RECRUITMENT FOR DIETITIANS IN KANSAS SCHOOLS

by

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INTRODUCTION

A major problem in providing hospital care is a shortage of personnel in the allied health field. Dietetics, one of the allied health professions, is affected by a lack of qualified people. Van Horne (1960) stated the American Dietetic Association has been concerned since 1942 over the inability of the dietetics profession to meet the nation's needs for its service. According to Cashman (1967) and Cohen (1967), between 3,000 and 4,000 hospital positions for dietitians remain unfilled. Piper (1969) predicted that 17,000 dietitians (9,000 new and 8,000 replacements) are needed by 1975. The number of dietetic students is increasing but is insufficient to meet the demand.

The public is demanding comprehensive health care for all, but apparently is unaware of the allied health professions. Part of the dietitian shortage exists because many do not know what a dietitian is or does. All too often, the dietitian is placed "near the kitchen" where the duties are thought to include preparing the menus, cooking the food, and receiving criticisms by patients, hospital staff and others for the poor quality hospital food (Krehl, 1969).

The dietetics profession has not emphasized a well-planned coordinated recruitment program aimed toward the general population. Yet the influence of parents, friends, teachers, and counselors on the student's selection of a career is well known.

In addition, considerable misinformation and half truths

exist about nutrition. Dietitians are needed to help the general public, with its limited knowledge of nutrition, follow an adequate diet for the maintenance of good health.

The demand for dietitians, ignorance about the dietetics profession, and lack of a coordinated dietetics recruitment program were incentives for this study. The objectives of the research were: (1) to survey students' interest in health, food and nutrition; (2) to obtain information from young people, teachers and counselors on their exposure to the allied health field; (3) to ascertain the extent of the students' knowledge about dietetics; and (4) to develop recommendations for future dietetic recruitment plans.

REVIEW OF LITERATURE

The Dietetics Profession

Dietetics as defined by the American Dietetic Association (1969) "is a profession concerned with the science and art of nutritional care, an essential component of the health sciences. It includes the extending and imparting of knowledge concerning foods which will provide nutrients sufficient for health and during disease throughout the life cycle and the management of group feeding for these purposes." A dietitian is "a specialist educated for a profession responsible for the nutritional care of individuals and groups."

The American Dietetic Association (ADA) is the national organization of the profession of dietetics whose objectives as stated in the Constitution, (1959, amended 1967) are "to improve the nutrition of human beings; to advance the science of dietetics and nutrition; and to promote education in these and allied areas."

Careers in Dietetics

The professionally educated dietitian is qualified for unlimited career opportunities in the health field (Robinson, 1965). Throughout history, hospitals have and still are offering the largest number of positions for dietitians (A.D.A. Courier, 1970).

According to Esch *et al.* (1963), the hospital dietetics staff has the responsibility of "providing patients with high quality

food service that meets their individual needs and in the personal consideration that brings diet therapy into proper perspective in the total medical care."

The duties and responsibilities of dietitians can be divided into the categories of food service administration, diet therapy, research, and nutrition education (Health Careers Handbook, 1965). In practice, these categories may not be so well defined. The size and philosophy of the institution will determine the number of dietitians employed in each. For example, a large medical center may have several dietitians specializing in one category while a small hospital may have one dietitian performing functions of all categories (Anderson et al. 1964, p. 16). Robinson (1965) noted that a dietitian may work on a "shared" basis serving two or more smaller health care institutions.

Demands for consulting dietitians exist also in nursing homes, extended care facilities, and small hospitals. Other dietetic health career opportunities are in community programs, medical clinics, and governmental projects.

Duties and Responsibilities of Dietitians in Health Care Institutions

Director of Dietetics. In large hospitals, the top position in the Department of Dietetics is the director who plans, administers, and delegates duties and responsibilities to the staff for meeting all dietary needs of the patients. This is done in accordance with administrative principles and sound

medical treatment (Anderson et al. 1964, p. 157). The director is responsible for all activities of the department including quality food production and service, education and research. Typical duties of the director as listed by (Esch et al. 1963) include establishing departmental policies and procedures, controlling financial management, selecting the professional dietetic staff, and coordinating interdepartmental professional activities and relationships. The director also is responsible to the administrator of the institution and reports important developments of the department to him (American Dietetic Association, 1962).

Administrative Dietitian. An administrative dietitian has prepared for the job by specializing in food service management (The American Dietetic Association, 1966). In a health facility, administrative dietitians provide for the nutritional care of individuals and groups while maintaining high standards of food quality in quantity food production and service. The philosophy of the food service should allow for the patients, personnel, and guests to individually select food for optimal satisfaction within the established objectives of the institution (American Dietetic Association, 1962). Young (1965), Robinson (1965), and Terrell (1962) emphasized that the administrative dietitian is the keystone to a successful dietary department as exemplified by the job's responsibilities:

1. Plans effective and economical operation.
2. Sets realistic goals.
3. Develops policies to attain these goals.
4. Establishes education programs for personnel.
5. Looks toward future needs and possibilities of the food service.

Examples of duties and responsibilities of an administrative dietitian are: employs, trains, and supervises personnel, develops standards for food purchasing, storage, production, and merchandising; exercises cost control; plans menus; keeps meaningful records; writes specifications for equipment needs; maintains sanitation and safety; coordinates and evaluates departmental activity (American Dietetic Association, 1965).

Donaldson (1965) pointed out that technological, social, and economic developments in food service have increased tremendously the employment opportunities for administrative dietitians.

Therapeutic Dietitian. Young (1965) defined the therapeutic dietitian as a specialist "in interpreting the nutritional needs of human beings, individually or in groups, sick or well, in terms of food." Therapeutic dietitians are specialists in the practical problems of feeding people. Anderson et al. (1964, p. 19) added that the principal duty of the therapeutic dietitian is responsibility for all dietary aspects in the immediate care and treatment of patients. The therapeutic

dietitian requires an understanding of patients' problems and a desire to be helpful. This includes a working knowledge of therapeutic nutrition, psychology, sociology, food service administration, and education (American Dietetic Association, 1966).

Functions of the therapeutic dietitian, according to Young (1965), include estimation of dietary status by the dietary interview, dietary treatment and follow-up; contribution of nutritional and dietary knowledge to the medical team; and dietary counseling of the patient. Guidelines are listed for the important task of reporting the patient's program and progress by communicating with the medical team and physician through personal and staff conferences, charting, and ward rounds (American Hospital Association, 1966).

Other typical duties cited by Tillotson and Loughney (1963), American Dietetic Association (1965), Young (1965), and American Dietetic Association (1966) include:

1. Conferring with physicians on dietary prescriptions and their implementation.
2. Correlating the patients' dietary treatment with other aspects in the total care and treatment of the disease.
3. Consulting with community agencies if they are responsible for home or institutional care of the patient after hospitalization.
4. Planning attractive and satisfying meals for therapeutic diets in cooperation with food service administration.
5. Participating in the overall dietary departmental planning.

6. Delegating nonprofessional duties and responsibilities to competent employees.

7. Instructing student nurses, medical students, and others in nutrition education.

8. Teaching, supervising, and evaluating dietetic interns.

9. Continuing self education in the field.

10. Reviewing, preparing, and revising materials on modified diets for the diet manual and educational programs.

Noland and Steinberg (1965) summarized the therapeutic dietitians' activities into one phrase -- communicating with others.

Education Dietitian. The education dietitian usually is associated with a college, university, or medical center in training students in the medical and allied health fields as well as future dietitians and nutritionists. An advanced degree generally is required, according to Anderson et al. (1964, p. 158).

The educational responsibilities of the dietitian identified by The American Dietetic Association (1965) and Butterworth (1966) include:

1. Developing, organizing, and teaching courses or units related to normal and therapeutic nutrition.

2. Coordinating teaching programs for patients in the overall educational curriculum.

3. Formulating, directing, and participating in in-service education, training of dietary personnel, and staff development.

4. Incorporating current trends into the educational program.

5. Using effective motivating and learning techniques in teaching.

6. Preparing audio-visual aids, manuals, brochures, and other materials used in teaching.

7. Being flexible in applying principles of learning in dietetic teaching.

In a medical center that has a dietetic internship, the nutrition teaching is coordinated by the educational director of that internship. Teaching responsibilities may include coordinating and integrating nutritional education programs for the professional staff as well as the student groups (American Dietetic Association, 1966).

Schools of nursing often employ teaching dietitians to present nutrition education to their students. The dietitian may be teaching nurses in a college degree program (Kelly, 1960), associate degree program (Cafferty, 1960), diploma nursing program (Brown, 1960) or vocational nursing program. Greene (1960) reported most nursing schools with integrated and correlated programs have a full or part-time nutrition instructor on the nursing faculty. In that case the dietitian has few responsibilities to the dietary department, which leaves her free time to attend meetings and functions of the nursing school. Edmonds (1961) stated that so many dietitians have entered nursing education that several publications have been written for guidance in this area.

An expanding frontier for the dietitian is teaching nutrition in medical education programs as explained in the Dairy Council Digest (Anon, 1969a) and by Harlan, et al. (1968). Teaching is a part of all the dietetic specialties (American

Dietetic Association, 1966).

Research Dietitian. The research dietitian originates or assists as a team member in planning, organizing, and conducting research programs in the areas of nutrition, administration, and education. This person's responsibilities involve studying and analyzing scientific findings for application to present research. Then the data from this research is analyzed, evaluated, and interpreted (The American Dietetic Association, 1965). Findings are presented to scientific organizations and published in professional documents (Anderson et al. 1964, p. 159). According to Zolber and Donaldson (1970) and Esch et al. (1963), much research remains to be done in the area of dietetics.

Clinic Dietitian. According to Anderson et al. (1964, p. 159), the clinic dietitian guides and teaches patients who are not hospitalized but require a modification in their diets. Patients are referred to this type of therapeutic dietitian by a physician. Walsch (1965) and Gold (1969) predicted that dietitians will become increasingly involved in medical care programs for the child bearing groups such as improving nutrition for the family through well-baby clinics.

Shared Dietitian. Robinson (1965) stated a shared dietitian is a professionally qualified dietitian who assumes the administration of the dietary department for more than one hospital on a part-time basis. Spears (1961) described how a dietitian can

combine the duties and responsibilities of the shared dietitian on a consulting basis. The Metropolitan Chicago Nursing Home Association has established a shared dietitian program to provide dietitians in nursing homes on a shared, part-time basis at reasonable salary levels (Anon, 1969b).

Consultant Dietitian. The consultant dietitian observes, evaluates, advises, counsels, and instructs in a small health care institution according to Montag (1967) and Robinson (1967). The actual management is done by a full-time food service supervisor or cook-manager. A consultant may work in other areas such as conducting in-service training courses, conferences, and institutes for food service personnel; developing and evaluating informational material; making recommendations for improvments in food service practices and facilities, and conferring with architects and equipment personnel in planning new facilities or remodeling food service units (Bureau of Employment Security, 1965). Several consulting dietitians maintain offices that are independent of organizational affiliation. Guidelines have been developed by Forbes et al. (1969) and suggestions made by Mac Rae (1967) and Pettee (1963) for consultant dietitians who want to establish dietary counseling services for patients.

Dietitians in Public Health. Bosley and Huenemann (1968) pointed out that roles of the dietitian and the public health nutritionist are overlapping because the trend in medical care

is toward public responsibility. However, with advanced education in nutrition, the dietitian may become a nutritionist in public health. According to Anderson et al. (1964, p. 159), the public health nutritionist or dietitian primarily gives professional advice and services to other members of the health team. Vaughn (1967) pointed out that nutritionists work closely with physicians, public health nurses, supervisors, administrators, other consultants, licensed practical nurses, and home health aids for patients. Nyhus (1967) described the activities of the dietitian in public health related to health care services under Medicare. The activities included development of guidance material for part-time and consulting dietitians, interpretation of a dietitians services to health care agencies, recruitment of dietitians, and training programs for dietitians on recent health care legislation.

Dietitians in the Armed Forces. The Veterans Administration, Army, Navy, Air Force, and United States Public Health Service offer careers in several kinds of health care facilities for every category of dietitians. The governmental services offer an opportunity for patriotic service, rapid advancement, and generous financial rewards to dietitians (Hoeflin, 1970, p. 101; American Dietetic Association, 1966).

Dietitians in Other Countries. Members of the American Dietetic Association find their education and experience qualify them for programs of technical assistance to the developing

areas of the world. Governmental and international agencies may employ individuals with backgrounds in dietetics, nutrition, home economics, biological sciences, or education (American Dietetic Association, 1961).

Dietitians in Specialized Areas. Cowell and Rhyne (1969) discussed the challenge dietitians need to face in becoming involved with the health, education, and welfare agencies in the community. With the recent federal legislation, dietitians have leadership responsibility for developing and supporting programs that improve the nutrition of citizens. Egan (1968) and Phillips (1969) reviewed the federal legislation concerned with child nutrition and its implications for dietitians. Cashman et al. (1967) described the opportunities for and responsibilities of dietitians employed by hospitals, nursing homes, and extended care facilities that are participating in the Medicare program. Adair et al. (1968) proposed guidelines and suggestions for the dietitian involved in home care programs, homemaker home health aide programs, and home-delivered meals programs. The Medicare program also includes aid for home health agencies that meet the conditions for participation (Social Security Admin., 1966).

Employment Benefits. A beginning dietitian who has completed her internship may expect to earn approximately $7500 yearly (American Dietetic Association, 1968b). Most dietitians work an eight hour day and a 40 hour week. Since health institu-

tions serve food seven days a week, work on some weekends and holidays may be required. Paid vacation, holidays, and health and retirement benefits are usual and some hospitals provide laundry service for uniforms and meals in addition to salary. Stipends for jobs of great responsibility that require dietitians with much training and experience may range to $20,000 or more (United States Department of Labor, 1966).

Personal Educational Qualifications. To become a qualified dietitian, a student needs definite characteristics and motivation. According to The American Dietetic Association (1966), the dietitian needs the following personal characteristics:

1. Likes working with people including other professionals, patients, general public, and food service personnel.
2. Has a flair for good food.
3. Enjoys teaching others.
4. Is interested in the sciences.
5. Has patience.
6. Has a sense of humor.
7. Possesses good health.

The minimum educational requirements for a dietitian is a bachelor's degree with a major in foods and nutrition or institution management usually in colleges of home economics. Courses are taken in foods and nutrition, institution management, chemistry, bacteriology, and physiology and such related courses as mathematics, psychology, sociology, and economics. To qualify for professional recognition, The American Dietetic Association

recommends the completion of a dietetic internship program approved by the Association, or three years of experience under the supervision of members of the Association. Membership may also be obtained by a master's degree in foods, nutrition, food service management, education, or related fields with qualifying experience and endorsements. A person who obtains a doctoral degree in the same content areas, with an endorsement by a member can also become a member (American Dietetic Association, 1966).

Graning (1970) pointed out that students considering dietetics must realize that education continues after graduation. The American Dietetic Association has established a Registry to protect the health, safety, and welfare of the public by "encouraging high standards of performance of persons practicing in the profession of dietetics." Registration requires periodic upgrading of dietitians through additional education.

The Demand for Dietitians

Forecasting Health Manpower Needs. Determining health manpower needs may be difficult, but two methods used for this calculation were suggested by Sturm (1967):

1. Estimating the number of people needed for desirable health care minus the current number of employees.
2. Tallying the number of allied health job vacancies.

Other procedures for determing health manpower needs were cited by Kissick (1967). These included:

1. Existing health manpower-population ratio applied to the projected population base.

2. An economic projection consisting of the ratio of total expenditures to expenditures per worker.

3. Professional judgments of experts on present and future needs.

Each method has limitations, which should be considered when interpreting the results of any study that forecasts health manpower needs.

