ANALYSIS OF MARKETING STRATEGIES OF HEALTH CARE FOODSERVICE DEPARTMENTS IN INDIANA

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CHAPTER I

INTRODUCTION

Limited research has been done in the area of marketing in hospital foodservice departments, since hospitals have just recently placed greater emphasis on marketing their services in general. Marketing offers hospitals the hope of finding a new approach to solving the problems of maintaining a productive census level, attracting medical staff, support staff, and increasing revenue. Marketing techniques are being used to build strong community support by increasing the consumer's awareness of the hospital's existence and services.

Ask any administrator what the purpose of his hospital is, and the answer is likely to be, "we're in the business of serving the needs of our patients," or, "our primary purpose is to provide high quality health care to the community that we serve." The preceding statements are identified as marketing statements. The first one pertains specifically to patients and the second one pertains to the community in general. Today, hospitals not only serve the needs of their patients, but many hospital services are provided to the community as well.

Philip Kotler (1982), now considered the pioneer of nonbusiness marketing, defines marketing as "the analysis, planning, implementation, and control of carefully formulated programs designed to bring about voluntary exchanges of values with target markets for the purpose of achieving organizational objectives." It is important to design the

provider's services relative to the target market's needs and desires. The primary objective of the hospital dietary department is meeting consumer needs and wants. Marketing is a way of doing business that focuses on determining consumer needs and wants, not just consumer preferences. Decision making should be based on consumer research that identifies those needs and wants.

Patient meal preparation still may be the foundation of hospital foodservice departments, but it no longer can support the entire operation. Increased pressure to contain costs is forcing hospitals to expand their horizons - to find new ways of bringing revenue into their departments so that meal quality does not have to suffer.

Research to identify the state of the art relative to the use of marketing techniques within hospital foodservice departments throughout the United States has been conducted in Texas (Pickens & Shanklin, 1985). The Texas study was to determine whether any relationships existed between the use of marketing techniques and selected demographic characteristics of the foodservice administrators and/or operations.

It is hoped that the current study will expand on the marketing issues involved, as well as, the perceived importance of marketing by hospital foodservice administrators. The findings and implications from this research may then be used in the healthcare setting for foodservice administrators to develop programs for their foodservice departments.

Purpose and Objectives

The purpose of this study was to determine the importance of marketing in hospital foodservice departments and the practical applications involved in selected operations. Specific objectives included:

1. Analyze marketing techniques used in hospital foodservice departments. Specifically, the following areas will be examined in relation to marketing techniques used by the foodservice department:
    a. in-house patients
    b. hospital employees
    c. the community
    d. hospital visitors
2. Analyze the perceived importance of marketing techniques by foodservice directors. Specifically, the following marketing techniques will be examined:
    a. discounting
    b. reputation
    c. merchandising
    d. public relations
    e. patron surveys
    f. advertising
    g. new product development
    h. sales promotions
    i. product/service positioning

3. Determine the importance of marketing techniques based on selected variables of foodservice directors and hospitals.

Respondent Variables

a. age group
b. sex
c. highest degree attained
d. professional affiliation
e. length of experience in foodservice
f. registration status
g. employment status

Institutional Variables

a. hospital classification:
   - not-for-profit vs. for-profit
   - corporate owned
   - government operated (federal)
   - government operated (city, county)
   - owned and managed by a hospital corporation
b. number of meals served daily
c. number of beds in the hospital
d. management of the foodservice department
e. population of the city where the hospital is located

4. Analyze the perceived importance of marketing in relation to other management activities by the foodservice director. Specifically, the following responsibilities will be examined in comparison to marketing:

a. menu planning and purchasing

b. education and training

c. administration (budgeting, supervising, reports)

d. therapeutics

Hypotheses

The hypotheses postulated in this study were:

H_1: Respondent characteristics will have no effect on the marketing techniques used in Indiana. Specific marketing techniques examined were:

a. techniques used for in-house patients

b. techniques used for hospital employees

c. techniques used for the community

d. techniques used for hospital visitors

H_2: Institutional characteristics will have no effect on the marketing techniques used in Indiana. Specific marketing techniques examined were the same as stated in H_1.

