associate Degree graduates. Considering that graduates of the Diploma program had more hours of diet therapy as students, followed by Associate Degree and BSN students, respectively, and taking into account the fact that the Diploma graduates appeared to have more experience giving diet instruction than graduates of the other two programs, one might expect the Diploma students would score higher on the diet therapy knowledge test. However, when a t-test was computed for the scores of all the respondents, it was found that the mean test scores made by the Associate Degree and Diploma graduates were significantly lower than the mean score made by the BSN graduates ( $P = .05$ ). The mean test scores of those RNs who gave diet instruction was significantly lower ( $P = .05$ ) than for the Associate Degree graduates compared to the BSN and Diploma graduates. There was no significant difference in the mean test scores of the BSN and Diploma graduates. No significant difference occurred between the mean test scores of the instructing and noninstructing nurses graduated from each of the three programs.

The results showed that RNs giving instruction for low protein, diabetic, and low sodium diets appear to have more knowledge about these diets in terms of the relationship between diet and disease/diagnosis and the principles/objectives behind dietary modifications. Less than 60.0 percent of the RNs answered the questions about the soft, bland and postgastrectomy diets correctly. Those nurses instructing patients about low protein and diabetic diets appeared to have relatively accurate



information about these diets in relation to the foods allowed or to be avoided for a particular diet and shopping and cooking tips for that diet. Less than 50.0 percent of the RNs answered the questions regarding the iron-rich, low sodium, postgastrectomy, and bland diets correctly.

#### E. CONTINUING EDUCATION IN DIET THERAPY FOR REGISTERED NURSES

Of all the registered nurses surveyed, 84.4 percent gave an affirmative response to the belief that continuing education courses would be beneficial to their patient interactions. Results which indicated a need for continuing education programs for RNs are

1. 45.6 percent of the RNs who were not giving diet instruction indicated there was not a dietitian or nutritionist available at their place of employment to do so,
2. 45.6 percent of the RNs indicated they had been responsible for planning modified diets since graduation, and 9.7 percent stated they were doing so at the present time.

#### F. RECOMMENDATIONS

Based upon these data the following recommendations are made:

1. diet therapy should be included in all nursing schools' curricula;
2. the student should be strongly advised to study normal nutrition, anatomy, physiology, chemistry, and fundamentals of nursing prior to studying diet therapy;

3. diet therapy should be taught as an integral part of other nursing courses;
4. a registered dietitian who is a member of the school faculty, and solely responsible to the school, should be the instructor for a diet therapy course;
5. information relating to the relationship of the diets to disease/diagnosis, foods to be allowed or avoided and shopping and cooking tips for the diets, and available resources from which the patient may obtain information concerning the diets should be included in the diet therapy course of all nursing schools;
6. the amount of material covered in a diet therapy course should be the same for the BSN and Diploma programs and should incorporate less material for the Associate Degree program;
7. thus, there would be fewer hours devoted to a diet therapy course in the Associate Degree program in relation to the other two programs;
8. employers should offer the RNs the opportunity to take continuing education programs regarding recent changes and advances in diet therapy.

Based upon these recommendations and other results reported in the survey, an outline was prepared for a diet therapy course to be taught in nursing school curricula. The outline includes course

objectives, methods of teaching and evaluation, course content, learning experiences, a bibliography, and a list of agencies from which literature is available regarding diets.



LITERATURE CITED

## LITERATURE CITED

1. ----- (1970) National Commission for the Study of Nursing and Nursing Education. Summary report and recommendations. Amer. J. Nursing, 70, 279-294.
2. Davis, T., Gershoff, S., & Gamble, D. (1969) Review of studies of vitamin and mineral nutrition in the United States (1950-1968). J. Nutr. Educ., 1, 41-57.
3. ----- (1970) Proceedings White House Conference on Food, Nutrition and Health. United States Government Printing Office, Washington, D.C.
4. ----- (1969) Nutrition in medical education. Dairy Council Digest, 40, 13-16.
5. Christakis, G. (1972) Teaching nutrition in the medical school. J. Nutr. Educ., 4 (Suppl. 1), 141-145.
6. Wen, C., Weerasingher, H., & Dwyer, J. (1973) Nutrition education in U.S. medical schools. J. Amer. Dietet. A., 63, 408-410.
7. ----- (1972) Nutrition education in medical schools. J. Nutr. Educ., 4, 158.
8. ----- (1973) Nutrition in medical education. S.N.E. Communicator, 4, 4.
9. ----- (1969) Food Consumption of Households in the United States, Spring, 1965. Preliminary Report Agriculture Research Service. United States Department of Agriculture, Washington, D.C.
10. United States Department of Health, Education, and Welfare, Public Health Services (1971) Ten-State Nutrition Survey in the United States (1968-1970). Preliminary Report to Congress. United States Department of Health, Education, and Welfare, Washington, D.C.
11. Elliott, F. (1972) What does society expect of its nurses? Hospitals, 46, 82-88.
12. Fewell, A. (1916) Diet kitchen methods of instruction. Amer. J. Nursing, 17, 12-18.

13. Newton, M. (1970) Nutrition content in the nursing curricula: Potential for deletion. J. Nutr. Educ., 1, 9-10.
14. Prater, B. (1970) Nutrition content in the nursing curricula: reaction paper. J. Nutr. Educ., 1, 11-12.
15. Western Council on Higher Education for Nursing (1967) Essential Content in Baccalaureate Programs in Nursing. Western Interstate Commission for Higher Education, Boulder, Colorado.
16. Cooper, L. (1954) Florence Nightengale's contribution to dietetics. J. Amer. Dietet. A., 30, 121-127.
17. Molleson, A. (1958) Teaching nutrition to student nurses. J. Amer. Dietet. A., 34, 164-169.
18. Greene, J. (1960) Nutrition in nursing. J. Amer. Dietet. A., 37, 38-44.
19. Smith, F. (1925) A summary of diet in diseases by means of case studies. J. Amer. Dietet. A., 1, 78-80.
20. Bryan, M. & Bailey, R. (1934) Examination in dietetics. Amer. J. Nursing, 34, 59-73.
21. Chalender, K., Eskens, E., Esson, M., McNutt, J., & Wheeler, G. (1955) Diet therapy experience for students. Amer. J. Nursing, 55, 317-320.
22. De Paul, M. (1956) Dietary practice for the student nurse. J. Amer. Dietet. A., 32, 340-344.
23. Edwards, M. (1955) Pretesting determines student nurses' need for cookery class. J. Amer. Dietet. A., 31, 54-56.
24. Germaine, L. (1953) Dietetic aspects of nursing care. J. Amer. Dietet. A., 29, 906-910.
25. Leitch, M. (1956) Educational standards for student nurses in the dietary department. J. Amer. Dietet. A., 32, 337-340.
26. Rynbergen, J. (1952) Changing concepts in teaching nutrition to nurses. J. Amer. Dietet. A., 28, 821-824.
27. Teel, K. & Greene, J. (1956) Student nurses' nutritional education in Massachusetts. J. Amer. Dietet. A., 32, 344-348.



28. Fleming, L. (1969) Integrating nutrition in clinical practice of nursing students in diploma programs. Proceedings—the 5th International Congress of Dietetics. American Dietetic Association, Chicago, Illinois.
29. Bendall, E. (1971) The learning process in student nurses — 2. Nursing Times, 67 (Suppl.), 173-175.
30. Miriam, X. (1957) Simultaneous correlation of nutrition and diet therapy for student nurses. J. Amer. Dietet. A., 33, 381.
31. Thigpen, L. & Mitchell, A. (1957) Integrating nutrition into nursing education. J. Amer. Dietet. A., 33, 378-380.
32. Tennessee Board of Nursing (1968) Rules and Regulations of the Tennessee Board of Nursing Concerning the Licensure and Education of Registered Nurses. Tennessee Board of Nursing, Nashville, Tennessee.
33. ----- (1972) Extending the scope of nursing practice. A report of the Secretary's Committee to study the extended roles for nurses. J.A.M.A., 220, 1231-1235.
34. ----- (1969) ICN statement on nursing education, nursing practice and service and the social and economic welfare of nurses. Amer. J. Nursing, 69, 2117-2179.
35. Ozimek, D. (1968) The preparation of a generalist. Nurs. Outlook, 16, 28-29.
36. Ball, M. (1970) Nutrition content in the nursing curricula: Potential for implementation. J. Nutr. Educ., 1, 10-11.
37. Kelly, C. (1958) Nurses, nutrition and the general public. Amer. J. Nursing, 58, 217-218.
38. Harrison, G., Sanchez, A., & Young, C. (1969) Public health nurses' knowledge of nutrition. J. Amer. Dietet. A., 55, 133-139.
39. Newton, M., Beal, M., & Strauss, A. (1967) Nutritional aspects of nursing care. Nurs. Research, 16, 46-49.
40. Burke, E. (1971) Training programs in diabetic care. Nurs. Outlook, 19, 548-549.
41. Derrington, P., Ellingson, B., Stanley, K., & Davern, M. (1956) What opportunities do general duty nurses have to teach patients about diet and nutritional needs? Amer. J. Nursing, 56, 1139.