Shortage of Dietitians. Studies have been conducted to assess the shortage of dietitians in medical care facilities. Hubbard and Donaldson (1968) assumed that if utilization of dietitians continued at the present rate, 11,900 would be needed in hospitals in 1972, and 17,922 by 1977. These projected views and replacement needs are based on a rate of 915 annually until 1972 and 1,200 from 1972 to 1977. Dietitians have been entering the profession at the rate of approximately 700 a year.

Dr. Cashman (1967) pointed out that in 1965 less than one percent of nursing homes and related long-term care facilities employed professional dietitians. Of the budgeted positions in state-county and city public health agencies, 60 to 80 were vacant.

Based on a study conducted by the Public Health Service, Von Richter (1967) and Piper and Youland (1968) reported an urgent need for 1,600 hospital dietitians and 3,600 for optimal care. The Public Health Service estimated that 1,000 dietitians

would be required to provide full or part-time consultation to certified extended care facilities. The annual projected need for dietitians is 4,082 or 39.7 percent from 5,342 hospitals.

Robinson (1969) in a survey of six Western Kansas Counties, reported a need for 17 dietitians in hospitals, nursing homes, medical doctors offices, and school districts.

Reasons for the Dietitian Shortage. The preparation of professional health personnel has not kept pace with the population growth (Young and Hardy, 1967; Piper, 1969). Between 1960 and 1970, the population is expected to increase by 35 million people; the greatest growth in the age groups under 15 years and over 65 years. These two groups are the most frequent users of health services.

Piper (1969) emphasized that the American public expects high quality health services for all. Greater dissemination of health information, advanced health care research, increased ability to pay for health care, and emphasis on civil rights contribute to the belief that health service is a right rather than a privilege.

The expectation of health care for all has been reflected in Federal health and welfare legislation. After World War II, the Federal Government launched into a hospital-building program under the Hill-Burton Act. However, there was no federal aid for a corresponding rise in training professional staffs for these hospitals. The impact of Medicare on the demand for dietitians was greater than estimated. If a health care organ-

ization is to obtain federal reimbursement for costs of quality care, professional personnel with institutional management and therapeutic nutrition competencies are needed (Social Security Administration, 1966).

Foster (1967) listed four major reasons why young people do not enter the dietetics field. These were: (1) competition from other occupations, (2) proliferation of curricula within home economics departments, (3) early marriage, and (4) the students' observations in high school of the low prestige of home economics classes. These classes are closely related to dietetics and nutrition. She also believed that junior and senior high school students are relatively unaware of the dietetics profession.

A study of high schools in Milwaukee, Wisconsin indicated that students of high average and superior ability generally are guided away from home economics classes (Lauscher, 1967).

Steinmann (1966) stated that negative attitudes concerning the working wife or mother affect decisions of young women regarding a professional career. Others believe the only choice is marriage or a career.

According to Sturm et al. (1967), the long period of training required for health occupations has discouraged many prospective students. Professional preparation for the dietetics field requires more than a four year college degree. Eligible college students are encouraged to apply for membership in the ADA. Under the current programs, membership may be met in one

of three ways: (1) completion of an ADA approved internship in an accredited institution; (2) graduate study in Foods and Nutrition or Institution Management; or (3) preplanned three year program of diversified experience under the supervision of ADA members. The additional time involved discourages students who would like to enter the working field immediately after graduation.

The prospect of science requirements in the dietetics curriculum also influenced some students to bypass dietetics when selecting a profession, although they often do not have accurate information on the requirements. (Sturm et al., 1967).

The disadvantages of some jobs in dietetics have been reasons for other students not selecting the profession. Tatge (1965, p. 125) noted that dietetics is practiced seven days a week. Working hours are irregular and include weekends and holiday duty especially for the beginning dietitian. He indicated that the married dietitian may find it difficult to keep house, care for small children, and work an irregular schedule. Low salaries and poor working conditions, according to Sturm et al. (1967), are other factors that contribute unattractiveness to the profession. Tatge (1965, p. 124) and Sturm et al. (1967) agreed that there has not been enough recruiting for the health professions. Tatge believed that dietetics has been hard to glamorize because of the existing attitudes that dietetics is hard work requiring mental agility,

patience, and a strong back.

Possible Solutions to the Dietitian Shortage

Federal Government. The acute shortage of health manpower has caused the Federal Government to allocate grants for increasing the number and quality of professional care. Piper (1969) explained the Bureau of Health Manpower was established on January 1, 1967 to focus solely on health manpower problems. The Bureau was organized to:

1. Evaluate available health manpower needs and resources.
2. Stimulate health manpower utilization.
3. Explore new types of personnel.
4. Aid innovation and improvement in professional and technical education.

The Bureau is comprised of five divisions. The Division of Allied Health Manpower administers the Allied Health Professions Personnel Training Act of 1966. This act gives financial support to colleges and universities with qualifying allied health curriculums. Undergraduate and graduate dietetic programs are among the specified areas that may apply for grants.

Recruitment. Wnuk (1969) discussed three basic recruiting approaches with examples of recruiting techniques. The indirect approach means the potential student or employee contacts the recruiter. Recruiting techniques include advertisements through newspapers, radio, television, journals, brochures, and magazines. The third party approach consists of the agency, person, or

representative making an initial contact between the recruiter and the recruited. Recruiting techniques for this second approach include placement offices, employment agencies and fraternal, religious and social organizations. Finally, the direct approach is initial contact by the recruiter who must directly use recruiting techniques. Wnuk explained that each recruiting approach has disadvantages. Other problems include competition, lack of innovation in recruiting techniques, failure to consider future manpower needs, and little consideration of individual wants and desires.

Amicarella (1967) believed a well-planned recruitment program is one of the most obvious solutions to the health manpower shortage. McConnell (1968) agreed by stating a successful recruiting campaign includes continuity, constant publicity, repeated delivery, and wide exposure.

Professional Activities. The ADA has recognized the importance of understanding the dietetics profession by counselors, parents, and youth for effective recruiting. A public relations director from the ADA headquarters staff supervises the processing and production tasks involved in career guidance activities. ADA members on the National Career Guidance Committee are responsible for coordinating recruiting activities of the state associations and advising the public relations director. State Career Guidance committees are organized each year to develop effective recruiting programs (American Dietetic

Association, 1968a) with the following objectives:

1. Establish an informative outline within the states on dietetic careers.

2. Enlighten parents, administrators, vocational counselors, high school and college students of the educational requirements and wide choice of employment opportunities in the profession.

3. Cooperate with other organizations which are conducting recruitment activities and combine forces with them whenever possible.

Jackson et al. (1969, p. 31) stated thirty-five state associations in 1968-1969 reported on career guidance that included projects with hospital associations, Health Careers Councils and community groups such as scouts, medical societies, nursing associations and local or state home economics associations. Other activities included contacting high school students, vocational guidance counselors, home economics teachers, junior high school students, youth and adult groups, and colleges and universities. Radio, TV, and newspaper publicity was thought to be inadequate. The American Dietetic Association also has an Associate membership in the Association of Schools of Allied Health Professions established to respond to the new health programs that are developing (Graning, 1970).

The Kansas Health Career Council has developed a career notebook (1969) containing information of all allied health areas including dietetics. Job descriptions, duties, qualifications, registration, education and training were covered. Schools in Kansas having the specialized curriculums are listed

as well as scholarships, loans, and job opportunities for each field. This project is in accord with Stewart's (1966) advice that health and welfare planning councils furnish excellent grounds for solutions to the health manpower shortage for the various professions.

Hospital Projects. Taylor and Richter (1969) seriously questioned the effectiveness of present recruitment methods for health manpower. In a survey of 384 freshman nursing students, the authors found personal contact between the potential student and the professional health staff a major influence in choosing a nursing career. Personal contact was made by the students actually working in hospitals or by personal and family illnesses. Because several students indicated their career choice was made at an early age, the authors suggested starting recruitment in the fifth, sixth, and seventh grades. They also recommended the direct recruiting approach with less emphasis on films, lectures, television presentations, and brochures.

Foster (1957) agreed that junior high school students need to be informed about dietetics. Bonnell (1962) believed many basic attitudes during this age affect later career decisions. Cooley (1963) stressed considering the age groups of upper elementary and junior high school students when planning science career programs.

A method of recruiting high school students called the Tutorial and Cultural Project was described by Carb (1967).

Thirty-six students, underachievers but motivated toward nursing, were enrolled in an eight-week course sponsored by the Cook County School of Nursing and the U. S. Office of Economic Opportunity. The objective of the project was to raise reading and mathematical skills so that the students may qualify for admission to professional nursing schools. As a result, 28 students continued in nursing careers.

Morgan (1968) described a pilot project called SHOP (Shering Health Opportunities Program) designed to improve future recruitment of high school students by hospitals. SHOP consisted of eight weeks of planned experiences throughout the various hospital departments for 28 students on summer vacation. The objective was to promote health occupations as future job possibilities. Students were chosen on the basis of an expressed interest in the program and on grades and were paid minimum wages. All students remained in the project, and the majority asked to work the following summer. A few continued on a part-time basis during the school year.

Suggested Recruiting for Hospitals. A survey conducted by the ADA in 1964 reaffirmed the need for recruiting hospital dietitians. The authors suggested hospitals include training more subprofessional personnel, recruiting part-time and shared dietitians, and utilizing dietitians more efficiently where hospitals are overstaffed. The results of the survey showed that more help from hospital administrators and other outside

sources is needed to recruit and encourage dietitians to stay in the hospital field. Tatge (1965) quoted an administrator who said dietitians need to do a better job of selling the importance of their services to hospital administrators.

Several authors have suggested solutions to the health manpower shortages for the smaller hospitals. A contract service for the dietary area was suggested by Petit (1967). He agreed with Hague (1967) and Sturm et al. (1967) that paramedical personnel be shared, key jobs be combined, manpower and facilities be used properly, personnel be promoted by training within the institution, wage and salary programs be competitive. Hague (1967) explained that often the small size, inadequate personnel, and obstacles to employment advancement need to be overcome. He advocated well-planned career information programs.

To successfully recruit competent persons for any size hospital Zahasky and Brady (1968) stressed the need for good cooperation between the personnel and dietary departments.

Tatge (1965) recommended enhancing the prestige of the dietetics profession, cutting the overacademic cost of the educational program, and continuous emphasizing of the opportunities available for dietitians including men. He urged more on-the-job training with pay and academic credit for students during the summer months.

Re-recruiting. Wolcyn (1962) and Sturm et al. (1967)

favored re-recruiting the qualified dietitian to return to professional work. The obvious advantages are that training does not take five years to become qualified, competence is already established, and work experience adds to the organization. However, Wolcyn did not want to de-emphasize established recruiting methods such as career days, science fairs, scholarships, and "big sister programs" to bring young people into the field.

Colleges and Universities. Bricker (1962) stressed the importance of junior colleges as recruitment reservoirs for potential dietitians. Many students will attend a junior college for generalized liberal studies with the intention of transferring for upper division classes in a specific profession. The author urged dietitians to assume responsibility for informing junior colleges about the profession.

Several techniques have been used to recruit and keep college students in dietetics. Providing summer experiences for college students in dietary departments of various institutions has been successful. The Association of College and University Housing Officers (A.C.U.H.O.) started the Food Service Management Training Program in 1961 "to develop effective recruitment programs in college and university food service management areas to introduce young people to this field while providing on-the-job learning experiences in food administration" (ACUHO, 1969). The U. S. Army also has a summer practicum curriculum for dietetic students who are interested in hospital

dietetics.

In recruiting at The Ohio State University for the Medical Dietetics Program, emphasis is placed on recruiting plans directed to guidance counselors, science teachers, and parents as well as to the students. Personal contact by graduate students or faculty seemed to be the most effective recruiting technique. Many high school counselors were not familiar with dietetic careers. Visits were made to high schools using color slides to describe the Medical Dietetics Program. Talks also were given to future nurses organizations, health career clubs, home economics groups and classes. Projects were displayed at fairs and in the communities (Education in Medical Dietetics, 1968).

Messner (1967) thought recruiting by personal contact with future college students was important. He also suggested recruitment through disseminating career guidance literature; contacting people through 4-H especially district leaders; speaking before home economics and general business classes on topics of interest to the group; attracting students with above-average ability in Kansas vocational-technical schools or summer workshops for further education in a college level curriculum; and producing 33 mm slides describing opportunities in the food service field for use by high school and college recruiters. Messner emphasized speaking to adults who have influence on decisions of the student's career choice.

Stewart (1966) emphasized that the aim should not be just

to recruit and retain people. There is no single answer to the problem of providing health manpower for future demands. Several courses of action are under way, but the common purpose of providing better health services needs to be constantly kept in mind.

PROCEDURE

An educational program for the allied health professions of dietetics, medical technology, and physical therapy was developed for presentation to students and faculty members of selected Kansas schools. The program included short lectures on each allied health area by a professional representative, with accompanying slides and leaflets. Information about the students' knowledge and interest was surveyed by questionnaire.

Selection of Schools

Permission to represent the allied health curriculums offered at Kansas State University was obtained from the Assistant Director of Admissions. The Kansas Educational Directory, 1966-1967, was used for a listing of public junior high and high schools. The names of junior colleges in Kansas were obtained from the Office of Admissions and Records at Kansas State University.

Junior high and high schools were classified as urban or rural. A school was classified as urban if it was located in a city with a population of 5,000 or more. A rural school was in a community of less than 5,000 people. Schools and alternate schools within a feasible distance of Manhattan were selected.

The list of schools included four junior high schools, four senior high schools, and one junior college. Four schools were located in urban communities and four in rural communities.

Alternates included three junior high schools and three high schools with four being urban and two rural. Six administrators from the list were willing to schedule the program.

Selection of Respondents

A letter (Appendix A) was sent to administrators of the selected schools requesting an opportunity to meet with groups of students. A follow up telephone call was made to complete arrangements for the visit and to learn the composition of the student groups. Misunderstanding was avoided by another call to the teachers or administrator the day before the scheduled program to confirm the date, time, location, and physical arrangements.

Instructors of the classes and counselors of the school involved in the study were asked to participate. When possible, the representatives explained the program and purpose of the visit to the instructors prior to the presentation.

Questionnaires

Three questionnaires and answer sheets (Appendix B) were developed for obtaining information from students and faculty members. Questionnaire A requested identification by name, school, and grade or profession. The respondent was asked through selected questions to indicate his interests, personal characteristics, future plans, and exposure to the areas of health, foods, and nutrition. The third page of the questionnaire ascertained the subject's knowledge of dietetics with a

quiz on facts and fallacies covering nutrition. Questions were selected from an American Dietetic Association (1967) pamphlet "Food Facts Talk Back" and from Wilson et al. (1965).

Questionnaire B surveyed the subject's interest in the presentation and requested suggestions for improvement. Students were asked also if they were interested in an allied health career.

Questionnaire C was prepared for members of the faculty. Inquiries concerning sources of information on allied health careers and job opportunities in Kansas were included. The respondent was asked to estimate the number of students he had counseled who had entered the allied health area. Questionnaire C was attached to Questionnaire A and B with specific directions for faculty members.

Answer sheets were written for the facts and fallacies quiz on nutrition and for Questionnaire C for the faculty members. These questionnaires and answer sheets were assembled into packets to be distributed at the beginning of the program. A sheet saying "STOP! DO NOT GO ON UNTIL INSTRUCTED TO DO SO" was inserted between the two questionnaires.

Visual Aid Materials

Visual aids were developed to add interest to presentation of the educational program. A University photographer made colored slides of the dietitian on the job at Kansas State University. Slides also were obtained from the United States Army, Air Force, and the Dean's Office of the College of Home

Economics. Slides showing a hospital room and various external views of different types of health care centers introduced the allied health field. Slides typical of administrative, therapeutic, research, and educational dietetics activities were included. Food models from the National Dairy Council were added to the illustrative material available for the lectures.

A leaflet containing information about dietetics was prepared to give to students who showed an interest in the profession. Job assets, definitions of careers in dietetics, and academic preparation were included.