H_3: Respondent characteristics will have no effect on the perceived importance of marketing techniques. Specific techniques examined were:

a. discounting
b. reputation
c. merchandising
d. public relations
e. patron surveys
f. advertising
g. new product development
h. sales promotion
i. product/service positioning

H_4: Institutional characteristics will have no effect on the perceived importance of marketing techniques. Specific techniques examined were the same as stated in H_3.

H_5: Respondent characteristics will have no effect on the perceived importance of marketing relative to:

a. menu planning and purchasing
b. education and training
c. administration (budgeting, supervising, reports)
d. therapeutics

H_6: Institutional characteristics will have no effect on the perceived importance of marketing relative to a. to d. as in H_5.

H_7: There will be no association between respondents perceived relative importance of marketing and marketing techniques actually used.

Limitations and Assumptions

This study is limited to Indiana hospitals listed in the American Hospital Association Guide to the Health Care Field. The latest edition of this guide was published in 1986 and contains inpatient data concerning number of beds, admissions, census and occupancy. It was assumed, however, that the characteristics of the sample chosen were representative of most hospitals in the United States.

The instrument used to gather data was a questionnaire mailed to 142 foodservice directors of all Indiana hospitals and was designed to identify marketing techniques currently in operation in dietary departments, as well as a description of the hospital foodservice director. It was also assumed that the respondents to the survey completed the questionnaire objectively and without bias.

Definitions

Marketing: Marketing is the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives (Fisk, 1986).

Dietetic marketing: A management philosphy focusing attention on the design and delivery of organized programs relating to food to satisfy health needs in order to retain existing clients and to develop new ones (Ranaghan, 1980).

Not-for-profit hospital: An agency exempt from federal income tax under section 501 of the internal revenue code of 1954 and no part of the net earnings of which insures, or may lawfully insure, to the benefit of any private shareholder or individual (The Hospital

Licensing and Regulating Council, 1977).

For-profit hospital: A private, profit agency not exempt from federal income tax, owned by an individual, a partnership or a corporation (The Hospital Licensing and Regulating Council, 1977).

Corporate owned hospital: A non-profit agency owned under the corporate laws of the state (Fromm, 1987).

Government operated (federal) hospital: A federal, non-profit agency operated under the laws of that specific political entity (Fromm, 1987).

Government operated (city, county) hospital: A city or county, non-profit agency operated under the laws of that specific political entity (Fromm, 1987).

Hospital owned and managed by a corpoartion: A private, profit agency not exempt from federal income tax, owned by a multiple hospital system (Fromm, 1987).

Foodservice administrator: Individuals whose primary responsibility is management of the administrative functions of the foodservice department in a health care institution (The American Society for Hospital Foodservice Administrators Bylaws, Rules and Regulations, 1987).

Twenty-four hour room service: Meals or individual menu selections delivered to patients, employees and visitors during non-serving times by the foodservice department for a fee.

Gourmet meals: The provision of menu to in-house patients and visitors with selections not on rotating cycle menu for an additional fee or through the purchase of tickets available in the gift shop in lieu of flowers.

Elegant in-room dining: The special presentation of meals, using linen table service, flowers, etc. to provide atmosphere apart from an institution for in-house patients at an additional charge.

Theme menus: A menu containing selections that relate to a particular country, season or food, such as taco, sundae or potato bars and Thanksgiving for in-house patients, employees and visitors.

Fast food areas: A cafeteria service offering non-rotating menu selections or delicatessens with sandwich and bakery items, designed to provide faster service for hospital employees, and visitors.

Weight reduction programs: A charged clinical service providing a nutritional plan for employees and the community, desiring to lose weight.

In-home programs: A charged clinical service providing nutritional counseling to members of the community unable to leave their homes.

Convenience store: Offering products to the community that may or may not be used by the hospital foodservice department at competitive prices.

Consultant services available for food management audits: Providing objective evaluation of the management of other foodservice operations.