42. ----- (1969) Facts About Nursing. American Nurses' Association, New York.
43. Espenshade, B., Jr. (1970) Goode's World Atlas. Rand McNally & Company, Chicago.
44. ----- (1973) Directory. Amer. J. Nursing, 73, 178-182.
45. Nie, N., Bent, D., & Hull, C. (1970) Statistical Package for the Social Sciences. McGraw-Hill Book Company, Inc., New York.
46. Steel, R. & Torrie, J. (1960) Principles and Procedures of Statistics. McGraw-Hill Book Company, Inc., New York.
47. ----- (1971) The American Dietetic Association position paper on bland diets in the treatment of chronic duodenal ulcer disease. J. Amer. Dietet. A., 59, 244-245.

## APPENDIXES



APPENDIX A

SUGGESTED OUTLINE FOR AN INTEGRATED DIET THERAPY COURSE  
FOR STUDENT NURSES IN ASSOCIATE DEGREE, DIPLOMA,  
AND BACCALAUREATE PROGRAMS

SUGGESTED OUTLINE FOR AN INTEGRATED DIET THERAPY COURSE TAUGHT  
IN ASSOCIATE DEGREE, DIPLOMA, AND BSN NURSING PROGRAMS

Prerequisites: Normal Nutrition, Anatomy, Physiology, Chemistry, and Fundamentals of Nursing.

Placement in Curriculum: This course is integrated with courses in Medical-Surgical Nursing, Disaster Nursing, Maternal and Infant Care, and Nursing of Children.

Recommended Hours to Be Devoted to Diet Therapy Class:	<u>Nursing Courses</u>	<u>Associate Degree Hours</u>	<u>BSN Degree &amp; Diploma Hours</u>
	Medical-Surgical Nursing . . . . .	17 . . . . .	20
	Dermatology, Allergy, Burns . . . . .	0.5 . . . . .	2.0
	Gastrointestinal . . . . .	12.0 . . . . .	12.0
	Cardiovascular-Renal . . . . .	4.0 . . . . .	4.5
	Orthopedics/Neurology . . . . .	0.5 . . . . .	1.0
	Eyes, Ears, Nose, Throat- Respiratory . . . . .	0.0 . . . . .	0.5
	Disaster Nursing . . . . .	0 . . . . .	1
	Maternal and Infant Care . . . . .	1 . . . . .	2
	Nursing of Children . . . . .	2 . . . . .	3
	TOTAL Number of Class Hours . . . . .	20 . . . . .	26

Instructor: A Registered Dietitian who is a member of the school faculty.

Methods of Instruction: Lectures, films, tapes, worksheets, role-playing, clinical experience.

- Objectives:
1. On a written test with at least \_\_\_\_\_ percent<sup>4</sup> accuracy, answer questions concerning the principles underlying specified therapeutic diets.
  2. On a written test with at least \_\_\_\_\_ percent accuracy, discuss the dietary needs of patients with specified physiological or psychological disorders.

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<sup>4</sup>The percent accuracy should be determined by the individual school's objectives and standards.

3. On a written test with at least \_\_\_\_\_ percent accuracy, plan an adequate diet for a patient prescribed a specified therapeutic diet.
4. On a written test with at least \_\_\_\_\_ percent accuracy, identify the foods allowed on specified therapeutic diets.
5. With \_\_\_\_\_ percent accuracy in a role-play situation, teach a patient facts about a designated therapeutic diet using an approved diet manual.
6. On a written test with at least \_\_\_\_\_ percent accuracy, plan a low-income diet for a specified diet.

Evaluation:

Students should be given a pretest such as the diet therapy knowledge test included in the questionnaire to give the instructor some insight into the students' preexisting knowledge about diet therapy. This allows the instructor to teach at the students' level of comprehension. The same test may be given as a post-test to determine the knowledge the students have obtained from the course. Methods that may be used to evaluate the students are written tests, worksheets, role-play situations, and clinical performance.

Introduction to the Outline:

Diets generally included in a Normal Nutrition course are the Basic Four (or Seven), Low Cost, and Geriatric, therefore they are not included in this outline.

The depth of instruction for each diet should be determined by the instructor. For instance, BSN students generally have more physiology and biochemistry than students of the other two programs and may require a more detailed explanation of the physiological bases of the diets.

The symbol (\*) will denote possible material to be excluded from the Associate Degree program.

The American Dietetic Association Education Package (ADA EDU-PAK) tapes mentioned in the outline are available from The American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.

Assigned readings referred to in the outline would come from one of the textbooks and the readings listed in the suggested bibliography.



# OUTLINE FOR AN INTEGRATED DIET THERAPY COURSE

OBJECTIVES	CONTENT	LEARNING EXPERIENCE
State the role of today's nurse in the nutritional care of a patient	<p>I. Introduction to the study of therapeutic diets</p> <p>A. Factors in patient care</p> <ol style="list-style-type: none"> <li>1. Cultural, socioeconomic</li> <li>2. Psychological</li> <li>3. Physical</li> <li>4. Potential for learning</li> </ol> <p>B. Coordinated nutritional services for patients</p> <p>DIET IN MEDICAL-SURGICAL NURSING</p>	<ol style="list-style-type: none"> <li>1. Readings from bibliography</li> <li>2. Students observe role-play situation of: <ol style="list-style-type: none"> <li>a. dietitian taking a diet history</li> <li>b. dietitian giving diet instruction (May be live or on audiovisual tape)</li> </ol> </li> <li>3. Students take diet history from a patient</li> <li>4. ADA EDU-PAK tape: Why People Eat as They Do</li> </ol>
State the principle behind the use of the "house" diets	<p>II. Review of affiliating hospital's "house" diets</p> <p>A. Liquids—clear/surgical, full</p> <p>B. Soft</p> <ol style="list-style-type: none"> <li>1. Reasons for the diet</li> <li>2. Foods permitted on the diet</li> <li>3. Modifications in cooking</li> </ol> <p>C. Regular</p>	<ol style="list-style-type: none"> <li>1. Readings from bibliography</li> <li>2. Worksheets on the liquid and soft diets</li> <li>3. Related clinical experience</li> <li>4. Quiz</li> </ol>

OBJECTIVES	CONTENT	LEARNING EXPERIENCE
Compare the nutritional contents of tube feedings with the patients' nutritional needs	<p>III. Meeting nutritional needs thorough the use of artificial methods of feeding.</p> <p>A. Types of tube feeding</p> <ol style="list-style-type: none"> <li>1. Blended diets</li> <li>2. Commercially prepared diets</li> </ol> <p>B. Intravenous feedings</p> <p>C. Hyperalimentation feedings</p>	<ol style="list-style-type: none"> <li>1. Readings from bibliography</li> <li>2. Compare samples of formula, discuss advantages and disadvantages of each, taste some if possible, discuss ways of preparing to avoid "taste fatigue"</li> <li>3. Related clinical experience</li> <li>4. Quiz</li> </ol>
State the principles of dietary management for patients with ulcer and hiatal hernia	<p>IV. Nutritional needs in disorders of the stomach</p> <p>A. Dietary treatment of peptic ulcer and hiatal hernia.</p> <ol style="list-style-type: none"> <li>1. Reasons for dietary treatment of peptic ulcer <ol style="list-style-type: none"> <li>a. Aid in neutralizing acidity</li> <li>b. Avoid stimulating gastric secretions</li> <li>c. Avoid irritations</li> </ol> </li> <li>1. Diet modifications <ol style="list-style-type: none"> <li>a. Bland diet regimen</li> <li>b. Other regimens</li> </ol> </li> <li>3. Cooking modifications</li> </ol>	<ol style="list-style-type: none"> <li>1. Discussion of patients fed bland diet and their reaction to the diet</li> <li>2. Observe and participate in diet instruction for patient with peptic ulcer and for patient following gastrectomy</li> <li>3. Include dietary management of patient in clinical conference presentations</li> <li>4. Worksheet</li> <li>5. Assigned readings</li> <li>6. Quiz</li> </ol>