In the packet was an illustrated summary of the lectures for the three allied health areas called "Allied Health Professions" (Appendix C).

Presentation of Educational Program

The basic program was written with the understanding that it would be changed to fit the needs of the audience and the physical arrangement of the room (Appendix D).

The program was pre-tested on 35 vocational high school students. Parts of the questionnaire that confused the students were changed.

The program (approximately 50 minutes) was presented as follows:

1. The teacher or principal introduced the allied health representatives.
2. The representative distributed the packets.

3. The audience filled out Questionnaires A and C and returned them.

4. The representative clarified questions from the audience about the answer sheet.

5. Representatives lectured on the allied health areas, using slides and models.

6. The students filled out Questionnaire B and returned it.

7. The representatives answered questions by the audience.

8. Career leaflets were distributed to interested students.

RESULTS AND DISCUSSION

Nine trips to Kansas junior high schools, senior high schools, and a junior college were made. One group of nine junior college students and their instructor answered Questionnaire A during a tour of the College of Home Economics at Kansas State University. In a beginning foods course, 189 Kansas State University students, mostly freshmen and sophomores, answered Questionnaires A and B.

Of 928 packets given to students during the program, 832 questionnaires were returned of which 814 were usable for this study (Table 1). Twenty-three packets were given to the faculty members, including instructors and guidance counselors, but only 11 questionnaires were returned by them.

Completed questionnaires A and B were coded and responses were recorded on computer cards. Data were tabulated by the Kansas State University Statistical Laboratory on questionnaires from the 814 students and 11 faculty members. The total of 825 was used as the base for calculating percentages. This base included questions that did not apply to the faculty members which were tabulated in the category "no answer".

Table 1. Schools included in study.

Location of school	Code no.	Participating group or class	Grade	Student participation		%	Faculty participation		%
				No. Packets distributed	Questionnaires returned		No. Packets distributed	Questionnaires returned	
Rural	1	Physical Education	7,8	100	94		3	0	
Rural	2 (Jr. High)	Assembly	7,8,9	85	71		5	2	
	7 (Sr. High)		11,12						
Urban	3	English	11	96	75		2	2	
		Advanced Biology	12						
Rural	4	Physical Education	9,10	143	143		2	0	
Urban	5	Home Economics	9	40	36		2	2	
Urban	6	Biology	10	130	98		3	0	
		Chemistry	11						
		Physics (Assembly)	12						
Rural	8	Biology	10,11,12	22	22		1	0	

Table 1. (Cont.).

Location of school	Code no.	Participating group or class	Grade	Student participation			Faculty participation		
				No. Packets distributed	Questionnaires returned	%	No. Packets distributed	Questionnaires returned	%
Urban	9	Medical careers club	10,11,12	15	15		2	2	
Jr. College	10	Home Economics	freshmen sophomores	9	9		1	1	
Jr. College	11	General Health	freshmen sophomores	55	55		1	1	
Jr. College	12	Nutrition	freshmen & sophomore nursing students	44	42		1	1	
University	13	Foods	mostly freshmen & sophomores	189	172		0	0	
Total				928	832	89.7	23	11	47.8

Table 2. Number of respondents by grade level, location of school, and sex.

	Grade level			Faculty	Location (1)		Sex	
	Junior High	Senior High	College		Urban	Rural	Male	Femal
No.	245	292	277	11	216	330	209	616
%	29.5	35.5	33.6	1.3	26.3	40.0	25.3	74.7

No. respondents: 825

(1) Colleges not included

Students were predominantly from classes in science, home economics, and physical education. The 814 students were almost equally divided among junior high, senior high, and college (Table 2). Females outnumbered the males and 40 percent of the junior and senior high school students were from rural areas. Colleges were not classified into rural and urban areas because of the students' diversified backgrounds and temporary residence of the college community.

Student Interest in Dietetics

Students were questioned about their interest in science and whether they enjoy working with people. These interests were considered important for dietitians who are responsible for the nutritional care of individuals and groups. Over half of the students indicated an interest in science (Table 3) with a higher percentage of college students liking science than

Table 3. Student interest in areas related to dietetics.

	Total		Junior High		Senior High		College	
	No.	%	No.	%	No.	%	No.	%
Are you interested in science?								
Yes	359	43.5	87	10.5	127	15.5	141	17.1
No	282	34.2	88	10.7	104	12.6	88	10.7
Undecided	156	18.9	58	7.0	56	6.8	41	5.0
No answer	27	3.8	11	1.3	5	.6	7	0.8
Do you enjoy working with people?								
Yes	739	88.8	209	25.3	253	30.7	271	32.8
No	30	3.6	9	1.1	18	2.2	3	.4
Undecided	43	5.2	21	2.5	19	2.3	3	.4
No answer	13	1.6	6	.7	2	.2	0	0.0

No. respondents: 825

those in the junior high and senior high grades. Almost 90 percent of the respondents said they enjoyed working with people. More junior high and senior high students were undecided about their interest in working with others than college students. The younger students may have lacked experience involving people other than family, church, and school contacts to form an opinion.

As shown in Table 4, 454 students indicated they had future career plans, but only 95 expressed an interest in an allied health career that required college preparation. One junior high student and two college students wanted to become dietitians. As expected, the percentages indicated that older students have more definite career plans than the younger students.

Table 4. Student interest in future career plans.

Grade level of student respondents	Total Respondents		Have future career plans		Interested in allied health career requiring college		Interested in dietetics car	
	No.	%	No.	%	No.	%	No.	%
Junior High	245	29.5	113	13.9	12	1.5	1	0.
High School	292	35.5	149	18.1	29	3.5	0	0.
College	277	33.6	188	22.8	54	6.6	2	0.
Total	824	98.6	454	54.6	95	11.6	3	0.

No. respondents: 825

Previous Exposure to Health Information

In order to expand a dietetics recruiting program, various avenues of communication with students needed investigating. Students were asked to list affiliations with organizations and if information on health, food, and nutrition was included in the programs. Scouts and 4-H had the highest membership (Table 5) and had contributed information on health, food and nutrition. Comparable organizations of Youth Power, Campfire Girls, Future Homemakers of America, and others named by students were grouped together because of the small number of responses for each organization. Church and school affiliated groups such as MYF, Luther League, girls' pep clubs, gymnastic groups, future nurses, and health careers clubs were organizations also included in the "other" category.

Table 5. Organizations contributing to student information on health, food, and nutrition.

Organization	Areas Specified										To
	Health		Foods		Nutrition		Combinations		None		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1. Scouts	87	10.6	21	2.6	1	0.1	205	24.7	27	3.3	341
2. 4-H	18	2.2	43	5.1	1	0.1	200	24.0	8	.9	270
3. Other	39	4.6	14	1.5	4	.5	170	19.5	76	9.0	303

Since personal contact is an important part of communications, the students were asked who had given them information on health, food, and nutrition. The respondents, as seen in Table 6, indicated their greatest exposure to these areas came from parents (79.4 percent) and teachers (72.0 percent). These people obviously had the greatest contact with the students. The doctor was the third most important source, as indicated by 35.3 percent. The periodic physical examination required by public schools and for participation in athletics, as well as contact with physicians through childhood diseases, may account for students' frequent contact with physicians. Over 20 percent of the respondents cited the 4-H leader and nurse while more than 10 percent recalled as sources of information the athletic coach, peer group and county agent. Dietitians (4.8 percent) received the lowest response. Apparently little personal contact exists between dietitians and students in the localities surveyed.

Table 6. Exposure to information on health, food, and nutrition through personal contact.

Source of Students' Exposure	Response	
	No.	%
Parents	654	79.4
Teacher	594	72.0
Doctor	291	35.3
4-H Leader	230	27.9
Nurse	96	22.4
Coach	133	16.2
Peer group	129	15.6
County agent	109	13.2
Other	62	7.5
Recreation leader	42	5.0
Dietitian	40	4.8

No. questionnaires: 825

To explore the possible effect of community hospitals on recruiting for the allied health fields, students were asked if they had been patients or candy stripers. Almost 40 percent responded in the affirmative, with two students indicating they had worked as nurses aides (Table 3 Appendix E). These results point out that community hospitals have an important part in recruiting through volunteer programs and part-time jobs that give young people an opportunity to participate in patient care.

Knowledge Concerning Dietetics

Knowledge about careers, duties and responsibilities of jobs in the field, educational and personal requirements, and opportunities for employment are essential for selection of a career. Table 7 shows that only 19 out of 825 respondents or 2.3 percent knew what dietetics is. One hundred and seventy-

Table 7. Response to question "Do you know what dietetics is?"

Response	No.	%
Yes, correct explanation	19	2.3
Yes, partially correct explanation	172	20.8
Yes, no explanation	26	3.2
Yes, wrong explanation	25	3.0
No	340	41.3
Undecided	213	25.8
No answer	30	3.6
Total	825	100.0

two were partially right in their definitions and 26 said they knew what dietetics is but offered no explanation. Those who had no idea or were undecided about the field numbered 340 and 213 respectively. The data point out that students and faculty members surveyed generally were uninformed about the dietetics field.

From a list of duties, respondents were asked to select those that best describe what a dietitian does. Over 50 percent correctly chose the answers that a dietitian plans diets, plans menus, supervises hospital kitchen, does research, and works with doctors (Table 8). However, only 49.8 percent knew that a dietitian is a college graduate and 35.3 percent recognized teaching as a responsibility of the dietitian.

Responses from this group implies that one reason more young people do not enter dietetics is lack of knowledge about the profession. Some of the respondents had misconceptions about the duties of a dietitian. Over 10 percent thought a

Table 8. Respondents' knowledge of dietitian's duties and responsibilities.

Duties and qualifications listed	Correct answers	Incorrect answ
	%	%
Plans diets	86.3	
Plans menus	76.7	
Supervises hospital kitchen	61.8	
Does research	56.0	
Works with doctors	51.8	
Graduates from college	49.8	
Teaches	35.3	
Writes papers	24.4	
Cooks food		11.5
Sells vitamins		8.2
Prescribes medicine		6.8
Serves food		6.3
Takes blood samples		6.1
Gives shots		3.8

dietitian cooks food and 6.3 percent marked "serves food". Perhaps these ideas originated from food service employees who call themselves dietitians. Some of the students and faculty members thought that the dietitian can do almost anything related to the medical field. Between 5 and 10 percent indicated a dietitian "sells vitamins", "prescribes medicine", or "takes blood samples"; 3.8 percent thought a dietitian "gave shots".

Facts and Fallacies about Foods and Nutrition

A dietitian is concerned about the public's misinformation and false ideas concerning foods and nutrition. Therefore, a quiz was included in the questionnaire to obtain general impressions of the respondent's knowledge concerning food facts and fallacies. Statements thought to be of interest to the audience

were chosen for the true-false type of questions.

A high percentage of respondents gave inaccurate answers to several of the statements. Almost 75 percent thought eating gelatin strengthened fingernails, and that it is dangerous to leave refrigerated foods in an opened can (Table 9). Sixty-eight percent indicated raw beef was higher in food value than cooked beef. Only 63.3 percent knew that obesity is primarily caused by overeating.

Table 9. Respondents knowledge of food facts and fallacies.

Question	*Correct Responses
	%
1. All diseases are caused by faulty diet. Answer: false	96.6
2. Overcooking may cause excessive loss of vitamins and minerals. Answer: true	92.0
3. People of all ages need milk. Answer: true	91.4
4. Water is fattening. Answer: false	82.7
5. The nutritionist is a college graduate. Answer: true	71.3
6. Everyone needs to take vitamins. Answer: false	69.5
7. Poor soil causes malnutrition. Answer: false	67.6
8. Obesity is caused mainly by overeating. Answer: true	63.3
9. Rubber gloves should be worn when cleaning and dressing rabbits. Answer: true	57.0
10. Raw beef is higher in food value than cooked beef. Answer: false	32.0
11. Eating lots of gelatin strengthens fingernails. Answer: false	25.1
12. It is dangerous to leave refrigerated food in the same can that has been opened. Answer: false	24.4

*Based on 825 questionnaires.

Over 90 percent correctly answered that overcooking may cause excessive loss of vitamins and minerals, people of all ages need milk, and that all diseases are not caused by faulty diet.

Student Interest in Educational Program

Table 10 shows the respondent's interest in the presentation of the educational program. Over 75 percent indicated they liked the visual materials, lecture, survey or various combinations of these teaching methods. The greatest response (31.6 percent) was for the lecture followed by 25.3 percent enjoying the slides. The audience responded favorably to on-the-job experience. Food models, crutches, syringes, and other tools of these professions also created interest. From students' comments, the questionnaire was a good introduction to the program. Many were interested in the health facts and fallacies questions and said it was fun to take a test without being graded. Several asked questions about the answer sheet. However, the facts and fallacies quiz apparently was too difficult for some of the junior high school students. For example, several seventh and eighth graders did not understand the meaning of malnutrition. Having questionnaires for the different grade levels would make a more effective program. The attention span was shorter in the younger students so shorter programs and more variety is needed to hold their interest.

Following the presentation, interest in an allied health

Table 10. Affirmative responses to program presentation and interest in allied health professions.

Interest	Total No.	Total %	Grade Level Junior High %	Grade Level Senior High %	Grade Level College %	Location Rural %	Location Urban %
Lecture	261	31.7	9.1	13.1	9.5	11.8	10.4
Visual materials	209	25.4	8.4	7.3	9.7	12.4	3.3
Lecture, visual materials	103	12.3	1.8	2.3	8.2	2.7	1.5
Survey	82	7.8	4.4	1.9	1.5	6.4	2.1
Lecture, visual materials, survey	25	3.1	0.6	1.0	1.5	1.0	.6
Lecture, survey	19	2.4	0.4	1.5	0.5	1.2	0.6
Visual materials, survey	9	1.1	0.5	0.4	0.2	.7	.1
Allied health professions (1)	154	18.6	6.4	6.7	5.5	9.3	3.8
Dietetics	47	5.7	1.6	1.8	2.3	1.8	1.6

(1) Negative responses 304
Undecided 309
No answer 58

profession was expressed by 154 (18.6 percent), while 309 were undecided and 304 answered negatively. Forty seven specified an interest in dietetics (Table 10). Additional information was sent to these students.

The representatives found they had to be flexible in planning the program for the make-up of the audience and physical arrangements. Often last minute changes were made. The program was given on an auditorium stage, in laboratories, classrooms, and a library. In one school, 85 students were crammed into one room with most of the audience sitting on the floor.

Faculty Members' Knowledge of Allied Health

In questionnaire C, open-ended questions were asked of the teachers and counselors concerning the allied health field. The small response (11) appeared to be due to lack of information. One counselor indicated he had no training for his position.

A variety of sources on dietetics careers was given. Several faculty members listed schools, colleges and universities, hospitals, and dietitians as sources. Others mentioned films, books, magazines, TV, radio, people, and field trips. One pointed out the American Dietetic Association and the American Home Economics Association. A counselor referred to the Health Careers Guidebook.

In reply to the question concerning the job opportunities for dietitians in Kansas, the teachers and counselors mentioned hospitals, schools, cafeterias, nursing homes, consultants,

institutional areas, and university dormitories. Most realized a dietitian has a college degree. Only one counselor indicated the number of students from his school that had entered the allied health field in the past 5 years.

These results indicate that faculty members apparently do not have enough information on the allied health careers to adequately guide students who are thinking about jobs in these areas. Counselors and teachers need information on sources for up-to-date information on specific health service careers. Because the number of replies was small, these conclusions are only implied.