Take-out food: Menu selections available for employees and visitors to purchase for use at home or to a patient's room, using disposable service.

Discounting: Reduced pricing for hospital employees and visitors.

Reputation: General estimation which the foodservice department is held by in-house patients, hospital employees, the community and

hospital visitors.

Merchandising: Presentation to promote sale of products.

Public relations: Activities to promote favorable relationship with in-house patients, hospital employees, the community and hospital visitors.

Patron surveys: Obtaining feedback from patients, employees or visitors.

Advertising: Preparing and distributing notices to promote products, services or programs offered by the foodservice department.

New product development: Trying products for the first time to add variety to the patient or cafeteria menu.

Sales promotion: Attempt to sell or popularize a product at lowered prices.

Product/service positioning: Offering the right products in the appropriate places, such as, color coordination or salad bar arrangement.

CHAPTER II

REVIEW OF LITERATURE

One of the major changes brought about by the diagnosis related groups (DRG)-based prospective payment system is the new emphasis on business management in hospitals. As a result, there will be organizational changes and reassessments of departmental and personnel needs. To be prepared for such change, it is imperative to speak the language of administrators, or more importantly, have an appreciation of the issues facing a business person/administrator (Hull, 1986). According to research done by Thompson (1977), the term "marketing" means to most people a function peculiar to business terms. Marketing is seen as the task of finding and stimulating buyers for the firm's output. It involves product development, pricing, distribution, and communication, and in the more progressive firms, continuous attention to the changing needs of customers and the development of new products, with product modifications and services to meet these needs. But whether marketing is viewed in the old sense of "pushing" products or in the new sense of "customer satisfaction engineering," it is almost always viewed and discussed as a business activity. Only recently has marketing made its appearance in health care facilities. Marketing has been found to be a successful venture, hence hospitals are increasingly assigning staff to direct the marketing function. This does not mean that nonprofit agencies are abandoning ethical practices, but rather

that marketing provides an approach to planning that can serve the public better.

The Development of Marketing

According to Parks and Moody (1986), the marketing concept first surfaced in the mid-1950's in the business literature, where it primarily increased new product development and provided strategies for getting those products to the users. Many theorists contributed to the development of the discipline, but Drucker (1974) is generally credited with placing marketing as a central conern for any business. Drucker made two major and distinct contributions to marketing in the 1950's. First, he hypothesized that the role of the customer, and not the product, should be the primary focus of a business. Then, he argued that an organization had to attract customers proactively. In the early 1960's, Levitt (1985) found that most business failures assumed that the market for their product would stay constant and that their "marketing function" was to produce and sell a product.

Marketing tools have not been clearly defined for health professionals. There is a need for hospitals to use marketing tools and to survive the structural changes seen by the health care industry.

Since implementation of DRG's, Hull (1986), stated the business structure has changed from "charge" oriented to a "cost" oriented accounting system. Prior to DRG's, charges were manipulated in such a way that the income of a hospital offset expenses sufficiently to break even (rarely acceptable), or to make a profit. Even not-for-profit institutions had their term for profit as cash excess. It is important to realize that charges often had little relationship to real costs, and

that charges often reflected the willingness to pay on the part of some reimbursement agency. The legacy of this sort of thinking is that some nutritional therapies like intravenous hyperalimentation, specifically, total parenteral nutrition (TPN), which historically was a profit maker for the hospital, has a reputation for being very expensive. In fact, it may be possible to provide TPN at a relatively low cost. Enteral feedings, on the other hand, are still considered inexpensive because they were usually not a charged item.

As long as charges could be used and manipulated, departments wih large charges for services that had relatively low costs were profit centers in the hospital. Their goods and services had a high "profit margin." Departments such as pharmacy and radiology generally became powerful in these systems, while departments such as dietary, which was a "cost center" had less favorable status.

Current Marketing Issues

In the President's Message at The American Dietetic Association Annual Meeting in Las Vegas in 1986, Anita Owen emphasized the importance of marketing when she said, "The health care climate of the 1980's will be characterized by historians with three words: uncertainty, competition and marketing."