OBJECTIVES	CONTENT	LEARNING EXPERIENCE
Write the dietary management of the patient following a gastrectomy	B. Postgastrectomy treatment <ol style="list-style-type: none"> <li>1. Rationale behind the use of the diet</li> <li>2. Postgastrectomy regimen</li> <li>3. Dietary management of the Dumping Syndrome</li> </ol>	<ol style="list-style-type: none"> <li>1. Worksheet</li> <li>2. Related clinical experience</li> <li>3. Assigned readings</li> <li>4. Quiz</li> </ol>
State the dietary needs of patients with intestinal disorders	V. Nutritional needs in disorders of the intestine <ol style="list-style-type: none"> <li>A. Diets in constipation</li> <li>B. Diets restricted in residue               <ol style="list-style-type: none"> <li>1. Indications for use</li> <li>2. Composition of diet</li> </ol> </li> <li>C. Low fiber diets</li> </ol>	<ol style="list-style-type: none"> <li>1. Class discussion: Identify ways in which low residue diet and low fiber diets vary from each other and from patient's previous intake</li> <li>2. Related clinical experience</li> <li>3. Assigned readings</li> <li>4. Worksheet</li> <li>5. Quiz</li> </ol>
State the principles behind diet therapy for diseases of the liver and biliary system	VI. Nutritional needs in diseases of the liver and biliary system <ol style="list-style-type: none"> <li>A. Dietary needs in hepatitis               <ol style="list-style-type: none"> <li>1. High calories, protein, carbohydrate</li> <li>2. Moderate fat</li> <li>3. Small feedings</li> <li>4. Liquid or soft diet with anorexia</li> <li>5. Sodium restriction with edema</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion</li> <li>3. Include dietary management of patient in clinical conference presentations</li> <li>4. Assist patient in selection of foods from menu</li> <li>5. Observe and participate in diet instruction</li> <li>6. Worksheet</li> <li>7. Quiz</li> </ol>



OBJECTIVES	CONTENT	LEARNING EXPERIENCE
	<p>B. Dietary modifications for cirrhosis</p> <ol style="list-style-type: none"> <li>1. High protein, carbohydrate</li> <li>2. Low fat or medium chain triglycerides</li> <li>3. Concentrated protein supplements</li> <li>4. Vitamins</li> <li>5. Fluids and sodium</li> <li>6. Low fiber with esophageal varices</li> </ol> <p>C. Dietary modifications for hepatic coma</p> <ol style="list-style-type: none"> <li>1. Low protein, high carbohydrate, moderate fat</li> <li>2. Vitamins</li> <li>3. Fluids and sodium</li> </ol> <p>D. Dietary modifications for diseases of the gall bladder</p> <ol style="list-style-type: none"> <li>1. Cholecystitis and cholelithiasis               <ol style="list-style-type: none"> <li>a. Low fat, cholesterol</li> <li>b. Reduction of fibrous foods</li> </ol> </li> <li>2. Cholecystectomy               <ol style="list-style-type: none"> <li>a. Diet depends on doctor and patient</li> <li>b. Generally, a progression from soft to low fat to regular</li> </ol> </li> </ol>	

OBJECTIVES	CONTENT	LEARNING EXPERIENCE
<p>State the reasons for dietary considerations in diabetes mellitus</p>	<p>E. Dietary modifications for diseases of the pancreas</p> <ol style="list-style-type: none"> <li>1. Pancreatitis (acute and chronic)               <ol style="list-style-type: none"> <li>a. NPO (nothing by mouth) during attacks</li> <li>b. Low fat, low fiber diet</li> <li>c. High protein and calories</li> <li>d. Omit alcohol</li> <li>e. Six small meals</li> <li>f. Use of pancreatic enzymes</li> </ol> </li> <li>2. Cystic fibrosis               <ol style="list-style-type: none"> <li>a. High calories and protein</li> <li>b. Moderate fat, use of medium chain triglycerides</li> <li>c. Vitamin supplement, vitamins A and D in aqueous solution</li> <li>d. Replace sodium and chlorine losses</li> <li>e. Pancreatic enzymes given with each meal</li> </ol> </li> </ol> <p>VII. Nutritional needs in diabetes mellitus</p> <ol style="list-style-type: none"> <li>A. Reasons for modifications of the normal diet</li> </ol>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Discussion of exchange lists using overhead projector with transparencies</li> </ol>

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
Plan diabetic diets	<p data-bbox="772 134 1238 161">B. Planning the Diabetic diet</p> <ol data-bbox="819 182 1330 463" style="list-style-type: none"> <li data-bbox="819 182 1140 209">1. Diet prescription</li> <li data-bbox="819 230 1330 292">2. Distribution of carbohydrate, protein, and fat               <ol data-bbox="866 312 1304 463" style="list-style-type: none"> <li data-bbox="866 312 1156 340">a. Without insulin</li> <li data-bbox="866 347 1238 374">b. With regular insulin</li> <li data-bbox="866 381 1304 408">c. With slow acting insulin</li> <li data-bbox="866 415 1304 463">d. With intermediate acting insulin</li> </ol> </li> </ol> <p data-bbox="772 484 1255 546">C. Meal planning with exchange lists</p> <p data-bbox="772 566 1289 628">D. Patient teaching "Living with the diabetic diet"</p> <ol data-bbox="819 648 1263 1094" style="list-style-type: none"> <li data-bbox="819 648 1075 676">1. Shopping tips               <ol data-bbox="866 696 1255 854" style="list-style-type: none"> <li data-bbox="866 696 1255 758">a. Plan meals ahead with exchange lists</li> <li data-bbox="866 765 1140 793">b. Food selection</li> <li data-bbox="866 799 1140 827">c. Dietetic foods</li> <li data-bbox="866 834 1187 861">d. Convenience foods</li> </ol> </li> <li data-bbox="819 875 1126 902">2. Food preparation</li> <li data-bbox="819 923 1140 950">3. Special occasions               <ol data-bbox="866 971 1269 1094" style="list-style-type: none"> <li data-bbox="866 971 1156 998">a. Packing a lunch</li> <li data-bbox="866 1005 1238 1033">b. Picnics and cookouts</li> <li data-bbox="866 1039 1269 1067">c. Eating in a restaurant</li> <li data-bbox="866 1074 1058 1101">d. Traveling</li> </ol> </li> </ol>	<ol data-bbox="1365 134 1847 868" style="list-style-type: none"> <li data-bbox="1365 134 1739 196">3. Calculate a diabetic diet prescription</li> <li data-bbox="1365 203 1835 292">4. Calculate and plan a day's menu using the exchange lists</li> <li data-bbox="1365 299 1770 360">5. Set up sample diabetic tray using food models</li> <li data-bbox="1365 367 1790 422">6. Assist diabetic patient selecting food on menu</li> <li data-bbox="1365 429 1790 552">7. Plan with dietitian for diet instruction either clinically or role-play situation</li> <li data-bbox="1365 559 1821 648">8. Observe and participate in diet instruction using food models</li> <li data-bbox="1365 655 1847 744">9. ADA EDU-PAK tapes: Diabetes Mellitus Living with a Diabetic Diet</li> <li data-bbox="1365 751 1835 841">10. Include dietary management of diabetics in clinical conference presentation</li> <li data-bbox="1365 847 1479 875">11. Quiz</li> </ol>



OBJECTIVES	CONTENT	LEARNING EXPERIENCES
List the dietary needs of patients with diseases of the skin	E. Use of diabetic diet as weight reduction diet	1. Assigned readings 2. Class reports on fad diets
	VIII. Nutritional needs of a patient with allergic and dermatological diseases	1. Assigned readings 2. Class discussion 3. Include dietary management of patients presented in clinical conference 4. Related clinical experience 5. Taste wheat, gluten, milk free bread 6. If possible, show slides or pictures of dermatological diseases resulting from nutrient deficiencies. A slide set is available from: Nutrition Today, Inc. 101 Ridgely Avenue P.O. Box 465 Annapolis, Md. 21404
Write the nutritional needs of the severely burned patient	*A. Nutrition in relation to acne vulgaris	7. Quiz
	1. Well-balanced diet 2. Avoidance of excess carbohydrate, fat, and iodine	
	*B. Nutrition in relation to psoriasis	
	1. Low fat and protein 2. Low tryptophan	
	*C. Nutritional needs of a patient with xanthomas	
	1. Low fat 2. Low cholesterol	
	*D. Nutritional needs of a patient with pemphigus	
	1. Tube or liquid feedings 2. High calories, protein, vitamins, low sodium	
	E. Diet following burns	
	1. Fluid therapy - Brooks Army Formula	

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
Write the methods of diagnosing food allergies	2. High calorie, high vitamin 3. High protein	
Instruct patient on his specific allergy diet	F. Nutrition in relation to food allergy 1. Diagnosis a. Elimination diet b. History c. Skin tests 2. Patient teaching—nurse's role	
	*G. Nutrient deficiencies resulting in dermatitis 1. Protein 2. Lipids 3. Vitamin A 4. Vitamin B complex 5. Vitamin C	
State the principle/objective behind the use of the sodium-controlled diet	IX. Nutritional needs in cardiac disease A. Reasons for dietary modification B. Terminology C. Levels of sodium restriction	1. Assigned readings 2. Class discussion 3. Role play: teach a sodium restricted diet 4. Observe and participate in dietary instruction 5. Include dietary management of patient presented in clinical conference
Identify the foods allowed at the different levels of sodium restriction	1. Strict—500 mg. or lower 2. Moderate—1000 mg. 3. Mild—2000 mg. or more 4. Levels of sodium in regular diet	6. Worksheet 7. Sample low sodium foods and salt substitute 8. Quiz