SUMMARY

A major probelm in providing medical care today is the shortage of qualified allied health personnel including dietitians. In addition to the 3,000-4,000 hospital positions remaining unfilled (Cashman, 1967; Cohen, 1967), Piper (1969) predicted 17,000 more dietitians will be needed by 1975. The number of dietetic students is increasing but is insufficient to meet the demand. The public is wanting comprehensive health care for all, but apparently is unaware of the allied health professions. The dietetics profession has not emphasized a well-planned coordinated recruitment program aimed toward the general population. Yet the influence of parents, friends, teachers, and counselors on the student's selection of a career is well known. In addition, considerable misinformation and half truths exist about nutrition and dietitians are needed to help the general public follow an adequate diet for the maintenance of good health.

The demand for dietitians, ignorance about the dietetics profession, and lack of a coordinated dietetics recruitment program were incentives for this study. The objectives of the research were (1) to survey students' interest in health, food, and nutrition; (2) to obtain information from young people, teachers, and counselors on their exposure to the allied health field; (3) to ascertain the extent of the students' knowledge about dietetics; and (4) to develop recommendations for future

dietetic recruitment plans.

An educational program for the allied health professions of dietetics, medical technology, and physical therapy was developed for presentation to students and faculty of selected Kansas schools. The program included short lectures on each allied health area by a professional representative with accompanying slides and leaflets. Information about the students' knowledge and interest was surveyed by questionnaire.

A total of 825 respondents, composed of 814 students and 11 faculty members, answered the questionnaires. At the beginning of the program, over half of the students indicated future career plans with 95 interested in an allied health profession. Three students specified dietetics. Following presentation of the program, interest in an allied health profession was expressed by 154 with 47 mentioning dietetics.

In order to expand a dietetics recruiting program, various avenues of communications with students were investigated. Results showed most information on health, food, and nutrition was obtained from parents and teachers. However, some knowledge was gained from other personal contacts and programs of youth organizations such as Scouts and 4-H. Apparently, little contact existed between dietitians and students in the localities surveyed. The importance of the community hospital in recruiting was explored. Over 40 percent of the students had some experience in a hospital either as a patient or candy striper.

Data obtained from questions asking for the meaning of dietetics and for a selection of dietitians' duties and qualifications generally indicated respondents were uninformed about the dietetics field. Responses from this study implies one reason more young people do not enter dietetics is lack of knowledge about the profession. A quiz was included in the questionnaire to obtain general impressions of the respondent's knowledge concerning food facts and fallacies. A high percentage of respondents had indicated inaccurate answers for several of the questions.

An open end questionnaire given to the class instructors and school counselors indicated that faculty members apparently do not have enough information on the allied health careers to adequately guide students who are thinking about jobs in these areas. Counselors and teachers need information on sources for up-to-date information on specific health service careers. Because the number of replies was small, these conclusions are only implied.

Recommendations include: (1) continue and expand the recruitment program for dietetics; (2) develop a coordinated recruitment program with the Kansas Dietetic Association; (3) mail career information on dietetics to school counselors; (4) study present dietetic students at Kansas State University to find out why they are majoring in dietetics, when they decided on a dietetics career and what influenced their decision.

CONCLUSIONS

Under the conditions of this study, the following statements may be made:

1. Many students, including college freshmen and sophomores, were undecided about future career plans.

2. Although only about 10 percent of the students indicated an interest in an allied health profession at the beginning of the program, over 75 percent were interested in learning about allied health careers following presentation of the program.

3. Most of the young people, teachers, and counselors, questioned were unaware of the dietetics field.

4. Although the number questions asked was not large enough to be conclusive, it was apparent that misconceptions about nutrition did exist.

5. Students obtained the greatest amount of information on health, foods, and nutrition from parents and teachers with some knowledge gained from other personal contacts and programs of youth organizations such as Scouts and 4-H.

6. Dietitians in the areas of Kansas included in this study apparently have little contact with students.

RECOMMENDATIONS

1. Continue and expand recruitment program for dietetics with these suggestions for improvement:

    a. Obtain a file of different slides and scripts to help prevent monotony in the presentation.

    b. Present the program only to interested groups and organizations.

    c. In junior college obtain permission for presenting program to an assembly instead of in classes, so that only interested students would attend.

    d. Mail publicity for the educational program to schools, county agents, and various youth organizations in the spring to aid in planning itinerary for the following fall term.

2. Develop a coordinated recruitment program with the Kansas Dietetic Association that would involve recruiting by all Kansas dietitians in the communities.

3. Mail to school counselors career information on dietetics and the names of dietitians in the community willing to explain the profession to interested students.

4. Study present dietetic students at Kansas State University to find out why they are majoring in dietetics, when they decided on a dietetics career, and what influenced their decision. An investigation of the factors that seem to influence students' career decisions also would be helpful.

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APPENDIX A

KANSAS STATE UNIVERSITY *Manhattan, Kansas 66502*

DEPARTMENT OF INSTITUTIONAL MANAGEMENT
JUSTIN HALL

60

Date

Principal
Urban High School
Urban, Kansas

Dear Sir:

Are you aware of the impact Medicare has had on the demand for young people in the Allied Health Professions?

Kansas State University has been awarded a grant from the Department of Health, Education, and Welfare; and part of the funds are being used to inform students about the fields of Dietetics, Medical Technology, and Physical Therapy. The desired results of this program are to encourage students to think about these areas as future careers and collect data for a master's thesis.

I shall call you in a few days regarding a 50 minute educational program to be presented in your school on The Facts and Fallacies in the Allied Health Field and Professions. We would like to meet with a representation of each grade in classes such as science and health or as a group. To avoid conflicts may the program be scheduled in your school on a Tuesday or Thursday during January and February? If you have further questions, I will try to answer them at that time. Your cooperation will be greatly appreciated.

Sincerely,

(Mrs.) Marlene Kolstad
Graduate Assistant

MK/vk

APPENDIX B

QUESTIONNAIRE A

67.68

Kansas State University
Allied Health Survey

Please fill in the following questionnaire. Do not start until you are told.

Name_____School_____

Circle the answer that applies to you.

Male Female

Your grade or classification:

*Faculty	Years in Profession	Students--------Grade
Counselor I	_____	7th
Counselor II	_____	8th
Counselor NQ	_____	9th
Teacher	_____	10th
(State area) _____	_____	11th
		12th
		College Freshman
Other explain _____	_____	College Sophomore
		Other (explain) _____

A) Are you interested in science? Yes No Undecided
If yes, which kind of science interests you most? Physical (such as Chemistry) Biological (such as Biology) Both

B) Do you enjoy working with people? Yes No Undecided

C) Would you rather work alone? Yes No Undecided

D) Do you have any career plans for the future? Yes No Undecided
If yes, what are they?
_____
_____

67.68

Kansas State University
Allied Health Survey

Circle the organizations that you have belonged to and place an X in the box of those that have included information on Health, Foods and Nutrition.

Organization	Health	Foods	Nutrition
4-H			
Girl Scouts or Boy Scouts			
Youth Power			
Campfire Girls			
FHA			
Other (explain)			

Circle the people who have instructed you in Health, Foods and Nutrition. Place an X in the appropriate box.

Person	Health	Foods	Nutrition
Parents			
County Agent			
Coach			
4-H Leader			
Nurse			
Dietitian			
Doctor			
Teacher (what subject?)			
Recreation Leader			
Friends your own age			
Others (Explain such as aunt, uncle, brother, sister, neighbor)			

Have you been a patient or a candy striper in a hospital? Yes No

If yes which one?

Have you known a handicapped person? Yes No

If yes, how? (such as neighbor)

*Circle the answer that applies to you.

Do you know what dietetics is? Yes No Undecided
If yes, explain

What food areas interest you most? (you may circle more than one answer) Planning Buying Preparing Serving Eating None

*Place an X before the answers that you think best describe what a dietitian does.

____cooks food
____plans menus
____gives shots
____supervises a hospital kitchen
____sells vitamins and food supplements
____graduates from college
____writes papers
____serves food on a cafeteria line
____teaches
____prescribes medicine
____does research
____works with doctors
____plans diets for patients
____takes blood samples

*After reading the following statements, circle yes if the statement is true or no if the statement is false.

1. All diseases are caused by faulty diet. 1. Yes No
2. Poor soil causes malnutrition. 2. Yes No
3. Eating lots of gelatin will strengthen fingernails. 3. Yes No
4. Water is fattening. 4. Yes No
5. Raw beef is higher in food value than cooked beef. 5. Yes No

67.68 Kansas State University
Allied Health Survey

6.	It is dangerous to leave refrigerated food in the same can that has been opened.	6.	Yes No
7.	Everyone needs to take vitamins.	7.	Yes No
8.	Rubber gloves should be worn while cleaning and dressing rabbits.	8.	Yes No
9.	The nutritionist is a college graduate.	9.	Yes No
10.	Obesity is caused primarily by overeating.	10.	Yes No
11.	Overcooking may cause excessive loss of minerals and vitamins.	11.	Yes No
12.	People of all ages need milk.	12.	Yes No

Do you know what Physical Therapy is? yes no
Explain

Place an X before the answers that you think best describe what a Physical Therapist does.

____Gives injections
____Sits at a desk
____Gives exercises
____Works primarily in a hospital
____Helps patients learn to walk
____Massages tight muscles
____Consults with physicians
____Treats any and all patients
____Is in constant contact with people
____Takes dictation

After reading the following statements circle T if the statement is True and F if the statement is False.

1.	Cerebral Palsy is a contagious disease of the aged.	T	F
2.	The Glutius Maximus is the name of the muscle upon which you sit.	T	F
3.	Over exposure to ultraviolet light will burn the skin.	T	F

67.68 Kansas State University
Allied Health Survey

4. Aspirin cures Arthritis. T F

5. The buoyancy of water provides greater freedom of movement. T F

6. The Salk vaccine is given for the prevention of Poliomyelitis. T F

7. Regular exercise is unimportant to good health. T F

8. Any limb encased in a plaster cast will in time become stiff. T F

Do you know what Medical Technology is? yes no
Explain

Place an X before the answers that you think best describe what a Medical Technologist does.

____Cultures bacteria
____Draws blood from patients
____Pushes wheelchairs
____Tests for cancer
____Works in an office
____Determines blood types
____Uses a microscope
____Works out of doors
____Gives medications
____Is accurate and precise.

After reading the following statements circle T if the statement is true and F if the statement is false.

1. All bacteria are harmful. T F

2. Modern medical diagnosis is dependent upon laboratory tests. T F

3. "Kissing Disease" is the nick name for Infectious Monomucleosis. T F

4. Diabetes involves the improper metabolism of sugar. T F

5. Leukemia is a disease of the blood. T F

67.68 Kansas State University
Allied Health Survey

6. Compatiable blood types are unimportant for blood transfusion. T F

7. Radio Active Isotopes are useful in cancer studies. T F

8. Not all infections respond to treatment by antibotics. T F

67.68

Kansas State University
Allied Health Survey

STOP! DO NOT GO ON UNTIL INSTRUCTED TO DO SO.

QUESTIONNAIRE B

67.68

Kansas State Univeristy Allied Health Survey

Name_____

Circle what interested you most about the talk and give suggestions for improvements.

Visual materials (sli
Lecture
Survey

Do you think you would be interested in an allied health profession as a career?

Yes No Undecided

Circle the health career that appeals to you ONLY if you are interested.

Physical Therapist	Medical Technologist	Dietitian
Physical Therapy Aide	Laboratory Assistant	Food Service Supervis
	Cytotechnologist	Food Service Worker
	Histologic Technician	Food Service Clerical Worker

67.68 Kansas State University Allied Health Survey

ANSWER SHEET

What is dietetics?

Dietetics is the application of the science of nutrition to the feeding of individuals and groups of people in health and sickness. A dietitian is one who has a college degree and advanced education or qualifying experiences in the sciences of nutrition and management as required by the American Dietetic Association.

Place an X before the answers that you think best describe what a dietitian does.

___ cooks food	___ serves food in a cafeteria line
X plans menus	X teaches
___ gives shots	___ prescribes medicine
X supervises a hospital kitchen	X does research
___ sells vitamins and food supplements	X works with doctors
X graduates from college	___ plans diets for patients
X writes papers	___ takes blood samples

After reading the following statements, circle yes if the statement is true or no if the statement is false.

1. All diseases are caused by faulty diet. Although some diseases may be caused by a lack of some important nutrient such as scurvy caused by a lack of Vitamin C, there are several other causes of disease such as viruses, poisonings, bacteria, etc. 1. Yes (No)

2. Poor soil causes malnutrition. Experiments have shown the nutritive value of a crop is influenced by the kind of seed planted - not the fertility of the soil. 2. Yes (No)

3. Eating lots of gelatin will strengthen fingernails. Fingernail formation is influenced by many factors such as state of nutrition, endocrine state, disease, and environment. 3. Yes (No)

4. Water is fattening. 4. Yes (No)
Water has no caloric value and therefore cannot be converted to body fat.

5. Raw beef is higher in food value than cooked beef. 5. Yes (No)
The difference is very small and raw beef may be infested with a form of tapeworm. It is best to cook to at least the rare stage for safe eating.

6. It is dangerous to leave refrigerated food in the same can that has been opened. 6. Yes (No)
It is safe to have food in the original can, covered, and kept cool. A few acids may dissolve a little iron from the can but this is not harmful to health. Also, the cans are sterilized in processing while another container may have bacteria causing the food to spoil.

7. Everyone needs to take vitamins. 7. Yes (No)
Scientists agree that foods are the best sources of vitamins and are all obtained for the average person by an adequate diet.

8. Rubber gloves should be worn while dressing rabbits. 8. (Yes) No
Wild rabbits have caused over 90 percent of the disease tularemia in the United States and can be transmitted by touching an infected animal. Hence, rubber gloves should be worn. Cooking renders the diseased bacteria harmless.

9. The nutritionist is a college graduate. 9. (Yes) No

10. Obesity is caused primarily by overeating. 10. (Yes) No
More calories are taken into the body than are used and, as a result, fat is stored.

11. Overcooking may cause excessive loss of minerals and vitamins. 11. (Yes) No
They are at least partially destroyed by overcooking.

12. People of all ages need milk. 12. (Yes) No
One quart of milk each day is recommended to meet the needs of growing children and one pint daily for adults.

67.68 Kansas State University Allied Health Survey

Tear off and mail

If you wish more detailed information concerning education in dietetics, nutrition, or home economics, please send this form to:

Dean of Home Economics
Kansas State University
Manhattan, Kansas 66502

Your name_____

Street or P. O. Box Number_____

Town or City_____

State and zip code number_____

School or College you are now attending_____

Do you know what Physical Therapy is?
It is the profession in which exercise, massage, heat, light and water is used in the treatment and rehabilitation of the ill and the handicapped. The required training is 3 years of college with major study in Biological Science and 14 months in an accredited school of Physical Therapy.

Place an X before the answers that you think best describe what a Physical Therapist does.

____ Gives injections

____ Sits at a desk

_X_ Gives exercises

_X_ Works primarily in a hospital

_X_ Helps patients learn to walk

_X_ Massages tight muscles

_X_ Consults with physicians

____ Treats any and all patients

_X_ Is in constant contact with people

____ Takes dictation

67.68 Kansas State University Allied Health Survey

After reading the following statements circle T if the statement is True and F if the statement is False.

1. Cerebral Palsy is a contagious disease of the aged. False
This condition is the result of damage to the brain occuring at the time of birth.

2. The Glutius Maximus is the name of the muscle upon which you sit. True
It is one of the major muscles covering the posterior portion of the hip joint. This area also contains Adipose tissue otherwise known as fat.

3. Over exposure to ultraviolet light will burn the skin. True
Used correctly it is highly beneficial, but blindness and severe burns can result from excessive radiation.

4. Aspirin cures Arthritis. False
The medical profession has found no cure for Arthritis. Aspirin relieves the pain accompanying this disease.

5. The buoyancy of water provides greater freedom of movement. True
Hydortherapy is one of the most helpful tools in the reeducation of weak and injured muscles. Weight displacement in water eliminates friction and gravity, allowing the muscle to contract without resistance.

6. The Salk vaccine is given for the prevention of Poliomyelitis. True
Due to medical research this crippling disease is rare today.