From the Stokes Report (1987), marketing has certainly become the buzzword in health care as hospitals spent more than $1.1 billion on marketing in 1986 - a 56% increase over 1985. Health care facilities have discovered that foodservice is an excellent marketing tool. But health care is not the only segment of the service industries to discover the marketability of the foodservice operation.

Uncertainty and competition characterize all facets of foodservice in the '80's, resulting in a greater need to market every segment of foodservice. Hospitals market foodservice in response to DRG's, school lunch programs market in response to fast food and vendor encroachment, nursing homes use foodservice as a marketing tool to attract new residents, and correctional facilities market foodservice to deter inmate unrest.

Parks and Moody (1986) described marketing with a model and focused their discussion on the application of marketing principles and the development of a marketing plan. Marketing decisions should not be made without an appropriate research base.

The first step in the model was to define the business of health and dietetics. In other words, what is the "mission" of the business? Drucker (1974) says that one develops a mission by answering the following four questions:

Who is my customer?

What is the value to my customer?

What will my business be?

What are the unsatisfied wants of my customer?

In other words, Drucker focuses attention first on the consumer, not the professional services.

The second step in Parks and Moody's (1986) marketing process is to survey the environment in which the consumer and professional operate. There is little question that the effects of DRG's and other prospective payment plans have placed greater demands on institutional foodservice departments to operate more efficiently and to generate revenues. Prior to 1983, those factors would not have been of much importance. Initial

reactions to the pressures of prospective payments plans varied. Personnel were cut, services were eliminated, and foodservice and nutrition professionals scampered to find new products or services to sell. Some were successful, but others were not.

Rather than going back to basics, a more proactive response to the revenue-generating problem might have been to study new internal and external marketing opportunities. That assumes that foodservice departments know their markets, the size of each market, and how to develop a service responsive to the needs of those markets.

According to Fisk (1986), internal marketing strategies concern efforts to strengthen the foodservice administrator or dietitian's ability to fulfill his or her job responsibilities by building internal coalitions. External marketing strategies refers to most of the marketing strategies needed for the foodservice administrator or dietitian to become promotional strategies. There is a strong need to: 1) Improve the public's awareness and concern for dietary issues and 2) Improve the respectability of dietitians.

An example of a market internal to a facility is working mothers (employees) who do not want to eat out or cook. The take-out business in restaurants is booming; it could be an ideal profit venture for hospitals. Also each community has individuals who want to entertain but do not want to prepare the food for a party themselves. During "down" hours, many hospital foodservice departments are developing extremely profitable catering businesses (Parks and Moody, 1986).

The third step in Parks and Moody's (1986) research model of marketing still resembles the traditional health planning process. But there are two fundamental differences: (a) The process begins by

looking at what is happening in the environment, and (b) The assumption is made that marketing begins with the consumer, not with health goals.

Berkowitz and Flexner (1978) delineated the differences by comparing and contrasting the health process and marketing process models. The health process generally begins with a program, like weight reduction in mind and suspends consideration of the actual consumer until the third step. The marketing model, on the other hand, formulated no program until it thoroughly researches and identifies the needs and wants of consumers. In general, however, dietetic professionals should not try to "sell themselves" to consumers, who do not want to buy health services but, rather, want to buy the results those services may produce.

Step four (Parks and Moody, 1986), is to define your service strengths in relation to those of the other providers, while finally in step five, one develops strategies for the marketing mix. Here, one must examine the target markets (which will be discussed in Chapter Three) and isolate benefits critical to a buying decision. Like other components of the marketing mix, promotion or communication strategies are responses to consumer needs.

According to Fisk (1986), the marketing mix contains four key elements:

Product - what you offer the customer.

Price - what the customer must offer in return.

Delivery - how the customer gets the product.

Promotion - communication about the product, which includes advertising, personal selling, publicity and sales promotions.