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
State the principles involved in dietary treatment for patients with atherosclerosis	D. Sources of sodium <ol style="list-style-type: none"> <li>1. Natural and processed foods</li> <li>2. Sources other than food</li> </ol> E. Patient teaching <ol style="list-style-type: none"> <li>1. Food purchasing               <ol style="list-style-type: none"> <li>a. Dietetic foods</li> <li>b. Reading labels</li> </ol> </li> <li>2. Food preparation/menu planning</li> <li>3. Eating out</li> <li>4. Use of salt substitutes</li> </ol> X. Dietary treatment of atherosclerosis <ol style="list-style-type: none"> <li>A. Relationship of blood cholesterol to ingested cholesterol</li> <li>B. Basis for diet—experiments</li> <li>C. Indications for control of dietary fat               <ol style="list-style-type: none"> <li>1. Hypercholesterolemia</li> <li>2. American Heart Association position</li> </ol> </li> <li>D. Fat-controlled diet               <ol style="list-style-type: none"> <li>1. Terminology</li> <li>2. Composition</li> <li>3. Patient teaching</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion: Are dietary changes for the general population advisable?</li> <li>3. Film—"Eat to Your Heart's Content" from local Am. Heart Assoc.</li> <li>4. Observe and participate in diet instruction</li> <li>5. Worksheet</li> <li>6. Quiz</li> </ol>
List the food composition of the fat-controlled diet		



OBJECTIVES	CONTENT	LEARNING EXPERIENCES
<p>Identify the nutritional problems encountered in renal disorders</p> <p>Write the dietary modifications for the various renal disorders</p>	<ul style="list-style-type: none"> <li>a. Food selection</li> <li>b. Food preparation</li> <li>c. Shopping tips</li> <li>d. Eating out</li> <li>*E. Hyperlipoproteinemia diets               <ul style="list-style-type: none"> <li>1. Terminology</li> <li>2. Composition</li> </ul> </li> <li>XI. Nutritional needs in renal disorders               <ul style="list-style-type: none"> <li>A. Reasons for dietary treatment                   <ul style="list-style-type: none"> <li>1. Reduce work load of kidney</li> <li>2. Maintain electrolyte balance</li> <li>3. Maximum nutritional adequacy within limitations of diet</li> </ul> </li> <li>B. Diet modifications                   <ul style="list-style-type: none"> <li>1. Protein levels                       <ul style="list-style-type: none"> <li>a. Indications for increase</li> <li>b. Indications for decrease</li> <li>c. Nitrogen balance</li> </ul> </li> <li>2. Mineral restrictions                       <ul style="list-style-type: none"> <li>a. Sodium</li> <li>b. Potassium</li> </ul> </li> <li>3. Dietary products on the market for low protein diets</li> <li>4. Acid and alkaline ash diets</li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Identify methods of teaching patient and family</li> <li>3. Discussion of dietary management of specific patients with renal disorders</li> <li>4. Set up a day's menu for a 20 gm. and 40 gm. protein diet using food models</li> <li>5. Worksheet</li> <li>6. Related clinical experience</li> <li>7. Quiz</li> </ul>

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
State the dietary modifications for anemic patients	5. Diet restrictions for renal calculi <ul style="list-style-type: none"> <li>a. Calcium</li> <li>b. Uric acid</li> <li>c. Cystine</li> </ul> XII. Nutritional needs in anemias <ul style="list-style-type: none"> <li>A. Iron deficiency anemia               <ul style="list-style-type: none"> <li>1. Causes of deficiency</li> <li>2. Dietary management                   <ul style="list-style-type: none"> <li>a. Iron-rich foods</li> <li>b. Nutrients that enhance iron absorption</li> </ul> </li> </ul> </li> <li>B. Pernicious anemia               <ul style="list-style-type: none"> <li>1. Relation of intrinsic and extrinsic factors</li> <li>2. Dietary management</li> </ul> </li> <li>C. Folic acid anemia               <ul style="list-style-type: none"> <li>1. Causes of deficiency</li> <li>2. Dietary management</li> </ul> </li> </ul>	1. Assigned readings 2. Write an iron-rich menu for a patient with a restricted income
Identify the nutritional needs of patients with arthritis and bone disorders	XIII. Nutrition and diet therapy in the care of patients with bone disorders <ul style="list-style-type: none"> <li>A. Diets in arthritis               <ul style="list-style-type: none"> <li>1. Avoidance of food fads</li> <li>2. Osteoarthritis</li> </ul> </li> </ul>	1. Assigned readings 2. Class discussion 3. Show examples of special silverware made for easy handling by patients 4. Related clinical experience 5. Quiz

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
	<ul style="list-style-type: none"> <li>a. High calcium</li> <li>b. Maintain/attain ideal weight</li> <li>3. Rheumatoid arthritis—diet high in protein, vitamins, minerals</li> <li>4. Gout—purine restriction</li> <li>B. Diet for osteomalacia               <ul style="list-style-type: none"> <li>1. High calcium</li> <li>2. High vitamin D</li> </ul> </li> </ul>	
Identify the nutritional needs of patients with nervous disorders	*XIV. Nutritional needs of patients with nervous disorders <ul style="list-style-type: none"> <li>A. Lack of specific nutrients may lead to malfunction of CNS</li> <li>B. Nutrition for the mentally handicapped</li> </ul>	<ul style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion</li> <li>3. ADA EDU-PAK tape: Nutritional Care of Stroke Patients</li> <li>4. Related clinical experience</li> <li>5. Quiz</li> </ul>
Identify the additional nutritional needs of patients with neuromuscular disorders	*XV. Nutrition in neuromuscular disorders <ul style="list-style-type: none"> <li>A. Cerebral palsy               <ul style="list-style-type: none"> <li>1. Adjust calories for activity</li> <li>2. Concentrated foods</li> <li>3. Smaller, more frequent meals</li> <li>4. Psychological and physical problems of eating</li> </ul> </li> <li>B. Epilepsy—Ketogenic diet               <ul style="list-style-type: none"> <li>1. Rationale</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion</li> <li>3. Related clinical experience</li> <li>4. Quiz</li> </ul>



OBJECTIVES	CONTENT	LEARNING EXPERIENCES
	2. Composition <ul style="list-style-type: none"> <li>a. High fat</li> <li>b. Low carbohydrate</li> </ul> 3. Psychological and physical complications of diet	
State the principles behind the additional nutritional needs of patients with tuberculosis	*XVI. Nutrition in Throat and Respiratory Disorders <ul style="list-style-type: none"> <li>A. Nutritional needs of the patient with tuberculosis               <ul style="list-style-type: none"> <li>1. Diet liberal in protein, vitamins, and minerals</li> <li>2. Problems in feeding</li> <li>3. Sanitation</li> </ul> </li> <li>B. Meeting nutritional needs following a tonsillectomy</li> <li>C. Nutritional needs of the patient with emphysema               <ul style="list-style-type: none"> <li>1. Physical difficulty of eating</li> <li>2. Soft, high-calorie diet</li> <li>3. Small, frequent feedings of concentrated foods</li> </ul> </li> </ul>	1. Assigned readings 2. Class discussion 3. Related clinical experience 4. Quiz
State the diet therapy following tonsillectomy		
State the special dietary considerations for feeding people in an emergency situation	*DIET AND NUTRITION IN DISASTER NURSING <ul style="list-style-type: none"> <li>I. Meeting nutritional needs following a disaster               <ul style="list-style-type: none"> <li>A. Purposes of emergency feeding</li> <li>B. Sanitation facilities</li> </ul> </li> </ul>	1. Assigned readings 2. Class discussion