7. Regular exercise is unimportant to good health. False
Many prominent scientists have shown that a regular program of Physical Exercise promotes good health and longevity.

8. Any limb encased in a plaster cast will in time become stiff. True
A joint immobilized due to a fracture (broken bone) will become stiff and sore. Proper heat and exercise is necessary to restore the limb to its normal function.

67,68 Kansas State University Allied Health Survey

Do you know what Medical Technology is?
It is the application of scientific laboratory testing that is necessary to the diagnosis and treatment of disease. The required training is 3 years of college with major study in Chemistry and Biology and 12 months in an accredited Hospital School of Medical Technology.

Cytotechnology is the science of cancer cell identification. The required training for this field is 2 years of college with major study in biology and 12 months in an accredited school of cytotechnology.

Place an X before the answers that you think best describe what a Medical Technologist does.

X Cultures bacteria	X Determines blood types
X Draws blood from patients	X Uses a microscope
___ Pushes wheelchairs	___ Works out of doors
X Tests for cancer	___ Gives medications
___ Works in an office	X Is accurate and precise

After reading the following statements circle T if the statement is True and F if the statement is False.

1. All bacteria are harmful. False
   There are many bacteria that are beneficial to man. Only about 10% of all known bacteria are disease producing.

2. Modern medical diagnosis is dependent upon laboratory tests. True
   Laboratory tests provide the physician with valuable information in the accurate diagnosis of disease.

3. "Kissing Disease" is the nick name for Infectious Mononucleosis. True
   This contagious disease produces changes in the blood that can be detected only by laboratory tests.

4. Diabetes involves the improper metabolism of sugar. True
   Blood and urine levels of sugar are read by color reactions in the laboratory.

5. Leukemia is a disease of the blood. True
The amount of destruction of blood cells can be determined with a microscope.

6. Compatiable blood types are unimportant for blood transfusions. False
The blood from the donor must be agreeable with the blood of the recipient to avoid harmful reactions. Blood types are A, B, AB, and universal donor O.

7. Radio Active Isotopes are useful in cancer studies. True
Controlled dosages of RAI are beneficial in reducing the multiplication of cancer cells. Laboratory studies using RAI are helpful in discovering how cancer cells grow.

8. Not all infections respond to treatment by antibotics. True
There are certain strains of microorganisms unaffected by antibotics, and the laboratory can help find the most effective medication in these conditions.

67.68 Kansas State University Allied Health Survey

Faculty:

Please answer only the parts of the questionnaire marked with an asterisk (*) plus the questions on this page.

1. What does the term allied health mean?

2. List some of the job opportunities in the allied health area.

3. What are the sources of information on allied health careers?

4. What are the sources of information about careers in dietetics?

5. What are the sources of information about careers in physical therapy and medical technology?

6. What are the educational requirements for a dietitian?

7. What are the educational requirements for a physical therapist? a medical technologist?

8. What are the job opportunities in Kansas for dietitians?

9. What are the job opportunities in Kansas for physical therapists? a medical technologists?

Of those students whom you have counseled, estimate the number that have entered the allied health area in the past:

One year_____

Two years_____

Five years_____

67.68

ANSWER SHEET TO QUESTIONNAIRE C

Kansas State University Allied Health Survey

1. The term allied health means governmental or nongovernmental agencies, organizations and groups concerned with health service facilities or manpower that aid the physician in the areas of patient care, education, welfare, and rehabilitation.

2. Some of the job opportunities in the allied health area are dietitians, physical therapists, medical technologists, pharmacist, sociologist, nutritionists, food service supervisor, food service worker, physical therapy aide, laboratory assistant, cytotechnologist, histologic technician and many, many more.

3. Sources of information on allied health careers include the Public Health Service, National Health Council, U. S. Department of Agriculture, U. S. Government Printing Office, Armed Forces, Colleges and Universities.

4. Sources of information about careers in dietetics include:
The American Dietetic Assoc. and The American Home Economics Assoc
620 North Michigan Avenue — 1600-20th Street, N.W.
Chicago, Illinois 60611 — Washington, D.C. 20009

5. The source for information on Physical Therapy is:
The American Physical Therapy Association
1790 Broadway
New York, New York 10019

The source for information on Medical Technology is:
Medical Technology
Box 2544
Muncie, Indiana 47302

6. The education requirements for a dietitian includes a college degree and advanced education or qualifying experiences in the sciences of nutrition and management as required by the American Dietetic Association.

7. The educational requirements for a Physical Therapist includes 3 years of college with major study in biological science and 14 months in an accredited program of physical therapy.

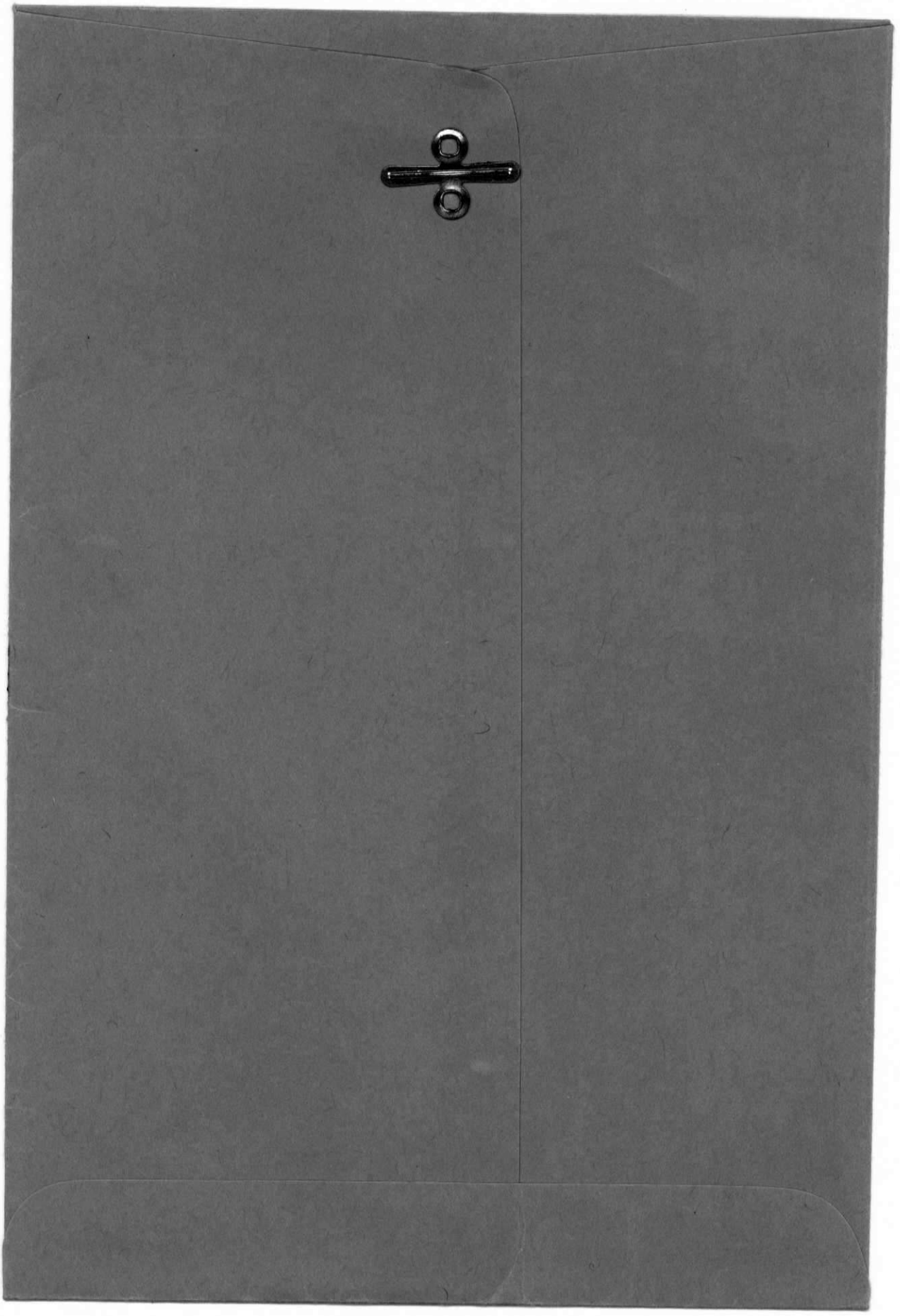
The educational requirements for a medical technologist includes 3 years of college with major study in physical and biological science and 12 months in an accredited hospital school of medical technology.

8. The job opportunities in Kansas for Dietitians are listed in the KSU pamphlets on dietetics.

9. The job opportunities in Kansas for Physical Therapists are in hospitals and medical centers.

The job opportunities in Kansas for Medical Technologists are in hospitals and laboratories.

APPENDIX C



KANSAS STATE UNIVERSITY • MANHATTAN, KANSAS

Allied Health Professions

DIETETICS

WANT A CHALLENGE . . . ?

INTERESTED IN FOOD AND SCIENCE . . . ?

LIKE TO WORK WITH PEOPLE . . . ?

Then Dietetics Is the Answer for You! ! !

The decision to go into this scientifically oriented profession will open the door to many opportunities. The dietitian may be in an administrative position applying the principles of nutrition and management to feeding large groups; in diet therapy as a member of a medical team caring for the patient; in research solving problems vital to human lives, teaching in a formal classroom or informal situation that may include nurses, medical interns, food service workers, patients and others as students; in several areas of public health; or one of many other specialties.

Opportunities for more training and new developments come with experience in this constantly changing profession.

MEDICAL TECHNOLOGY

LIKE SCIENTIFIC METHODS . . . ?

CHALLENGE AND SERVICE . . . ?

A Modern Medical Laboratory Is for You! ! !

The Medical Technologist performs the tests that help determine the causes and cures of disease by using reagents, chemicals, and complex instruments in testing body tissues and fluids. The Technologist cultures bacteria to identify organisms causing disease, analyzes blood factors, and traces cancer with radioactive isotopes.

Special attributes are needed for those considering this field: speed, precision, accuracy in performing tests; perseverance, curiosity, devotion to scientific methods; and a stability, calmness and patience under stress.

PHYSICAL THERAPY

ENJOY PEOPLE . . . ?

LIKE WORKING WITH THEM . . . ?

Then Physical Therapy Is for You! ! !

A Physical Therapist treats patients who have disabilities resulting from illness, birth injuries, and accidents.

Exercise is the most frequently used form of treatment; however, heat, water, light, electricity, massage, and ultrasound are also used for the benefit of the patient.

A thorough knowledge of body structure and its function is the cornerstone of Physical Therapy.

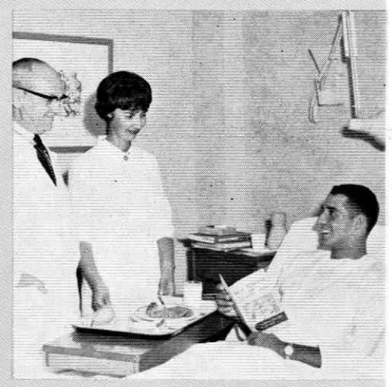
In considering this profession, one should have the desire to help others, good mental and physical health, energy, enthusiasm, patience, and the ability to work well with others under pressure.

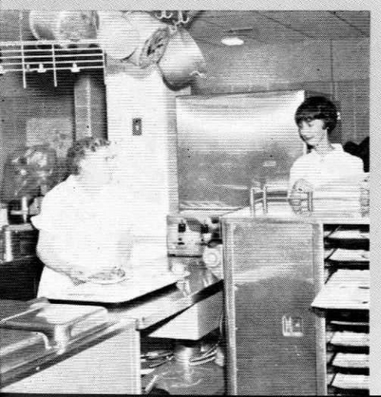
DIETETICS

POSITIONS AVAILABLE

- *Hospitals*
- *Colleges and Universities*
- *Medical Centers*
- *Public Health Services*
- *Clinics*
- *Government*

Develop culturally, socially, and professionally with Dietetics in the College of Home Economics.



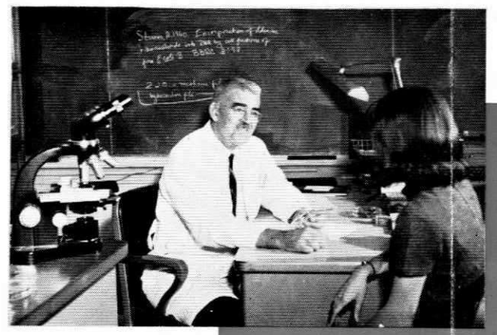


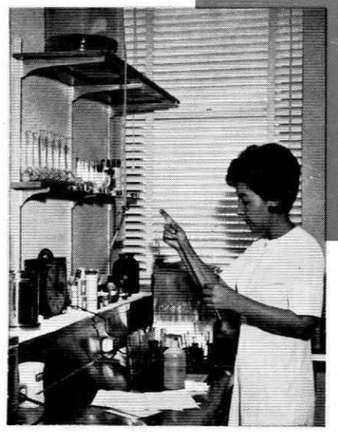
MEDICAL TECHNOLOGY

POSITIONS AVAILABLE

- *Hospital Laboratories*
- *Pharmaceutical Houses*
- *Physicians' and Clinic Laboratories*
- *Research Foundations*
- *Public Health Agencies*
- *Industrial Medical Laboratories*

Intelligent young men and women are putting their knowledge about disease to use in saving the lives of human beings, and discovering new knowledge to make the lives they save worth living.





PHYSICAL THERAPY

POSITIONS AVAILABLE

- *General Hospitals*
- *Crippled Children's Services*
- *Clinic and Physicians' Offices*
- *Medical Research Centers*
- *College and University Programs*

As a member of a modern health team the Physical Therapist has the stimulus of working with doctors, occupational and speech therapists, nurses, and others who contribute to the patient's progress.

HIGH SCHOOL STUDENTS

Take a college preparatory course in high school.

Select high school Chemistry, Physics, and Biological Science courses.

Visit in action a Dietitian, a Medical Technologist, and a Physical Therapist.

COLLEGE STUDENTS

DIETETICS

Eight semesters on campus

Major Study
- Meal Management
- Nutrition
- Diet Therapy
- Quantity Food Production
- Food Service Management
- Food Service Equipment

Basic Courses
- Humanities
- Physical Sciences
- Social Sciences
- Biological Sciences
- Communications

Unrestricted electives

Leads to:

B. S. degree from Kansas State University.

Internship in an accredited hospital.

Membership in the American Dietetic Association.

MEDICAL TECHNOLOGY

Six semesters on campus

Major Study
- Chemistry
- Biology

Basic Courses
- Physical Sciences
- Social Sciences
- English
- Humanities

12 months in an accredited school of Medical Technology requiring:
- Hematology
- Serology
- Bacteriology

Leads to:

B. S. degree from Kansas State University.

Certification by the Board of Registry of Medical Technologists.

PHYSICAL THERAPY

Six semesters on campus

Basic Courses
- Physical Sciences
- Social Sciences
- Biological Sciences
- English
- Humanities
- Foreign Language

14 months in an accredited school of Physical Therapy including courses such as:
- Anatomy
- Physiology
- Kinesiology

Leads to:

B. A. degree from Kansas State University.

Certificate or degree in Physical Therapy.

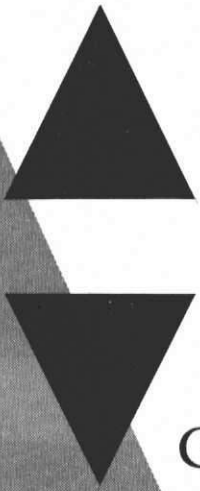
Registration in the American Physical Therapy Association.