Marketing research conducted by Kahn (1983) shows that a hospital's

foodservice department is among those service areas sharing responsibility for ensuring that patient stays are as pleasant as possible under the circumstances. Industry observers agree that the foodservice department will have increased importance as competition intensifies among hospitals. Marjorie A. Beasley, foodservice director at a Bloomington, Indiana hospital, suggests that "As prospective pricing further tightens the vise, hospital foodservice administrators will need to aggressively market their departments by offering services to the community such as nutritional consulting. But first, foodservice administrators need to further sharpen their financial and business management skills. Foodservice administrators have another concern - ensuring that clinical nutrition services are incorporated into the patient care regimen. Dietitians have always been an integral part of the health care team, and physicians are finally realizing that nutrition plays a major role in total patient wellness," she says (In Kahn, 1983, p.56). Erickson (1987) notes that Beasley has led the industry in discovering low-overhead alternate revenue sources. During the past three years, Beasley implemented such diverse operations as room service for visitors and staff, bakery and delicatessen operations, and clinical and moderate weight-loss programs. Beasley started the Breakaway Bakery/Deli to increase and diversify revenues. The deli sells fresh bakery goods and deli items to hospital employees and the community. The Breakaway Bakery/Deli grossed $14,000 in revenues for a 10 month period (November 1984-September 1985). As the program gained popularity with the hospital staff and community, revenues increased. From September 1985 to July 1986, the Deli grossed $26,000 in revenues (Koukol, 1986).

Other health care operations have followed Beasley's lead, creating their own profit-making and goodwill-producing ventures. Erickson (1987) also reported that new-parent congratulatory dinners and first-day home meals, complimentary fruit baskets and gourmet dinners given as gifts have helped hospital foodservice directors utilize idle staff and equipment while helping their institutions acquire a "user-friendly" reputation. Catering operations, both on premises and off, have become a combination public-relations device and top moneymaker in recent years.

A good example of outside catering was implemented by a Texas hospital to generate revenue through community foodservice. The following revenue-generating program was implemented by the foodservice department in this 212-bed hospital. The marketing goals were to increase revenues without increasing food or labor costs, to fully utilize the time, skills and talents of 33 foodservice employees, and to promote hospital goals and philosophy. First, phone calls were made to several local private schools and daycare centers to determine interest in purchasing hot meals prepared by the foodservice department. Two private schools, with no means of providing hot lunches for their students, accepted the proposal. To control food and labor costs, school menus were developed to coordinate with the hospital patient service menu. Personnel at each school were trained to portion and serve student meals. The schools were responsible for purchasing their meal trays, serviceware, and tableware. Meal counts were phoned in by the schools each Friday for the next week's delivery. Bulk foods were delivered to the schools in "thermotainers" by an employee of the maintenance department using the hospital van. The bulk food warmers

used in transporting the food cost approximately $200 each. Four carriers were required, at a total cost of $800. Revenues from school meals average $600 to $700 per month. Consider the payback: the cost of the thermotainers ($800) was recouped from generated revenue ($900 to $1,050) after one and one-half months' time (Wright, 1986).

Rose (1983) suggested that hospital foodservice departments offer many ways to market an array of services, both in the hospital and in the community. As recently as five years ago, the typical hospital foodservice department had three simple lines of business: patient tray service, staff cafeteria service, and catering for hospital functions. Today, a foodservice department typically has a dozen or more lines of business. These might include community services, publishing clinical nutrition support, home health care, restaurant operation, and patient foodservice programs. Adding to the complexity of the hospital foodservice department are needs to generate revenue, conduct goodwill programs, operate mixed and parallel service systems, and use foodservice as a competitive tool.

Current Marketing Techniques

A marketing study by Gullickson (1985) stated that in acute-care hospitals, dietary departments have been taken for granted as part of general service. To stave off budget cutters, dietary departments are establishing monetary values for clinical services by placing patient meals as an attraction for private-pay, elective procedure patients, generating more revenue from cafeterias, and marketing community programs.

The American Dietetic Association has identified DRG's, such as

diabetes and heart disease, as requiring nutritional care. It urges dietitians to document their work and to obtain reimbursement from insurers, changing their image to income producers for the hospital.