OBJECTIVES	CONTENT	LEARNING EXPERIENCES
<p>State the modification of normal nutrition for diet during pregnancy</p> <p>Teach patients how to meet their nutritional needs during pregnancy and lactation</p> <p>State the modifications necessary in the diet for complications of pregnancy</p>	<p>C. Minimum essential food needs</p> <p>D. Resources in obtaining:</p> <ol style="list-style-type: none"> <li>1. Food</li> <li>2. Fuel</li> <li>3. Refrigeration</li> </ol> <p>E. Provisions for special diets</p> <p>F. Provisions for food preparation</p> <p>G. Preparation of formula for infants</p>	<p>3. Student problem: Planning minimal essential food for a patient on a special diet</p> <p>4. Quiz</p>
	<p>DIET AND NUTRITION IN PREGNANCY AND LACTATION</p> <p>I. Alterations of the normal diet to meet the additional requirements of pregnancy and lactation</p> <p>A. Recommended allowances</p> <p>B. Basic meal pattern</p> <ol style="list-style-type: none"> <li>1. During pregnancy</li> <li>2. Increase during lactation</li> </ol> <p>C. Nutrition education</p> <ol style="list-style-type: none"> <li>1. Opportunities</li> <li>2. Methods</li> </ol> <p>II. Dietary management of toxemia</p> <p>A. High protein, sodium restricted diet</p> <p>*B. Review of basic sodium restricted diet</p>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Present patients with dietary problems in class</li> <li>3. Observe and give diet instructions to patients in doctor's office, hospital, prenatal clinic</li> <li>4. Role playing as a basis for discussion of diet during pregnancy</li> <li>5. Demonstration of formula preparation</li> <li>6. ADA EDU-PAK tape: Ecology and Nutrition</li> <li>7. Quiz</li> </ol>

OBJECTIVES	CONTENT	LEARNING EXPERIENCE
	<p>III. Dietary management of diabetes during pregnancy</p> <p>*A. Review of diabetic diets B. Variations during pregnancy</p> <p>IV. Calorie restricted diet during pregnancy</p> <p>V. Diet for individual with very limited income</p> <p>NUTRITIONAL NEEDS IN NURSING OF CHILDREN</p> <p>I. Nutritional needs from birth to one year</p> <p>A. Normal nutrition</p> <p>1. Meeting basic nutritional needs of the newborn 2. Addition of foods</p> <p>II. Nutritional needs of the child from one to three</p> <p>A. Normal nutrition</p> <p>1. Foods to meet recommended allowances 2. Additions to diet 3. Changes in texture 4. Characteristic eating habits of age group</p>	
Identify the role of adequate diet in normal growth and development of the infant		<p>1. Assigned readings 2. Demonstration of preparing baby food in blender</p>
Teach parents the normal nutritional needs of the infant		
Know the role of adequate nutrition in the normal growth and development of the toddler		<p>1. Assigned readings 2. Class discussion 3. Quiz</p>
Teach parents the normal nutritional needs of the toddler		



OBJECTIVES	CONTENT	LEARNING EXPERIENCE
State dietary management of celiac disease	B. Dietary management of celiac disease <ol style="list-style-type: none"> <li>1. Gluten restriction</li> <li>2. High calorie, high protein, low fat diet</li> <li>3. Supplementary vitamins</li> </ol>	
Identify the role of nutrition in normal growth and development of the preschool child	III. Normal nutrition for the child from three to six <ol style="list-style-type: none"> <li>A. Food to meet recommended allowances</li> <li>B. Characteristics of normal eating habits of age group</li> </ol>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion</li> <li>3. Film: "Jenny Is A Good Thing" from Head Start</li> <li>4. Quiz</li> </ol>
State ways of meeting the nutritional needs of the preschool child		
Identify the role of nutrition in normal growth and development of the child from six to twelve	*IV. Normal nutrition for the child : from six to twelve <ol style="list-style-type: none"> <li>A. Food to meet recommended allowances</li> <li>B. Dietary management of diabetic children               <ol style="list-style-type: none"> <li>1. Exchange lists</li> <li>2. Free regime</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. Assigned readings</li> <li>2. Class discussion</li> <li>3. Role play—diet instruction for the diabetic child</li> <li>4. Quiz</li> </ol>
State the nutritional needs of the school age child and teach the child and his family to meet these needs		

OBJECTIVES	CONTENT	LEARNING EXPERIENCE
<p>State the role of nutrition in the normal growth and development of the adolescent</p>	<p>*V. Normal nutrition for the adolescent</p>	<p>1. Assigned readings</p>
<p>Identify the role the peer group plays in the dietary patterns</p>	<p>A. Food to meet recommended allowances</p>	<p>2. Class discussion of food fads</p>
<p>State the nutritional needs of the adolescent and teach him to meet his needs</p>	<p>B. Nutritional problems of age group</p>	<p>3. Quiz</p>

## SUGGESTED BIBLIOGRAPHY FOR DIET THERAPY COURSE

Textbooks

- Anderson, L., Dibble, M., Mitchell, H., & Rynbergen, H. (1972) Nutrition in Nursing. J. B. Lippincott Company, Philadelphia.
- Krause, M. & Hunscher, M. (1972) Food, Nutrition and Diet Therapy. W. B. Saunders Company, Philadelphia.
- Robinson, M. (1972) Normal and Therapeutic Nutrition. The Macmillan Company, New York.
- Williams, S. (1973) Nutrition and Diet Therapy. The C. V. Mosby Company, St. Louis.
- (The diet manual used by the affiliating hospital)

## Articles and Other References Listed According to Subject

Teaching the Patient

- Craig, D. G. (1971) Guiding the change process in people. J. Amer. Dietet. A., 58, 22.
- Johnson, D. (1967) Effective diet counseling begins early in hospitalization. Hospitals, 41, 94.
- Morris, E. (1960) How does a nurse teach nutrition to patients? Amer. J. Nursing, 60, 67.
- Vargas, J. (1971) Teaching as changing behavior. J. Amer. Dietet. A., 58, 512.

Tube Feedings/Hyperalimentation

- Campbell, M. (1973) 104 days with Rodney K. RN Magazine, 36, 34.
- Colley, R. & Phillips, K. (1973) Helping with hyperalimentation. Nursing '73, 3, 6.
- Grant, J. (1973) The nurse's role in parenteral hyperalimentation. RN Magazine, 36, 28.
- Hinchey, E., et al. (1972) Enteral hyperalimentation with elemental diet. Can. Med. Assoc. J., 107, 184.
- Vogel, C., et al. (1972) Intravenous hyperalimentation: a review of two and one-half year's experience. Arch. Surg., 105, 414.

Ulcers/Bland Diets

- (1971) The American Dietetic Association position paper on bland diet in the treatment of chronic duodenal ulcer disease. J. Amer. Dietet. A., 59, 244.



- Buchman, E., et al. (1969) Dietary treatment in duodenal ulcer. Amer. J. Clin. Nutr., 22, 1536.
- Caron, H., et al. (1972) Popular beliefs about the peptic ulcer diet. J. Amer. Dietet. A., 60, 306.
- Ingelfinger, F. (1971) Gastric function. Nutrition Today, 6, 2.
- Ingelfinger, F. (1973) How to swallow and belch and cope with heartburn. Nutrition Today, 8, 4.

### Low Residue Diet

- Grundy, D. (1971) Small bowel fistula treated with low-residue diet. Br. Med. J., 2, 531.

### Diseases of the Colon

- Bayless, T. & Christopher, N. (1969) Disaccharidase deficiency. Amer. J. Clin. Nutr., 21, 181.
- Goldstein, F. (1972) Diet and colonic disease. J. Amer. Dietet. A., 60, 499.
- Huang, S. & Bayless, T. (1967) Lactose intolerance in healthy children. New Eng. J. Med., 276, 1283.
- Painter, N. (1972) Diverticular disease of the colon and constipation and their relationship to our diet 2. Nurs. Times, 68, 564.
- Painter, N. (1972) Diverticular disease of the colon and constipation 3. High fibre diet with added bran. Nurs. Times, 68, 620.
- Rowbotham, J. (1971) Colostomy problems—dietary and colostomy management. Cancer, 28, 222.
- Rubin, W. (1971) Celiac disease. Amer. J. Clin. Nutr., 24, 91.

### Diabetes Mellitus/Diabetic Diet

- Brennan, E., et al. (1971) Sorbitol and mannitol for diabetic patients? J. Amer. Dietet. A., 58, 570.
- (1972) Diabetes mellitus—obesity and dietary management. Br. Med. J., 2, 706.
- (1971) Diabetic diet—1971. JAMA, 218, 1939.
- Etzwiler, D. (1967) Who's teaching the diabetic? Diabetes, 16, 111.
- FORECAST. Published monthly by the American Diabetes Assn., 18 East 48th Street, New York, N.Y. 10017. \$2.00 per year.
- Jernigan, A. (1970) Diabetic patients require education and understanding. Hospitals, 44, 77.
- Stalvey, R. (1971) A chat with Dr. Charles Best. Nutrition Today, 6, 5.
- (1970) The management of diabetes 2. Selecting patients for diet therapy, obesity and insulin insensitivity, and formulating the diabetic diet. Amer. Fam. Physician GP, 1, 111.

- (1970) The management of diabetes 3. Optimal content of a diabetic diet exchange list and standard meal plans altering the dietary program. Amer. Fam. Physician GP, 2, 113.
- (1970) Programmed instruction. The management of diabetes. Installment 4. Amer. Fam. Physician GP, 2, 119.
- Tani, G., et al. (1971) A self-learning unit for patients with diabetes. J. Amer. Dietet. A., 58, 331.