Dean's Office
College of Home Economics
Justin Hall
Kansas State University
Manhattan, Kansas
66502

Medical Technology Adviser
Division of Biology
Veterinary Hall
Kansas State University
Manhattan, Kansas
66502

Physical Therapy Adviser
Division of Biology
Veterinary Hall
Kansas State University
Manhattan, Kansas
66502

For further information concerning Kansas State University, write to
Dean of Admissions Office, Kansas State University,
Manhattan, Kansas 66502



GO

WHERE THE ACTION IS!

GET

READY FOR A PROFESSION!

PREPARE

FOR MARRIAGE AND A FAMILY!

DIETETICS AT KANSAS STATE UNIVERSITY OFFERS YOU CHALLENGING CAREERS INVOLVING FOOD AND PEOPLE

The professional dietitian or nutritionist performs useful service to individuals, community, and country. Association may be with children and/or adults, young or old, in urban or rural areas, at home or abroad.

The opportunity for employment is unlimited—both in numbers and variety of jobs. Employment may be in food service administration in hospitals, colleges and universities, with the military services or institutions providing special services as well as in food and nutritional research, public health or community service, and teaching.

The demand for qualified dietitians and nutritionists far exceeds the supply. A good job is assured for all who prepare themselves for this profession. Advancement is virtually boundless for those who continue to study and grow.

The dietitian or nutritionist often is a member of a team of doctors, nurses, social workers, engineers, chemists, food technologists, or other professional persons. Such associations promote a life that is rich in experiences and friendships.

The career of a dietitian or nutritionist is flexible for a woman. She can work full time or part time in accordance with the needs of her family. A dietitian or nutritionist may terminate her paid services while her children are young but by keeping in touch with her profession she may return to it at a later date.

Wherever one lives, the dietitian or nutritionist will readily find a hospital, school, health agency, or institution that can utilize the knowledge and skills of the profession.

Dietitians and nutritionists generally work an 8-hour day and a 40-hour week. Their vacation periods vary from 2 to 4 weeks, depending upon length of service with an organization.

Salaries and employment benefits vary with locality, ability, experience, advanced training, and job responsibilities. Salaries range from $6,000-$17,000 per year. Most positions include retirement plans, medical plans, and other benefits.

A DIETITIAN is . . .

one who has a college degree and in addition has advanced education or qualifying experiences in the sciences of nutrition and management as required by the American Dietetic Association. Proficiency is required in the application of these sciences in feeding individuals and groups. Advanced education in foods, nutrition, public health, or social welfare may lead to a position as a nutritionist. This person interprets and applies the principles of nutrition for the promotion of positive health and prevention of disease.

CAREERS WITH A FUTURE

The ADMINISTRATIVE DIETITIAN applies the principles of nutrition and management to menu planning, food production and service. Other examples of typical administrative duties include the purchase of food and equipment; the storage of food; the training of personnel; and the maintenance of sanitation and safety.

The THERAPEUTIC DIETITIAN plans menus for patients as prescribed by the physician. As a member of the medical team, the therapeutic dietitian is concerned with education of the patient to meet his special food needs.

The CLINIC DIETITIAN guides and teaches patients who are not hospitalized but who require modifications in their diet. This is done on an individual or group basis during periodic visits to the clinic.

The RESEARCH DIETITIAN, as a research team member, conducts laboratory studies and surveys which relate to food and nutritional needs. Such a person participates in the evaluation of data and presents findings to scientific organizations and for publication in professional documents.

The TEACHING DIETITIAN who is associated with a college, university, or medical center trains students in allied health fields as well as future dietitians and nutritionists.

The PUBLIC HEALTH or COMMUNITY NUTRITIONIST interprets the science of nutrition into simple, specific instruction that co-workers and the public can understand. She offers nutritional guidance and practical instruction for promoting health, preventing disease, and treating the ill.

HIGH SCHOOL

While in high school, you will want to meet the College of Home Economics entrance requirements at KSU that include:

1. completing two units of algebra, or one unit of algebra and one unit of geometry,
2. three units of high school English,
3. one unit of high school science,
4. and graduating from an accredited high school, if residing in Kansas.

COLLEGE

The College of Home Economics offers students an opportunity to develop culturally, socially, and professionally. Basic courses in liberal education include psychology, the social sciences, communications, and humanities. Physiology, chemistry, and bacteriology are core courses which relate to the human body and how it functions. Study in all of these areas helps you to understand yourself and others. Upon completion of these courses, a field of specialization is chosen that prepares you for a career in health-related professions.

If you select Dietetics and Institutional Management as your major at Kansas State University, your emphasis will be in food service management, foods, nutrition, and diets in special conditions. Your knowledge in these areas will be strengthened by courses in food service equipment, design and layout, economics, cost accounting, and personnel management.

If you select Foods and Nutrition as your major at Kansas State University, you will concentrate on a study of scientific principles of food, its preparation and composition, and nutritive values. The nutritional emphasis is placed on the promotion of health and the prevention of disease. Skills based on research techniques and procedures are developed in laboratory and applied areas. For the student particularly interested in research, additional courses in mathematics, physics, and chemistry are recommended.

AFTER GRADUATION—DIETETICS

In preparation for a dietetics career, courses are selected from departments of Institutional Management and Foods and Nutrition to meet the academic requirements for an approved American Dietetic Association internship.

A WELCOME TO TRANSFER STUDENTS

Perhaps you will choose to attend a junior college for two years. Let's plan now how you can transfer to the College of Home Economics at Kansas State University without losing any credits.

First, you must meet the KSU requirement of a 2.0 (C) overall average in your previous academic work. Then have your transcripts of records sent to the Admissions Office from each institution previously attended. Apply for admission approximately six months prior to the term you wish to enter. The most important step . . . you and your college advisor at KSU will work out a detailed plan so that your major courses are taken in the correct sequence.

For further information, write:

COLLEGE OF HOME ECONOMICS
KANSAS STATE UNIVERSITY
MANHATTAN, KANSAS 66502

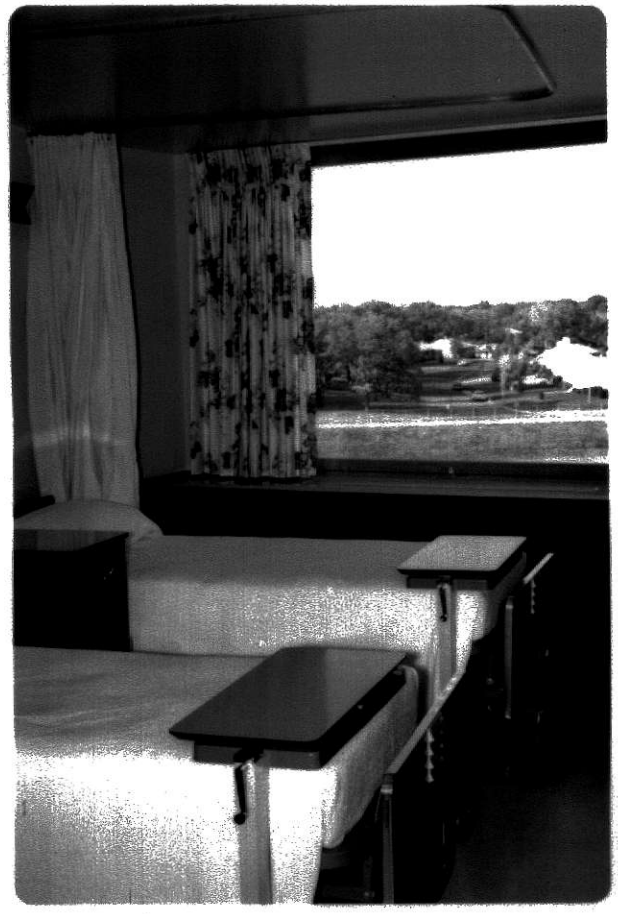
APPENDIX D

BASIC SCRIPT

What do you know about the allied health field? Have you heard of a dietitian, physical therapist, or medical technologist? Let's get acquainted by you filling out the survey that is printed on the white stapled sheets---the sheets on top of your packet. Does everyone have a pen or pencil? Your answers to the survey will help us in future talks to groups your age by giving us your ideas, opinions, and answers you have concerning the allied health field. You will not be graded on the survey, but I hope it will stimulate your interest, so you will be eager to know more about this fascinating subject. Please do your own work and pass the survey to the front when everyone has finished. Some of the information asked for may be hard to remember, but try to do your best. Are there any questions?

Have you been a patient in a hospital?

Have you visited a hospital?



The medical technologist, physical therapist, and dietitian may be employed in a private hospital,

community clinic,

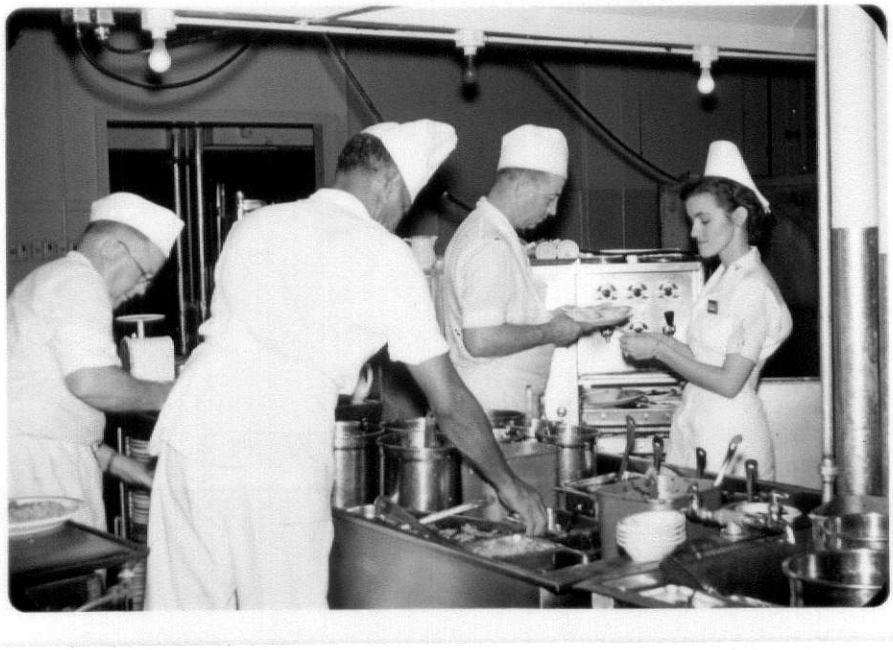
a large medical center,

or armed forces hospital.

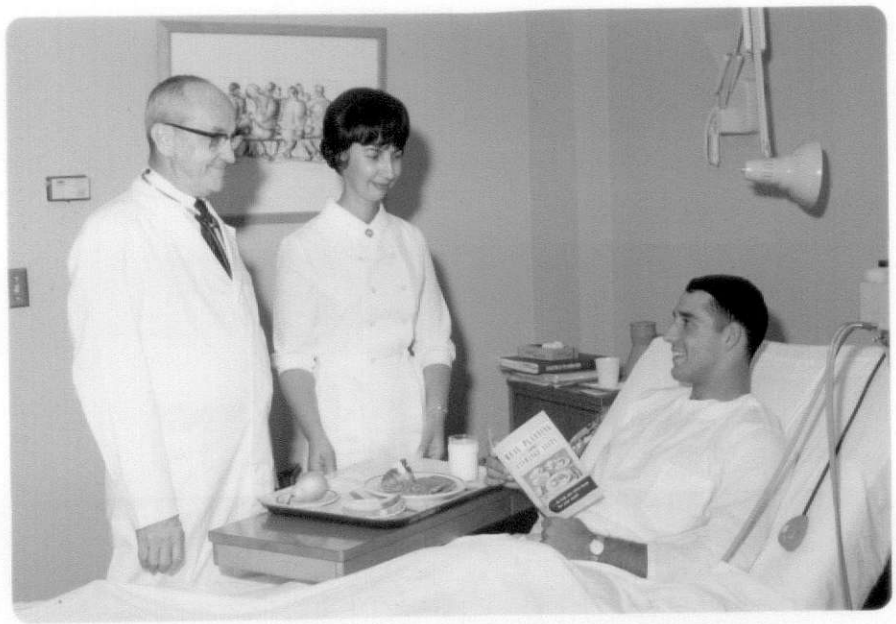
All three fields require a college education. All three fields work with the physical being of the patient--dietetics for food and nourishment of the body, physical therapy with body movements, and medical technology with bacteria and viruses such as found in the blood. These three fields are part of 200 allied health careers.

What is an allied health worker? He is in every area of the health profession aiding the physician directly or indirectly with patient care, welfare, and education.

What is dietetics? Dietetics is the application of the sciences in nutrition and management to the feeding of individuals and groups of people in health and sickness. A student who wants to become a dietitian must have 4 years of college and advance education or qualifying experience to learn the application of these sciences. There are several categories of dietitians that divide the duties and responsibilities into specialized areas in a large institution. However, a dietitian in a small hospital or nursing home may be responsible for all the duties that are more simplified.

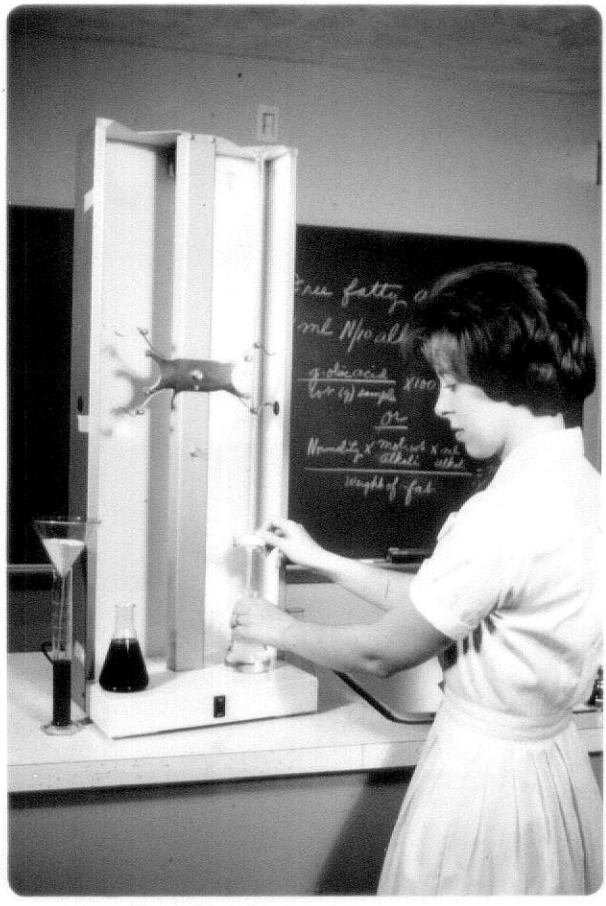


The administrative dietitian applies the principles of nutrition and management to menu planning, food production, and service. Other examples of typical administrative duties include the purchase of food and equipment; the storage of food; the training of personnel; and the maintenance of sanitation and safety for employees and patients.

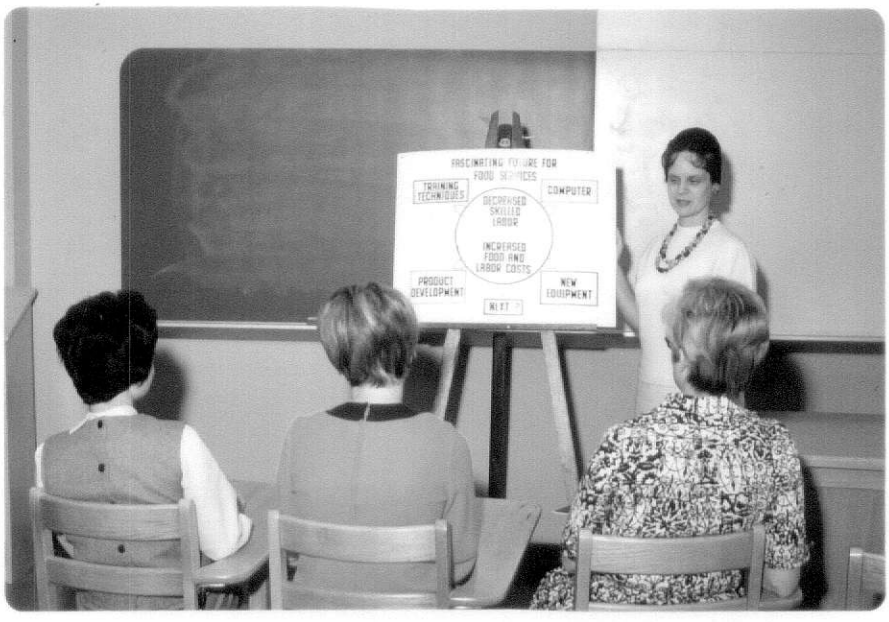


The therapeutic dietitian plans menus for patients as prescribed by the physician. As a member of the medical team, the therapeutic dietitian is concerned with education of the patient to meet his special food needs.