Leslie Levy, R.D. (1987), ARA Healthcare Nutrition Services, chief clinical dietitian at Marian Medical Center, Santa Marina, California found a solution to the problem of how to generate revenue from clinical dietetic services. She was responsible for 80 to 85 inpatients, as well as a monthly average of eight to 10 outpatients who were referred by local physicians to the dietary department for diet counseling. She believed that with additional personnel, clinical nutrition services could generate needed revenue for the hospital by tapping the local outpatient market. After documenting the clinical productivity, she decided to seek permission to implement a fee-for-services program to generate outside revenue. After surveying the baseline fees charged by hospitals within a 250-mile radius of Santa Marina, as well as their billing procedures and realized revenue, she drafted a proposal that established their basic fee for out-patient nutrition services such as diet counseling. The administration agreed to an out-patient fee of $45 and the services were described in terms that would make it easier for patients' expenses to be reimbursed by third-party payers such as insurance companies. In the first year of the fee-for-services program, $7,958 was generated in revenue for the hospital. In order to make the program truly successful, the staff of Marian's foodservice department will also focus on educating third-party payers as to the health benefits and economic savings of nutrition services.

Overlake Hospital Medical Center in Bellerue, Washington, has increased cafeteria revenues 20% to 30% by enticing employees away from

brown bags. The foodservice director accents special events for different countries with decorations and a special menu (Gullickson, 1985).

In a study conducted by Pickens and Shanklin (1985), they indicated that marketing was extremely important to the success of a hospital foodservice department and that the importance of marketing had increased in the past two years. A validated questionnaire was mailed to 600 randomly selected hospital foodservice administrators requesting information related to marketing in their facilities. Forty-five percent of the questionnaires were returned and analyzed for frequency of response and significant relationships between variables. Four different categories were studied in terms of marketing services. Techniques were used to market services to four groups: patients, employees, the community and visitors, doctors and administrators.

Techniques used to market services to in-house patients

Offering special holiday meals (89.8%) and supplying birthday cakes (82.3%) were used most often to market the services of the foodservice department to in-house patients. Pickens and Shanklin (1985) found that the use of restaurant-style menus increased with the increase in years of experience attained by the foodservice administrators in their study.

Techniques used to market services to hospital employees

Cafeteria service, provided to hospital employees by 93.3% of the foodservice departments in the survey by Pickens and Shanklin (1985) was the most common technique used to market the foodservice to employees.

Theme menus were used as a marketing technique by 63.3% of the respondents. Younger foodservice administrators were more likely to use theme menus and coupons in the cafeteria than older foodservice administrators.

Additional techniques included: a variety of "bars," such as ice cream, potato, salad, soup, and dessert, outdoor picnics and summer barbecues in the park, patio cookouts and restaurant days on which chefs from local restaurants worked with the cook to provide their specialties to cafeteria patrons. "By the ounce" pricing programs, promotions that offered free items with a certain amount on the cash register ticket and periodic fruit and cheese baskets were also among additional techniques used to market services to hospital employees.

Techniques used to market services to the community

Nutrition counseling, the technique used most often to market the hospital foodservice department to the community, was cited by 75.3% of the respondents (Pickens and Shanklin, 1985). Programs related to nutrition education are appropriate services to market to the community because most hospital foodservice departments employ registered dietitians as part of the professional staff. A substantial percentage of the respondents indicated that they used the expertise of those professionals by offering weight-reduction programs to the community (40.6%), participating with the local media in presentation of nutrition features (45.6%), providing nutrition programs to civic organizations and clubs (45.6%), and providing nutrition education classes to school-aged children.

Techniques used to market services to hospital visitors, physicians, and administrators

The techniques used most often in the Pickens and Shanklin (1985) study were provision of vending services (62.2%) and cafeteria services (82.7%). Provision of catered meals was the technique used most often for physicians and/or hospital administrators.

The majority of the respondents (73.1%) indicated that marketing was extremely important to the success of a hospital foodservice department. This result parallels the trend that hospital marketing in general, as evidenced by advertisements in mass media, has gained wider acceptance. Hospital marketing has been assigned increased importance in recent years because of increased competition in the health care industry. Increased employee satisfaction (73.5%) and increased sales (66.4%) were judged by respondents to be the most effective indicators for evaluating marketing techniques implemented in the foodservice department.