### Weight Control

- Leverton, R. (1965) Food Becomes You. ed. 3. Iowa State University Press, Ames, Iowa.
- Mayer, J. (1968) Overweight: Causes, Cost, and Control. Prentice-Hall, Englewood Cliffs, N. J.
- Stuart, R. & Davis, B. (1972) Slim Chance In a Fat World; Behavioral Control of Obesity. Research Press Company, Champaign, Illinois.
- Wolff, K. (1969) Eating habits and emotional problems. J. Amer. Dietet. A., 45, 134.

### Allergies

- Allergy Recipes (\$1.00) American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.
- Cole, D. (1971) Feeding allergic patients. Hospitals, 45, 95.

### Burns

- Schwartz, P. (1970) Ascorbic acid in wound healing—a review. J. Amer. Dietet. A., 56, 497.

### Diets for Anemias

- Galton, L. (1972) Foods that fight fatigue. Family Circle, 4, No. 9, 34.
- Pearson, J., et al. (1971) Anemia related to age: a study of a community of young Black Americans. JAMA, 215, 1982.
- White, H. (1970) Iron deficiency in young women. Amer. J. Public Health, 60, 659.

### Sodium-Restricted Diets

American Heart Association. Your 500 Milligram Sodium-Restricted Diet (booklet and leaflet); Your 1,000 Milligram Sodium-Restricted Diet (booklet and leaflet); Your Mild Sodium-Restricted Diet (booklet); American Heart Association, New York, N. Y.



- Heap, B., et al. (1966) Simplifying sodium-restricted diets. J. Amer. Dietet. A., 49, 327.
- Mayer, J. (1971) Don't salt it, season it. Family Health, 3, No. 12, 35.
- Wiesman, C. (1971) The art of seasoning low sodium diets. Nursing Homes, 20, 12.

### Fat-Controlled Diets

- American Heart Association: Recipes for Fat-Controlled, Low-Cholesterol Meals, from local Heart Associations or American Heart Association, 43 East 23rd Street, New York, N. Y. 10010 .
- American Heart Association. (1969) Programmed Instruction for Fat-Controlled Diet, 1800 Calories. American Heart Association, New York.
- (1973) Cook to your heart's content. Family Health, 5, No. 6, 30.
- Cooper, T. & Mitchell, S. (1971) Cardiovascular research programs. J. Amer. Dietet. A., 58, 401.
- Levy, R., et al. (1971) Dietary management of hyperlipoproteinemia. J. Amer. Dietet. A., 58, 406.
- Payne, A. & Callahan, D. (1966) Fat and Sodium Control Cookbook, ed. 3. Little, Brown & Company, Boston.
- Planning Fat-Controlled Meals at 1,200 and 1,800 Calories, Revised 1966. American Heart Association, New York.
- Pye, O., et al. (1970) Developing a program of learning on the fat-controlled diet. Amer. J. Dietet. A., 57, 428.

### Hyperlipoproteinemia Diets

- (1973) A Maximal Approach to the Dietary Treatment of the Hyperlipidemias. American Heart Association, New York.
- Frederickson. (1972) A physicians guide to hyperlipidemia. Modern Concepts of Cardiovascular Disease, 41, No. 7.
- The Dietary Management of Hyperlipoproteinemia. National Institutes of Health, Bethesda, Md.

### Renal Disease

- Comty, C. (1968) Long-term dietary management of dialysis patients. J. Amer. Dietet. A., 53, 439.
- Downing, S. (1969) Nursing support in early renal failure. Amer. J. Nursing, 69, 1212.
- Kahn, H. (1967) Effect of cranberry juice on urine—implications for therapy of urinary tract infection and calculi. J. Amer. Dietet. A., 51, 251.
- Kopple, J., et al. (1969) Evaluating modified protein diet for uremia. J. Amer. Dietet. A., 54, 481.



### Orthopedics/Neurology

- Brush, M. & Lasser, J. (1973) An improved ketogenic diet for epilepsy. J. Amer. Dietet. A., 62, 281.
- Klinger, J., et al. (1970) Mealtime Manual for the Aged and Handicapped. Simon & Shuster, New York.
- Maddox, G. (1969) Food and Arthritis. Taplinger Publishing Company, N.Y.
- Mayer, J. (1969) Nutrition and gout. Postgrad. Med., 45, 277.
- Signore, J. (1973) Ketogenic diet containing medium-chain triglycerides. J. Amer. Dietet. A., 62, 285.

### Diets for Pregnancy and Lactation

- Arena, J. (1970) Contamination of the ideal food. Nutrition Today, 5, 2.
- Bartholomew, M. & Poston, F. (1970) Effect of food taboos on prenatal nutrition. J. Nutr. Educ., 2, 15.
- Beal, V. (1969) Breast and formula feeding in infants. J. Amer. Dietet. A., 55, 31.
- Beck, J. (1968) Guarding the unborn. Today's Health, 46, 38.
- Mayer, J. (1973) When you're eating for two. Family Health, 5, No. 10, 31.
- (1971) Nutritional studies during pregnancy. I. Changes in intake of calories, carbohydrate, protein and calcium. II. Dietary intake, maternal weight gain and size of infant. J. Amer. Dietet. A., 58, 312.
- (1967) Sodium intake in pregnancy: two views. JAMA, 200, 42.

### Pediatric Diets

- Beal, V. (1957) On the acceptance of solid foods and other food patterns of infants and children. Pediatrics, 20, 448.
- (1971) Commercially prepared strained and junior foods for infants: nutritional considerations. J. Amer. Dietet. A., 58, 520.
- Heunemann, R., et al. (1968) Food and eating practices of teenagers. J. Amer. Dietet. A., 53, 17.
- Hill, M. (1969) Creating good food habits—start young, never quit. Food for us All—Yearbook of Agriculture. USDA, Washington, D.C., pp. 260-266.
- Mayer, J. (1972) The eating habits of children. Family Health, 4, No. 10, 24.
- Mayer, J. (1973) Fat babies grow into fat people. Family Health, 5, No. 3, 24.
- O'Grady, R. (1971) Feeding behavior in infants. Amer. J. Nursing, 71, 736.
- Safran, C. (1973) Parents: experts tell you what to do about balky vegetable eaters. Today's Health, 51, No. 11, 54.

----- (1971) The American Dietetic Association: Position paper on food and nutrition services in day-care centers. J. Amer. Dietet. A., 59, 47.

Todhunter, E. (1970) School feeding from a nutritionist's point of view. Amer. J. Public Health, 60, 2302.

Low Cost Diets (for those that need review)

Breeling, R. (1969) Marketing protein for the world's poor. Today's Health, 47, No. 2, 42.

----- (1965) Can We Eat Well For Less? National Dairy Council, Chicago.

Monge, B. & Trossell, D. (1960) Good nutrition on a low income. Amer. J. Nursing, 60, 1290.

## AGENCIES

Suggested Agencies from which material may be obtained regarding basic nutrition, low-income diets, and/or modified diets are

Agricultural Extension Service

American Diabetes Association, 18 East 48th Street, New York, N.Y. 10017

American Dietetic Association, 620 North Michigan Avenue, Chicago,  
Illinois 60611

American Heart Association, 43 East 23rd Street, New York, N.Y. 10010

The Arthritis Foundation, 1212 Avenue of the Americas, New York, N.Y.  
10036

Dial-A-Dietitian (local, if available)

National Dairy Council, 111 North Canal Street, Chicago, Illinois 60606

Public Health Department (local)

U.S. Department of Agriculture. Publications available from Superintendent of Documents. U.S. Government Printing Office, Washington, D.C.

U.S. Department of Health, Education and Welfare. Available from Superintendent of Documents, Washington, D.C.

Visiting Nurses' Association (local)



APPENDIX B

LETTERS SENT TO STATE AND DISTRICT AMERICAN  
NURSES' ASSOCIATION OFFICERS

THE UNIVERSITY OF TENNESSEE  
KNOXVILLE 37916  
College of Home Economics

Department of Nutrition

April 17, 1973

The Department of Nutrition of the University of Tennessee, Knoxville is interested in bettering nutrition and diet therapy education in nursing school curricula. This interest has been spurred by articles in several medical journals, among them an article by Frederick Elliott in HOSPITALS 46, 82-2 (June, 1972) in which he states, "With responsibility to the patient and the physician for the total therapeutic regimen, the nurse must understand the total prescription—the treatments, medicine, diet, and environmental conditions to be maintained. She must also understand the proven relationship to the processes of recovery."

As a graduate student working on a Master of Science degree in the Department of Nutrition, working with Dr. Jane R. Savage, I want to conduct a survey of nurses in seven different states across the continental United States, including the state of \_\_\_\_\_ to determine the actual amount and depth of diet instruction given by nurses to their patients. We would like to send out a questionnaire to a random sample of the nurses in the largest district in your state (size being based on your ANA membership). From this information, we hope to determine the diet therapy educational needs of nurses and possibly develop core course outlines to be used in teaching diet therapy in nursing schools.