The therapeutic dietitian may specialize in one area such as pediatrics--working with children.



The research dietitian, as a research team member, conducts laboratory studies and surveys which relate to food and nutritional needs. Such a person participates in the evaluation of data and presents findings to scientific organizations and for publication in professional documents.



The teaching dietitian who is associated with a college, university, or medical center trains students in allied health fields as well as future dietitians.

The armed forces has excellent programs for helping young people obtain their goals in entering the dietitics field. If you are interested, I will get you additional information for these programs.

The physical therapist continued with the slides on physical therapy. Then the medical technologist went into the careers offered in medical technology.

SUMMARY

If you decide to follow the road to a health career in Dietetics, Physical Therapy, or Medical Technology, Kansas State University offers these three areas as majors. What can you do in high school to prepare for this? Take a college preparatory course including the sciences.

The allied health careers are for young people with young ideas--people who want to cram their lives with youthful action--people who want to go, but to places where they are needed--people who want to have fun, fun with a purpose--people who want to have romance--romance from their jobs. People who want to help others. So we encourage you to take a serious look at the challenging careers of the allied health field.

Please fill out the questionnaire on the blue sheet and pass it to the front. Are there any questions?

APPENDIX E

TABLE 1. STUDENT INTEREST IN AREAS RELATED TO DIETETICS.

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Are you interested in science?																
Yes	114	13.8	104	12.6	129	15.6	230	27.9	87	10.5	127	15.5	141	17.1	359	43.5
No	128	15.5	66	8.0	43	5.2	239	29.0	88	10.7	104	12.6	88	10.7	282	34.2
Undecided	76	9.2	39	4.7	29	3.5	127	15.4	58	7.0	56	6.8	41	5.0	156	18.9
No Answer	12	1.5	7	1.0	8	1.0	19	2.3	11	1.3	5	.6	7	0.8	27	3.8
If yes, which kind of science interests you most?																
Chemistry	41	5.0	16	2.0	45	5.5	33	4.0	31	3.8	26	3.2	21	2.5	78	9.5
Biology	40	4.8	53	6.4	44	5.3	128	15.5	29	3.5	60	7.3	79	9.6	172	20.8
Both	21	2.5	32	3.9	30	3.6	59	7.2	16	1.9	37	4.5	36	4.4	89	10.8
No Answer	12	1.5	3	0.4	10	1.2	10	1.2	11	1.3	4	.5	5	.6	20	2.4
Do you enjoy working with people?																
Yes	290	35.2	178	21.6	163	19.8	576	69.8	209	25.3	253	30.7	271	32.8	739	88.8
No	12	1.5	15	1.8	19	2.3	11	1.3	9	1.1	18	2.2	3	.4	30	3.6
Undecided	24	2.9	16	2.0	23	2.8	20	2.4	21	2.5	19	2.3	3	.4	43	5.2
No Answer	5	0.6	7	.8	4	.5	9	1.2	6	.7	2	.2	0	0.0	13	1.6

Table 1. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Do you have any career plans for the future?																
Yes	156	18.9	110	13.3	95	11.5	359	43.5	113	13.7	149	18.1	188	22.8	454	55.0
No	46	5.6	37	4.5	46	5.6	48	5.8	43	5.2	40	4.8	11	1.3	94	11.4
Undecided	101	12.2	57	6.2	52	6.3	173	21.0	72	8.7	80	9.7	73	8.8	225	27.3
No Answer	28	3.4	18	2.1	16	1.9	36	4.3	17	2.1	23	2.8	5	.6	52	6.3
If yes, what are they?																
Allied health career requiring college	16	1.9	25	3.0	5	0.6	90	10.9	12	1.5	29	3.5	54	6.6	95	11.5
Allied health career not requiring college	1	0.1	0	0.0	0	0.0	1	0.0	1	0.1	0	0.0	0	0.0	1	0.1
Dietetics	1	0.1	0	0.0	0	0.0	3	0.4	1	0.1	0	0.0	2	0.2	3	0.4
College	9	1.1	4	0.5	7	0.8	6	0.7	7	0.9	6	0.7	0	0.0	13	1.6
Undecided	19	2.3	10	1.2	5	0.6	31	3.8	13	1.6	16	1.9	7	0.9	36	4.4
Marriage	0	0.0	0	0.0	0	0.0	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1
No Answer	1	0.1	0	0.0	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	1	0.1

TABLE 2. ORGANIZATIONS CONTRIBUTING TO STUDENT INFORMATION ON HEALTH, FOOD & NUTRITION

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Organizations																
4-H																
Health	8	1.0	5	0.6	9	1.1	9	1.1	7	0.9	6	0.7	5	0.6	18	2.2
Food	32	3.9	5	0.6	1	0.1	42	5.1	20	2.4	17	2.1	6	0.6	43	5.2
Nutrition	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	1	0.1
None	5	0.6	3	0.4	4	0.5	4	0.5	6	0.7	2	0.2	0	0.0	8	1.0
Combination	88	10.7	25	3.1	18	2.2	182	22.1	56	6.7	56	6.8	87	10.5	200	24.3
No Answer	198	24.0	177	21.5	177	21.5	378	45.8	156	18.9	210	25.5	179	21.7	555	67.3
Scouts																
Health	19	2.3	23	2.8	27	3.3	60	7.3	12	1.5	30	3.6	45	5.5	87	10.6
Food	9	1.1	5	0.6	5	0.6	16	1.9	9	1.1	5	0.6	7	0.9	21	2.6
Nutrition	0	0.0	1	0.1	1	0.1	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1
Exposure	10	1.2	7	0.9	7	0.9	20	2.4	7	0.9	10	1.2	10	1.2	27	3.2
Combination (5, 6, 7, 8)	68	8.2	67	8.2	49	6.0	156	18.8	44	5.4	90	10.9	70	8.4	205	24.8
No Answer	225	27.3	113	13.7	120	14.5	364	44.1	173	20.9	156	18.9	145	17.5	484	58.7

Table 2. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Other																
Health	9	1.1	12	4.7	3	0.3	36	4.3	6	0.7	15	1.7	18	2.2	39	7.9
Food	4	0.2	4	0.4	2	0.2	12	1.4	2	0.2	6	0.6	6	0.7	14	1.7
Nutrition	3	0.4	1	0.1	0	0.0	4	0.5	1	0.1	3	0.4	0	0.0	4	0.5
Exposure	53	6.4	13	1.6	15	1.8	61	7.3	37	4.4	29	3.4	10	1.2	76	9.1
Combination	66	8.0	23	2.7	11	1.2	39	19.4	28	3.4	60	7.3	81	8.8	170	20.7
No Answer	1189	144.1	811	98.9	805	97.5	2192	265.7	906	99.7	1055	123.0	1093	120.4	2997	363.4

TABLE 3. EXPOSURE TO INFORMATION ON HEALTH, FOOD AND NUTRITION THROUGH PERSONAL CONTACT

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Parents																
Health	17	2.1	20	2.4	17	2.1	37	4.5	29	2.3	18	2.2	17	2.1	54	6.6
Food	28	3.4	12	1.5	14	1.7	29	3.5	22	2.7	18	2.2	3	0.4	43	5.2
Nutrition	3	0.4	1	0.1	1	0.1	3	0.4	3	0.4	1	0.1	0	0.0	4	0.5
None	3	0.3	2	0.2	4	0.5	2	0.2	3	0.4	2	0.2	1	0.1	6	0.7
Combination	188	27.2	126	14.2	109	13.1	444	54.0	128	15.6	184	22.2	239	7.0	553	67.1
No Answer	92	11.2	55	6.7	64	7.8	101	12.2	70	8.5	69	8.4	17	2.1	165	20.0
County Agent																
Health	4	0.5	2	0.2	3	0.4	13	1.6	3	0.4	3	0.4	10	1.2	16	1.9
Food	0	0.0	2	0.2	0	0.0	12	1.5	0	0.0	2	0.2	10	1.2	12	1.5
Nutrition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
None	0	0.0	1	0.1	0	0.0	2	0.2	0	0.0	1	0.1	1	0.1	2	0.2
Combination	25	3.0	8	0.9	4	0.4	77	9.3	13	1.6	19	2.3	48	5.8	81	9.8
No Answer	302	36.6	203	24.6	202	24.5	512	62.1	229	29.8	267	32.4	208	25.2	714	86.6

Table 3. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Coach																
Health	19	2.3	21	2.6	29	3.5	21	2.6	15	1.8	25	3.0	10	1.2	50	6.1
Food	2	0.2	2	0.2	3	0.4	6	0.7	1	0.1	3	0.4	5	0.6	9	1.1
Nutrition	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	1	0.1	0	0.0	2	0.2
None	0	0.0	1	0.1	2	0.2	0	0.0	0	0.0	1	0.1	1	0.1	2	0.2
Combination	23	2.7	24	2.9	55	6.6	17	2.0	13	1.6	34	4.1	25	3.0	72	8.8
No Answer	286	34.7	167	20.2	119	14.4	571	69.2	215	26.1	228	27.6	236	28.6	690	83.6
4-H Leader																
Health	6	0.7	5	0.6	11	1.3	9	1.1	4	0.5	7	0.9	9	1.1	20	2.4
Food	35	4.2	4	0.5	2	0.2	44	5.3	23	2.8	16	2.9	7	0.9	46	5.6
Nutrition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
None	3	0.4	1	0.1	0	0.0	7	0.9	0	0.0	4	0.5	3	0.4	7	0.8
Combination	62	8.8	22	2.6	11	1.4	153	18.5	49	5.9	44	5.4	70	8.5	164	19.9
No Answer	215	26.1	184	22.3	185	22.4	403	48.9	169	20.9	221	26.8	188	22.8	588	71.3

Table 3. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Nurse																
Health	24	2.9	21	2.6	14	1.7	63	7.6	15	1.8	29	3.5	32	3.9	77	9.3
Food	1	0.1	1	0.1	0	0.0	2	0.2	0	0.0	2	0.2	0	0.0	2	0.2
Nutrition	1	0.1	0	0.0	0	0.0	2	0.2	0	0.0	1	0.1	1	0.1	2	0.2
None	4	0.5	0	0.0	1	0.1	3	0.4	2	0.2	2	0.2	0	0.0	4	0.5
Combination	41	3.9	19	2.3	10	1.2	95	11.5	24	2.8	36	4.4	45	4.5	105	12.7
No Answer	260	31.5	175	21.2	184	22.3	451	54.7	204	24.7	222	26.9	199	24.1	635	77.0
Dietitian																
Health	0	0.0	3	0.4	1	0.1	3	0.4	2	0.2	1	0.1	1	0.1	4	0.5
Food	2	0.2	4	0.5	0	0.0	9	1.1	2	0.2	4	0.5	3	0.4	9	1.1
Nutrition	2	0.2	0	0.0	1	0.1	4	0.5	1	0.1	1	0.1	3	0.4	5	0.6
None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Combination	7	0.8	4	0.5	3	0.4	19	2.2	4	0.5	5	0.6	11	1.3	22	2.6
No Answer	320	38.8	205	24.9	204	24.7	581	70.4	236	28.6	281	34.1	259	31.4	785	95.2

Table 3. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Doctor																
Health	23	2.8	26	3.2	19	2.3	82	9.9	14	1.7	35	4.2	52	6.3	101	12.2
Food	7	0.9	3	0.4	6	2.7	7	0.9	6	0.7	4	0.5	3	0.4	13	1.6
Nutrition	5	0.6	2	0.2	3	0.4	4	0.5	3	0.4	4	0.5	0	0.0	7	0.9
None	1	0.1	3	0.4	1	0.1	4	0.5	0	0.0	4	0.5	1	0.1	5	0.6
Combination	50	6.0	39	4.8	40	4.9	130	15.7	34	4.2	55	6.7	81	9.7	170	20.6
No Answer	245	29.7	143	17.3	140	17.0	389	47.2	188	22.8	190	23.0	140	17.9	529	64.1
Teacher																
Health	34	4.1	25	3.0	36	4.4	38	4.6	26	3.2	32	3.9	15	1.8	74	9.0
Food	5	0.6	4	0.5	0	0.0	11	1.3	5	0.6	4	0.5	2	0.2	11	1.3
Nutrition	1	0.1	4	0.5	1	0.1	8	1.0	0	0.0	5	0.6	4	0.5	9	1.1
None	8	1.0	3	0.4	7	0.9	8	1.0	3	0.4	8	1.0	4	0.5	15	1.8
Combination	172	20.9	115	13.9	78	9.4	422	51.1	119	14.5	166	20.2	213	25.8	500	60.6
No Answer	111	13.5	65	7.9	87	10.6	129	15.6	92	11.2	77	9.3	39	4.7	216	26.2

Table 3. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Recreation Leader																
Health	7	0.9	11	1.3	10	1.2	18	2.2	6	0.7	11	1.3	10	1.2	28	3.4
Food	1	0.1	1	0.1	0	0.0	2	0.2	1	0.1	1	0.1	0	0.0	2	0.2
Nutrition	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	1	0.1
None	1	0.1	0	0.0	0	0.0	1	0.1	0	0.0	1	0.1	0	0.0	1	0.1
Combination	7	0.8	3	0.4	4	0.5	7	0.9	4	0.5	6	0.7	1	0.1	11	1.3
No Answer	315	38.2	200	24.2	195	23.6	587	71.2	234	28.4	272	33.0	266	32.2	782	94.8
Friends your own age																
Health	14	1.7	5	0.6	11	1.3	17	2.1	7	0.9	11	1.3	9	1.1	28	3.4
Food	16	1.9	4	0.5	5	0.6	22	2.7	14	1.7	6	0.7	7	0.2	27	3.3
Nutrition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
None	1	0.1	0	0.0	0	0.0	1	1.1	0	0.0	1	0.1	0	0.0	1	0.1
Combination	19	2.3	16	2.0	8	1.0	66	8.0	10	1.2	24	2.9	39	4.7	74	8.9
No Answer	281	34.1	191	23.2	185	22.4	510	61.8	214	25.9	250	30.3	222	26.9	695	84.2

Table 3. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Other																
Health	6	0.7	6	0.7	5	0.6	10	1.2	4	0.5	8	0.9	3	0.4	15	1.8
Food	4	0.5	2	0.2	2	0.2	7	0.9	4	0.5	2	0.2	3	0.4	9	1.1
Nutrition	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
None	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Combination	15	1.8	7	0.8	7	0.8	31	3.8	10	1.2	11	1.3	16	1.9	38	4.6
No Answer	306	37.1	201	24.4	195	23.6	568	68.9	227	27.5	271	32.9	255	30.9	763	92.5
Have you been a patient or a candy striper in a hospital?																
Yes	113	13.7	81	9.8	86	10.4	225	27.3	79	9.6	114	13.8	117	14.2	311	37.7
No	189	22.9	95	11.5	99	12.0	305	37.0	137	16.6	145	17.6	120	14.6	404	49.0
Nurses aid	0	0.0	0	0.0	0	0.0	2	.2	0	0.0	0	0.0	2	0.2	2	0.2
No Answer	22	2.6	22	2.7	23	2.8	24	2.9	20	1.8	17	2.1	2	0.2	47	5.7

TABLE 4. RESPONSE TO QUESTION "DO YOU KNOW WHAT DIETETICS IS? IF YES, EXPLAIN."