According to Rose (1983), special services may include 24-hour room service, gourmet menu selections, congratulation programs, suite service with waiters, wine service, fruit baskets, elegant in-room dining or elegant congregate dining with family members. These special foodservices vary in their labor intensity and cost, but all are positive marketing forces.

Public relations and low cost marketing techniques should not be overlooked, as the Stokes Report (1987) emphasized. Students enjoy eating at fast food restaurants and are treated with respect. Fast food workers are taught to smile at customers and make them feel welcomed. Children, who are sometimes overlooked by retail sales people, are

particularly appreciative of the "glad to see you" treatment they receive at fast food places. Another low cost method of increasing foodservice patronage is by soliciting and implementing suggestions. Use of this method has had an added benefit at North Carolina State University where student suggested items have been sold at the snack bars. Since more low calorie drinks, fruit juices, granola bars and other "natural" snacks have been added at the suggestion of the students, more students have begun shopping at the snack bars. The last, and best, low cost method of marketing is by word-of-mouth. Speakers' bureaus and community meetings offer excellent word-of-mouth opportunities to advertise a facility. In one hospital, associated with a religious organization, numerous members of the church eat Sunday dinner at the hospital cafeteria rather than going to a local restaurant after church.

Baker and Treadwell (1986), describes the power of word-of-mouth "advertising" with a Sunday brunch that has proven to be an innovative adaptation of one hospital's foodservice department. The profitable enterprise has grown in popularity through in-house promotion and endorsement by satisfied customers. The emphasis was the opportunity for families to gather at a convenient location after church or prior to visiting a relative or friend in the hospital. The brunch was offered as a quality product at a reasonable price. The menu included cooked-to-order as well as prepared items. The price was substantially less than what local hotel restaurants charged for the same meal. The cafeteria relies heavily on self-service to save staffing costs and maintain reasonable prices. Table service consists of clearing plates, pouring beverage refills (customers can also do their own refills),

resetting tables and a hostess seats guests. On holidays, additional personnel are needed to serve larger crowds. Initially, patrons were primarily hospital employees, followed by patient visitors as a small part of the customer base. The customer mix has changed dramatically during the last year. Each Sunday, the cafeteria serves new and repeat customers. Research has shown that about 90% of the customers come to the hospital simply for brunch. The success factor is word-of-mouth "advertising," with friends telling friends about the cafeteria. The success of this venture supports the idea that a customer who is satisfied will tell an average of five people. Conversely, people who had a negative experience will tell an average of 10 people. Success of the Sunday brunch plays an important role in promoting a positive overall image for the hospital.

Nonpatient foodservice, now often called patron foodservice, is emerging from a period of some mediocrity. Profit, now is a motive, and with a change in philosophy has come an entirely new service approach. Most hospitals have paid lip service to the idea that the hospital cafeteria was an employee benefit. Pricing often reflected raw food cost only. Employees generally do not perceive inexpensive foodservice as a benefit. Holidays and vacations are benefits; cafeterias are services employees may elect to use. Therefore, hospital cafeterias are changing. Specials abound, including chef specials, discounts at specific times of the day, fitness meals, potato and salad bars, and make-your-own sundaes. Profit margins of 10-15% are no longer uncommon.

Marketing audits were used infrequently in the Pickens and Shanklin, 1985 study to evaluate the effectiveness of marketing activities. About 52% seldom or never used marketing audits. Kotler (1981), stated that

marketing audits are more objectively conducted by someone outside the operation being audited. A marketing audit is a valuable tool. It can signify the difference between the success and failure of an operation's marketing performance. With increased emphasis on the implementation of marketing activities within the health care industry, dietetic educators have a responsibility to devote more instructional time to the presentation of marketing concepts and their application to dietetic practice.