It is our understanding that each of your districts has available print-out sheets with the names, addresses, and place of employment of its ANA members. Do you know if these sheets would also contain information as to the type of program from which each member graduated, i.e., degree, associate degree, or diploma? If you would be kind enough to send me the name and address of the person whom I should contact in your LARGEST district to obtain a listing of its members, addresses, place of employment, and possibly the type of program graduated from, your efforts would be greatly appreciated. A self-addressed, stamped envelope is enclosed for your convenience.

Thank you very much for your cooperation.

Sincerely,

Julie M. McDaniel  
Graduate Student

JMM/JRS:nla  
Enclosure

Jane R. Savage  
Professor of Nutrition



THE UNIVERSITY OF TENNESSEE  
KNOXVILLE 37916  
College of Home Economics

Department of Nutrition

July 28, 1973

The Department of Nutrition of the University of Tennessee, Knoxville, is interested in bettering nutrition and diet therapy education in nursing school curricula. This interest has been spurred by articles in several medical journals, among them an article by Frederick Elliott in HOSPITALS 46, 82-8 (June, 1972) in which he states, "With responsibility to the patient and the physician for the total therapeutic regimen, the nurse must understand the total prescription—the treatments, medicine, diet, and environmental conditions to be maintained. She must also understand the proven relationship to the processes of recovery.

As a graduate student working on a Master of Science degree in the Department of Nutrition, working with Dr. Jane R. Savage, I want to conduct a survey of nurses in seven different states across the continental United States, including the state of \_\_\_\_\_, to determine the actual amount and depth of diet instruction given by nurses to their patients. We would like to send out a questionnaire to a random sample of the nurses in your district. From this information, we hope to determine the diet therapy educational needs of nurses and possibly develop core course outlines to be used in teaching diet therapy in nursing schools.

It is our understanding that your district has available print-out sheets with the name, address, and place of employment of each ANA member. If you would be kind enough to send me a set of these print-out sheets, your efforts would be greatly appreciated. Enclosed find stamps to cover cost of sending lists.

Thank you very much for your cooperation.

Sincerely,

Julie M. McDaniel  
Graduate Student

Jane R. Savage  
Professor of Nutrition

JMM/JRS:1z  
Enclosure



APPENDIX C

COVER LETTER, QUESTIONNAIRE, AND ANSWER SHEET

THE UNIVERSITY OF TENNESSEE  
KNOXVILLE 37916  
College of Home Economics

Department of Nutrition

October 30, 1973

The Department of Nutrition of the University of Tennessee, Knoxville is interested in bettering nutrition and diet therapy education in nursing school curricula. This interest has been spurred by articles in several medical journals, among them an article by Frederick Elliott in HOSPITALS 46, 82-8 (June, 1972) in which he states, "With responsibility to the patient and the physician for the total therapeutic regimen, the nurse must understand the total prescription—the treatments, medicine, diet, and environmental conditions to be maintained. She must also understand the proven relationship to the processes of recovery."

As a graduate student working on a Master of Science degree in the Department of Nutrition, working with Dr. Jane R. Savage, I am conducting a survey of nurses in seven different states across the continental United States to determine the actual amount and depth of diet instruction given by nurses to their patients. From this information, we hope to determine the diet therapy educational needs of nurses and possibly develop core course outlines to be used in teaching diet therapy in nursing schools.

We hope that you will take only twenty or thirty minutes to complete this questionnaire and return the answer sheet to us by November 15th. The answer sheets are not coded in any way, therefore, only you will know how you answered the questions. A self-addressed stamped envelope is enclosed for your convenience.

A summary of the results of the test will be sent to your district ANA office when the study is complete. If you would like a summary sent to you personally, please so indicate on the answer sheet.

Thank you very much for your time and cooperation.

Sincerely,

Julie M. McDaniel  
Graduate Student

Jane R. Savage  
Professor of Nutrition

JMM/JRS:jh  
Enclosures

Questionnaire Regarding Diet Therapy Educational Needs  
of Registered Nurses

REMEMBER: Answers are to be placed on the answer sheet. Please return  
ONLY the completed answer sheet by November 15, 1973.

1. In which area of the nursing field do you work?
 

A. Hospital	D. Nursing Home	G. Teaching
B. Public Health	E. Private Duty	H. Occupational Health
C. Clinic	F. School Nurse	I. Doctor's Office
2. What is your employment status?
 

A. Full-time	B. Part-time
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3. How many years have you been actively working in the nursing profession?
 

A. 1 - 4	C. 10 - 14	E. 20 - 29
B. 5 - 9	D. 15 - 19	F. 30 or more

The following seven questions pertain to your own nursing education.

4. From which type of nursing program did you graduate?
 

A. Associate Degree	B. B.S.N. Degree	C. Diploma
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5. Approximate date of nursing school graduation.
 

A. 1920-1929	C. 1940-1949	E. 1960-1969
B. 1930-1939	D. 1950-1959	F. 1970-1973
6. Approximate number of hours spent in actual Nutrition classroom lecture: exclude any clinical experience or conferences. If Nutrition and Diet Therapy were taught as one course, estimate a division of hours as best you can.
 

A. 0	C. 10 - 19	E. 30 - 39
B. 1 - 9	D. 20 - 29	F. 40 or more
7. Approximate number of hours spent in actual Diet Therapy classroom lecture: exclude any clinical experience or conferences.
 

A. 0	C. 10 - 19	E. 30 - 39
B. 1 - 9	D. 20 - 29	F. 40 or more
8. How was Diet Therapy taught?
 

A. No Diet Therapy was taught.
B. In a separate block.
C. In combination with Nutrition.
D. As an integrated part of, i.e., taught simultaneously with, related diseases in medical-surgical nursing, obstetrics, pediatrics, etc.













For the next nine questions, select the BEST answer for each question.

45. Mary Smith has been diagnosed as having gastritis and iron-deficiency anemia. Her doctor has prescribed a soft, iron-rich diet for her. Which of the following meals would be PERMITTED on Ms. Smith's diet?
1. Stewed fruit compote, oatmeal with molasses, scrambled eggs, enriched white toast, margarine, milk, coffee.
  2. Raisin-bran cereal, fried egg, whole wheat toast, margarine, milk, tea.
  3. Broiled calf liver, mashed potato, spinach, canned peaches with cottage cheese, baked custard, iced tea.
  4. Fried beef liver with onions, cornbread with margarine, turnip greens, coleslaw, sherbet, milk.
- A. 1 and 2                                      C. 3 and 4  
B. 2 and 4                                      D. 1 and 3
46. Mr. Black has recently had a subtotal gastrectomy and will be discharged on a postgastrectomy diet. Prior to surgery he had been receiving a bland diet. He will need some explanation and teaching to help him in adjusting to this diet because:
- A. it permits beverages he was not allowed on the bland diet.
  - B. he will receive dry feedings without beverages.
  - C. milk, a basic food on most bland diets, is not allowed.
  - D. All of the above.
47. Susan Sharp has been placed on a soft, low sodium diet following a recent myocardial infarction. Which would be the BEST dinner for her to select on this diet? (L.S. = low sodium)
- A. L.S. roast beef; L.S. fried potatoes; spinach with vinegar; lettuce wedge with L.S. dressing; chocolate-almond ice cream; buttermilk.
  - B. L.S. roast chicken; L.S. Harvard beets; fresh fruit compote; crescent roll with margarine; angel food cake with raspberry sauce; chocolate milk.
  - C. L.S. roast turkey; L.S. mashed potatoes; fresh, cooked green beans; banana slices in orange juice; L.S. vanilla pudding; iced tea.
  - D. Shrimp cocktail with L.S. cocktail sauce; baked potato with sour cream; L.S. green peas with mushrooms; L.S. coleslaw; meringue with strawberries; coffee.
48. Which of the following seasonings are most likely to be FORBIDDEN on a low sodium diet?
1. Wine, vinegar, garlic powder, oregano
  2. Lemon juice, coconut, almond extract, cinnamon
  3. Catsup, chili sauce, prepared mustard, worcestershire sauce.
  4. Celery leaves, olives, pickles
- A. 1 and 3                                      C. 2 and 4  
B. 1 and 2                                      D. 3 and 4