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Yes, no explanation	4	0.5	5	0.6	7	0.9	19	2.3	1	0.1	7	0.9	17	2.1	26	3.2
Yes, right explanation	10	1.2	6	0.7	5	0.6	14	1.7	11	1.3	5	0.6	2	0.2	19	2.3
Yes, partially right	31	3.8	49	5.9	35	4.2	137	16.6	20	2.4	55	6.7	92	11.2	172	20.9
Yes, wrong explanation	16	1.9	3	0.4	6	0.7	19	2.3	5	0.6	14	1.7	6	0.7	25	3.0
No	209	25.3	94	11.4	123	14.9	217	26.3	168	20.4	135	16.4	37	4.5	340	41.3
Undecided	51	6.2	48	5.8	26	3.2	187	22.7	31	3.8	68	8.2	114	13.8	213	25.8
No Answer	10	1.2	11	1.3	7	0.9	23	2.8	9	1.1	8	1.0	9	1.1	30	3.6

TABLE 5. RESPONDENTS KNOWLEDGE OF DIETETIANS DUTIES AND RESPONSIBILITIES

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Cooks food																
Marked X	39	4.7	26	3.2	19	2.3	76	9.2	30	1.6	33	4.0	30	3.6	95	11.5
Did not mark	292	35.4	190	23.0	190	23.0	540	65.5	215	26.1	259	31.4	247	30.0	730	88.5
Plans menus																
Marked X	199	24.1	169	20.5	131	15.9	502	60.9	131	15.9	229	27.8	264	32.0	633	76.7
Did not mark	132	16.0	47	5.7	78	9.5	114	13.8	114	13.8	63	7.6	13	1.6	192	23.3
Gives shots																
Marked X	20	2.4	10	1.2	10	1.2	21	2.6	17	2.1	13	1.6	1	0.1	31	3.8
Did not mark	311	37.7	206	25.0	199	24.1	595	72.1	228	27.6	279	33.8	276	33.5	794	96.2
Supervises a hospital kitchen																
Marked X	158	19.2	118	14.3	89	10.8	421	51.0	103	12.5	166	21.1	233	28.2	510	61.8
Did not mark	173	21.0	98	11.9	120	14.6	195	23.6	142	17.2	126	14.3	44	5.3	815	38.2

Table 5. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sells vitamins and food supplements																
Marked X	38	4.6	18	2.2	19	2.3	49	5.9	29	3.5	27	3.3	12	1.5	68	8.2
Did not mark	293	35.5	198	24.0	190	23.0	567	68.7	216	16.2	265	32.1	265	32.1	757	91.8
Graduates from college																
Marked X	116	14.1	103	12.5	58	7.0	353	42.8	79	9.6	133	16.1	191	23.2	411	49.8
Did not mark	215	26.1	113	13.7	151	18.3	263	31.9	166	20.1	157	19.3	86	10.4	414	50.2
Writes papers																
Marked X	53	6.4	43	5.2	32	3.9	169	20.5	35	4.2	57	6.9	104	12.6	201	24.4
Did not mark	278	33.7	173	21.0	177	21.5	447	54.2	210	25.7	235	28.5	173	21.0	624	75.6
Serves food on a cafeteria line																
Marked X	24	2.9	16	1.9	8	1.0	44	5.3	22	2.7	18	2.2	22	1.5	52	6.3
Did not mark	307	37.2	200	24.2	201	24.4	572	69.3	223	27.0	274	33.2	265	32.1	773	93.7

Table 5. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Teaches																
Marked X	70	8.5	66	8.0	55	6.7	236	28.6	53	4.2	88	10.7	154	18.7	291	35.3
Did not mark	261	31.6	150	18.2	154	18.7	380	46.1	202	24.5	204	24.7	123	15.0	534	64.7
Prescribes medicine																
Marked X	33	4.0	18	2.2	19	2.3	37	4.5	24	3.9	27	3.3	5	0.6	56	6.8
Did not mark	298	36.1	198	24.0	190	23.0	579	70.2	221	26.8	265	32.1	272	33.0	769	93.2
Does research																
Marked X	144	17.5	107	13.0	78	9.5	384	46.6	94	11.4	150	18.2	211	25.6	462	56.0
Did not mark	187	22.7	109	13.2	131	15.9	232	28.1	151	18.3	142	17.2	66	8.0	363	44.0
Works with doctors																
Marked X	121	14.7	102	12.4	69	8.4	358	43.4	71	8.6	146	17.7	204	24.7	407	51.8
Did not mark	210	25.5	113	13.7	139	16.9	258	31.3	174	21.1	145	17.6	73	8.9	397	48.1

Table 5. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Plans diets for patients																
Marked X	260	31.5	178	21.6	152	18.4	560	67.9	182	22.1	248	30.1	273	33.1	712	86.3
Did not mark	71	8.6	37	4.5	56	6.8	56	6.8	63	7.6	43	5.2	4	.5	112	13.6
Takes blood samples																
Marked X	27	3.3	17	2.1	20	2.4	30	3.6	16	1.9	28	3.4	6	.7	50	6.1
Did not mark	303	36.7	199	24.1	189	22.9	585	70.9	229	27.8	263	31.9	271	32.9	774	93.8

TABLE 6. RESPONDENTS KNOWLEDGE OF FOOD FACTS AND FALLACIES

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All diseases are caused by faulty diets																
Yes	11	1.3	7	0.9	7	0.9	13	1.6	9	1.1	9	1.1	2	0.0	20	2.4
*No	315	38.2	206	24.0	199	24.1	598	72.5	232	28.1	282	34.2	275	33.3	797	96.6
No Answer	5	0.6	3	0.4	3	0.4	5	0.6	4	0.5	1	0.1	0	0.0	8	1.0
Poor soil causes malnutrition																
Yes	91	11.0	59	7.2	67	8.1	187	22.7	67	8.1	80	9.7	104	12.6	254	30.8
*No	234	28.4	151	18.3	137	16.6	421	57.0	174	21.1	207	25.1	172	21.0	558	67.6
No Answer	6	0.7	6	0.7	5	0.6	8	1.1	4	0.5	5	0.6	1	0.1	13	1.6
Eating lots of gelatin will strengthen fingernails																
Yes	229	27.8	141	17.1	105	12.7	493	59.8	158	19.2	208	25.2	227	27.5	598	72.5
*No	92	11.2	67	8.1	93	11.3	114	13.8	78	9.5	78	9.5	48	5.8	207	25.1
No Answer	10	1.2	8	1.0	11	1.3	9	1.1	9	1.1	6	0.7	2	0.2	20	2.4

Table 6. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Water is fattening																
Yes	41	5.0	35	4.2	42	5.1	89	10.8	27	3.3	49	5.9	55	6.7	131	15.9
*No	285	34.6	174	21.1	161	19.5	521	63.2	215	26.1	237	28.7	222	26.9	682	82.7
No Answer	5	0.6	7	0.9	6	0.7	6	0.7	3	0.4	6	0.7	0	0.0	12	1.5
Raw beef is higher is food value than cooked beef																
Yes	201	24.4	133	16.1	131	15.9	405	49.1	148	17.9	182	22.1	202	24.5	536	65.0
*No	116	14.1	74	9.0	69	8.4	195	23.6	82	9.9	106	12.9	73	8.9	264	32.0
No Answer	14	1.7	9	1.1	9	1.1	16	1.9	15	1.8	4	0.5	2	0.2	25	3.0
It is dangerous to leave refrigerated food in the same can that has been opened																
Yes	233	28.2	162	19.6	145	17.6	461	55.9	165	20.0	225	27.3	211	25.6	606	73.5
*No	87	10.6	48	5.8	56	6.8	145	17.6	71	8.6	62	7.5	65	7.9	201	24.4
No Answer	11	1.3	6	0.7	8	1.0	10	1.2	9	1.1	5	0.6	1	0.1	18	2.2

Table 6. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Everyone needs to take vitamins																
Yes	113	13.7	66	8.0	56	6.8	185	22.4	81	9.8	98	11.9	62	7.5	241	29.2
*No	212	25.7	146	17.7	149	18.1	424	51.4	158	19.2	193	23.4	215	26.1	573	69.5
No Answer	6	.7	4	0.5	4	0.5	7	0.9	6	0.7	1	0.1	0	0.0	11	1.3
Rubber gloves should be worn while cleaning and dressing rabbits																
*Yes	194	24.0	122	14.8	122	14.8	348	42.2	148	17.9	164	19.9	154	18.7	470	57.0
No	115	13.9	83	10.1	80	9.7	232	28.1	81	9.8	115	13.9	114	13.8	312	37.8
No Answer	22	2.7	11	1.3	7	.8	36	4.4	16	1.9	13	1.6	9	1.1	43	5.2
The nutritionist is a college graduate																
*Yes	205	24.9	142	17.2	130	15.8	458	55.5	141	17.1	201	14.4	240	29.1	588	71.3
No	112	13.6	58	7.0	69	8.4	138	16.7	95	11.5	74	8.7	37	4.5	207	25.1
No Answer	14	1.7	16	1.9	10	1.2	20	2.4	9	1.1	17	2.1	0	0.0	30	3.6

Table 6. (Cont.).

	Jr. & Sr. High School				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Obesity is caused primarily by overeating																
*Yes	185	22.4	122	14.8	97	11.8	425	51.5	132	16.0	169	10.5	214	25.9	522	63.3
No	114	13.8	74	9.0	88	10.7	160	19.4	85	10.3	102	12.4	60	7.3	248	30.1
No Answer	32	3.9	20	2.4	24	2.9	31	3.8	28	3.4	21	2.6	3	.4	55	6.7
Overcooking may cause excessive loss of minerals and vitamins																
*Yes	287	35.8	202	24.5	169	20.5	590	71.5	208	25.2	274	33.2	269	32.6	759	92.0
No	36	4.4	11	1.3	32	3.9	22	2.7	31	3.8	16	1.9	7	8.5	54	6.6
No Answer	8	1.0	3	0.4	8	1.0	4	0.5	6	0.7	2	0.2	1	0.1	12	1.5
People of all ages need milk																
*Yes	309	37.5	197	23.9	174	21.1	580	70.3	227	27.5	274	33.2	248	20.1	754	91.4
No	16	1.9	15	1.8	31	3.8	30	3.6	14	1.5	15	1.8	29	2.5	61	7.4
No Answer	6	0.7	4	0.5	4	0.5	6	0.7	4	0.5	3	0.4	0	0.0	10	1.2

*Correct responses

TABLE 7. RESPONSES TO PROGRAM PRESENTATION AND INTEREST IN ALLIED HEALTH PROFESSIONS

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Circle what interested you most about the talk																
Visual materials	102	12.4	27	3.3	61	7.4	148	17.9	69	8.4	60	7.3	80	9.7	209	25.4
Lecture	97	11.8	86	10.4	46	5.6	215	26.1	75	9.1	108	13.1	98	9.5	261	31.7
Survey	53	6.4	17	2.1	30	3.6	52	6.3	36	4.4	34	1.9	12	1.5	82	7.8
Visual materials, lecture, survey	8	1.0	5	0.6	4	.5	21	2.6	5	0.6	8	1.0	12	1.5	25	3.1
Visual materials, lecture	22	2.7	12	1.5	16	1.9	87	10.6	15	1.8	19	2.3	68	8.2	103	12.3
Visual materials, survey	6	.7	1	0.1	2	0.2	7	0.9	4	0.5	3	0.4	2	0.2	9	1.1
Lecture & survey	10	1.2	5	0.6	0	0.0	19	2.3	3	0.4	12	1.5	4	.5	19	2.4
No Answer	33	0.4	63	7.6	50	6.1	67	8.1	38	4.6	48	5.8	21	2.5	117	14.2

Table 7. (Cont.).

	Jr. & Sr. High Schools				Sex				Grade Level						Total	
	Rural		Urban		Male		Female		Jr. High		Sr. High		College			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Do you think you would be interested in an allied health profession as a career?																
Yes	77	9.3	31	3.8	23	2.8	131	15.9	53	6.4	55	6.7	45	5.5	154	18.6
No	106	12.9	80	1.0	95	11.1	209	25.3	81	9.8	105	12.7	118	14.3	304	36.9
Undecided	134	16.2	79	9.6	69	8.4	240	29.1	95	11.5	118	14.3	96	11.6	309	37.5
No Answer	14	1.7	2.6	3.2	22	2.7	36	4.4	16	1.9	14	1.7	18	2.2	58	7.0
Circle the health career that appeals to you ONLY if you are interested																
Dietitian	15	1.8	13	1.6	4	0.5	43	5.2	13	1.6	15	1.8	19	2.3	47	5.7
Food Service Supervisor	7	0.9	1	0.1	5	0.6	6	0.7	7	0.9	1	0.1	3	0.3	11	1.3
Food Service Worker	4	0.5	2	0.2	2	0.2	4	0.5	5	0.6	1	0.1	0	0.0	6	0.7
Food Service Clerical Worker	2	0.2	1	0.1	0	0.0	4	0.5	2	0.2	1	0.1	1	0.1	4	0.5

RECRUITMENT FOR DIETITIANS IN KANSAS SCHOOLS

by

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B. S., University of Minnesota, 1964

AN ABSTRACT OF A MASTER'S THESIS

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A major problem in providing medical care today is the shortage of qualified allied health personnel including dietitians. The number of dietetic students is increasing but is insufficient to meet the demand. The public is wanting comprehensive health care for all, but apparently is unaware of the allied health professions. Also, the dietetics profession has not emphasized a well-planned coordinated recruitment program aimed toward the general population. In addition, considerable misinformation and half truths exist about nutrition, and dietitians are needed to help the general public follow an adequate diet for the maintenance of good health.

Therefore, the objectives of the research were (1) to survey students' interest in health, food, and nutrition; (2) to obtain information from young people, teachers, and counselors on their exposure to the allied health field; (3) to ascertain the extent of the students' knowledge about dietetics; and (4) to develop recommendations for future dietetic recruitment plans.

An educational program for the allied health professions of dietetics, medical technology, and physical therapy was developed for presentation to students and faculty of selected Kansas schools. The program included short lectures on each allied health area by a professional representative, with accompanying slides and leaflets. Information about the students' knowledge and interest was surveyed by questionnaire.

A total of 825 respondents, composed of 814 students and 11 faculty members, answered the questionnaires. At the beginning of the program, over half of the students indicated future career plans with 95 interested in an allied health profession. Three students specified dietetics. Following presentation of the program, interest in an allied health profession was expressed by 154 with 47 mentioning dietetics.

In order to expand a dietetics recruiting program, various avenues of communications with students were investigated. Results showed most information on health, food, and nutrition was obtained from parents and teachers. However, some knowledge was gained from other personal contacts and programs of youth organizations such as Scouts and 4-H. Apparently, little contact existed between dietitians and students in the localities surveyed. The importance of the community hospital in recruiting was explored.

Data obtained from questions asking for the meaning of dietetics and for a selection of dietitians' duties and qualifications generally indicated respondents were uninformed about the dietetics field. A quiz was included in the questionnaire to obtain general impressions of the respondent's knowledge concerning food facts and fallacies. A high percentage of respondents had indicated inaccurate answers for several of the questions.

An open end questionnaire given to the class instructors and school counselors indicated that faculty members apparently

do not have enough information on the allied health careers to adequately guide students who are thinking about jobs in these areas.

Recommendations include: (1) continue and expand the recruitment program for dietetics; (2) develop a coordinated recruitment program with the Kansas Dietetic Association; (3) mail career information on dietetics to school counselors; (4) study present dietetic students at Kansas State University to find out why they are majoring in dietetics, when they decided on a dietetics career and what influenced their decision.