49. Mr. Jones, diagnosed as having atherosclerosis, has been placed on a fat-controlled diet (high in polyunsaturated fats; restricted in saturated fats and cholesterol). Which of the following dinners would be ALLOWED on this diet? (F.F. = fat free)
- A. Broiled chicken (skin removed); rice with margarine; baked squash with margarine; fresh fruit salad; raspberry sherbert; coffee.
  - B. Shellfish plate (clams, oysters, scallops, shrimp); hard roll with margarine; F.F. green beans with almonds; coleslaw; coconut cream pie; iced tea.
  - C. Liver with onions; F.F. mashed potatoes; F.F. turnip greens; fruited gelatin salad; strawberry shortcake; whole milk.
  - D. Broiled steak; baked potato with sour cream; tossed salad with blue cheese dressing; pecan pie; coffee.
50. In advising Mrs. Jones about grocery shopping for her husband (see question 49), which of the following recommendations could you make?
- 1. Never buy meat above the GOOD grade.
  - 2. Buy only cheeses made from skim milk.
  - 3. Any type of fish is satisfactory to use.
  - 4. Frozen dinners and other convenience foods may be purchased without concern.
- A. 1 and 2
  - B. 1, 2 and 3
  - C. 2, 3 and 4
  - D. 3 and 4
51. A diabetic patient controlled by insulin and diet asks you for some tips for eating out in restaurants. You give him some sample menus from which to choose. Of the following meals, which would be his BEST selections?
- 1. Orange juice; fried eggs; sausage with gravy; coffeecake; milk; coffee.
  - 2. Grapefruit half; poached egg on toast; crisp bacon slice; milk; coffee.
  - 3. Breaded pork tenderloin; escalloped potatoes; stewed tomatoes; cottage cheese and peaches; ice cream; coffee.
  - 4. Baked white fish with lemon wedge; baked potato with butter; green beans; tossed salad with low calorie dressing; fresh fruit cup; iced tea.
- A. 1 and 3
  - B. 1 and 4
  - C. 2 and 3
  - D. 2 and 4
52. For Mr. Brown, a 48-year old renal patient, a 40 gram protein, low sodium, low potassium diet has been prescribed. Which of the following groups of foods would be PERMITTED on Mr. Brown's diet? (L.S. = low sodium)
- 1. Banana; cornflakes; eggs; whole wheat toast; butter; jelly; milk.
  - 2. Cranberry juice; puffed rice; egg; wheatstarch toast; butter; honey; coffee; sugar.



3. Chicken; L.S. green beans; L.S. rice with butter; applesauce; iced tea.
4. Cheese omelet; L.S. asparagus; hard roll with butter; chocolate sundae; coffee.
- A. 1 and 3                      C. 2 and 3  
B. 1 and 4                      D. 2 and 4
53. Mrs. Cole, a young mother on welfare, has been diagnosed as having iron-deficiency anemia. Low-cost, iron-rich foods you could advise Mrs. Cole to include in her diet would be:
1. liver; liver sausage; lean beef and pork (GOOD grade or below); eggs.  
2. dairy products.  
3. raisins; prunes; dark molasses.  
4. oatmeal; enriched bread, cereal, and pasta products.
- A. 1, 2 and 3                      C. 1, 3 and 4  
B. 2, 3 and 4                      D. All of them
54. On the answer sheet, circle those agencies in your community that are available as referrals for patients regarding their diets.
- |   |  |
|---|--|
| A. Public Health Dept.                    | D. Hospital and/or physician's dietitian |
| B. Local chapter of the Am. Heart Assoc.  | E. Dial-A-Dietitian                      |
| C. Local chapter of the Am. Dairy Council | F. Local, lay, diabetic group            |
|   | G. Meals-on-Wheels                       |
|   | H. None                                  |

REMEMBER: Send back ONLY the answer sheet!

Thank you for your time and help!



# Answer Sheet for Questionnaire Regarding Diet Therapy

## Educational Needs of Registered Nurses

### Directions for completing the questionnaire:

1. Please use the answer sheet provided to answer all questions on this questionnaire. Return ONLY the answer sheet in the self-addressed, stamped envelope.
2. Please return the completed answer sheet by November 15, 1973.

For the first 26 questions, circle the appropriate letter(s). Note that question 16 asks you to state the approximate number of times during an average month that you give diet instruction on each specified diet. For questions 16-21 and 24, fill in space J with the diet(s) for which you give instruction or would like more information about when one is not indicated in the question.

1. A. B. C. D. E. F. G. H. I.
2. A. B.
3. A. B. C. D. E. F.
4. A. B. C.
5. A. B. C. D. E. F.
6. A. B. C. D. E. F.
7. A. B. C. D. E. F.
8. A. B. C. D.
9. A. B. C. D. E. F.
10. A. B. C. D. E. F. G.
11. A. B. C. D. E. F. G.
12. A. B.
13. A. B.
14. A. B. C.
15. A. B. C. D. E. F.
16. A. \_\_\_\_ B. \_\_\_\_ C. \_\_\_\_ D. \_\_\_\_ E. \_\_\_\_ F. \_\_\_\_ G. \_\_\_\_ H. \_\_\_\_ I. \_\_\_\_ J. \_\_\_\_
17. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_
18. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_
19. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_

Please turn this page over to answer questions 20-54.

Page 2

Answer Sheet

20. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_
21. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_
22. A. B. \_\_\_\_\_
23. A. B. \_\_\_\_\_
24. A. B. C. D. E. F. G. H. I. J. \_\_\_\_\_
25. A. B. \_\_\_\_\_
26. A. B. \_\_\_\_\_

For questions 27 through 53, fill in the blank with the LETTER corresponding to the BEST answer.

- |           |           |           |           |
|-----------|-----------|-----------|-----------|
| 27. _____ | 34. _____ | 41. _____ | 48. _____ |
| 28. _____ | 35. _____ | 42. _____ | 49. _____ |
| 29. _____ | 36. _____ | 43. _____ | 50. _____ |
| 30. _____ | 37. _____ | 44. _____ | 51. _____ |
| 31. _____ | 38. _____ | 45. _____ | 52. _____ |
| 32. _____ | 39. _____ | 46. _____ | 53. _____ |
| 33. _____ | 40. _____ | 47. _____ |           |

For question 54, circle the appropriate letter(s).

54. A. B. C. D. E. F. G. H.

REMEMBER: Return ONLY the answer sheet!

If you wish to receive a summary of the study, please complete the information requested below. Otherwise, you may read the copy on file at your district ANA office.

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Street City State Zip

## APPENDIX D

### TABLES



TABLE 30

## NUMBER OF PARTICIPANTS FROM THE SPECIFIED STATES

State	Number
California	1
Florida	1
Georgia	15
Idaho	22
Illinois	1
Mississippi	14
New Jersey	25
New Mexico	14
North Dakota	1
Oklahoma	27
South Carolina	1
South Dakota	15
Wisconsin	1
Total	138

TABLE 31

"OTHER" DIETS FOR WHICH REGISTERED NURSES  
INDICATED THEY GAVE INSTRUCTION

Diet	Number of Registered Nurses Indicating Use of the Diet
Weight Control	9
Low Carbohydrate—60 gm.	1
High Protein	5
Hypoglycemic Diet	1
Low Residue	3
Infant Formulas and Pediatric Diets	3
Tube Feedings	2
High Fiber (Constipation)	2
Progressive Diarrhea Diet	1
Renal Diets	
Low Potassium, Sodium, and Protein	1
High Potassium	1
Prenatal	1
Low Cholesterol	1
Hypoallergenic Diet	1
Food Fads	1

TABLE 32

"OTHER" DIETS FOR WHICH REGISTERED NURSES WOULD LIKE  
TO HAVE CONTINUING EDUCATION PROGRAMS

Diet	Frequency Requested
Weight Reduction/Low Calorie	5
Basic Review of Balanced Diet	3
Tube and Parenteral Feedings	3
Infant (Pediatric) Diets	2
How to cope with children who have eating problems	
Renal Diets	2
How to teach nutrition and diet to patients	1
Dietary management as adapted to cultural area	1
Any information on new diet changes, research	1
Low Residue	1
Arthritic	1
A "positive approach" acne diet	1
Hypoallergenic	1
Alcoholic	1
Drug addict patient	1
Low Calorie, Low Sodium	
—a premenstrual (monthly) diet	1
—diet and the menopause	1



## VITA

Julie McMenamin McDaniel was born in Chicago, Illinois, on April 26, 1947. She grew up in a suburb of Chicago and graduated from Oak Park-River Forest High School in 1965. In September, 1965, she entered Clarke College in Dubuque, Iowa. After attending school there for one year, she transferred to Iowa State University and majored in dietetics, receiving her Bachelor of Science degree in 1970. Her dietetic internship was taken at Indiana University Medical Center and she received her registration to the American Dietetic Association in February, 1971. In March of that year she married Alan R. McDaniel. She has been on the faculty of Saint Mary's Memorial Hospital School of Nursing for two and one-half years. She is a member of American Dietetic Association, Society for Nutrition Education, National League of Nursing, and Phi Upsilon Omicron. She presently resides in Knoxville, Tennessee, with her husband and their son, Robbie.