In search of ways to make hospital foodservice as marketable as possible, practical innovations and initiatives from foodservice directors and dietitians from coast to coast have been implemented (Clancy, 1986). The St. Cloud Hospital foodservice department in St. Cloud, Minnesota makes their 144-seat main dining room available to outside groups for banquets. Local high school student groups have taken the greatest advantage of the facility and hold events such as sports banquets. Their average size banquet is 60 persons, and foodservice handles 30 to 40 catered affairs each year, recording an average of $10,500 in annual revenue toward the department.

The Memorial General Hospital foodservice department in Las Cruces, New Mexico contracts management and clinical services to a small, nearby psychiatric hospital, which cannot afford full-time dietitians. The hospital's three dietitians help evaluate recipes, aid in regulating portion control and troubleshoot, resulting in revenue of $6,000 to $10,000 annually from the contract (Clancy, 1986).

The Orlando General Hospital foodservice department in Orlando, Florida offers both in-patient and out-patient diet counseling for a fee by hospital dietitians. Their services include eight-week weight

control classes, which are also open to the general public, as well as short-term in-patient diet instruction and longer-term in-patient diet counseling. Sessions' average cost is $44 per hour, resulting in revenue of $22,000 annually from the program toward the foodservice department (Clancy, 1986).

The Firemen's Fund Insurance Company foodservice department in Green Bay, Wisconsin sponsors "Know your neighbor" once every two weeks. Employees of the company's various departments, such as accounting or personnel, are invited to plan the cafeteria menu on the 'special days,' which are held every other Thursday. Employees design a menu of soup, two hot entrees, starch, vegetable and dessert. The menu contains information relating to the featured department, as well as a trivia question about the company. Customer counts at this 1,100 employee company have increased by about 200 on "Know your neighbor" days (Clancy, 1986).

The Swedish American Hospital foodservice department in Rockford, Illinois, located in close proximity to a large number of high-rise apartments for the elderly, offers a 10% discount to all senior citizens who present a special discount card distributed by the foodservice department. The discount applies to any food item, and the card is honored at any time. Since the foodservice began distributing the card, purchases by senior citizens have risen to 5% of the total transactions per day (Clancy, 1986).

Hospital foodservice departments can contract services for clinical and foodservice management to day care centers, prisons, schools, hotels, restaurants, nursing homes, churches, home health agencies, industrial and commercial cafeterias, civic clubs, and mental health

centers. The benefits for the hospital include goodwill, public relations, and improved patient referral networks.

Summary

The marketing concept first surfaced in the mid-1950's where it increased new product development and provided strategies for getting those products to users. Drucker, (1974) hypothesized that the customer should be the primary focus of the business and organizations need to try to attract the customer.

Hospitals would do well to explore the techniques and strategies of marketing as they search for new, more effective, ways to attract patients, qualified personnel, other resources and deliver services that are needed, wanted and that will be used. A coordinated ongoing program of responding to the hospital's markets and employing marketing strategies to ensure that the right resources, once determined, are obtained and that services, once developed, are used is a concept whose time may have come in the health care field.

There have been demands placed on hospital foodservice departments to operate more efficiently and to generate revenues. Therefore, hospital foodservice administrators will need to market their departments by offering services to the patients, employees, the community and visitors. Services can be contracted to day care centers, prisons, schools, and other agencies. Special services the hospital could provide include 24-hour room service and special theme meals to create a positive marketing strategy.

How involved health care foodservice professionals will be in this booming new area remains a question. What is certain is that they must

change traditional attitudes, redefine their values within hospitals, and stake out a role in new health care alternatives.

CHAPTER III

METHODS

As was stated in the review of literature (Chapter II), only recently has marketing made its appearance on health care facilities. It is hoped that this study will identify present marketing conditions and will point to needs in the area of marketing.

Research Design

The research design used in this study was a mailed descriptive status survey used to collect facts, interests, beliefs and attitudes concerning foodservice marketing in various hospitals in Indiana. The research is not concerned with manipulation of the variables, but rather, to investigate marketing in the natural setting of hospital foodservice departments.

Independent variables that relate to the foodservice administrators were examined: age, sex, educational degrees, professional affiliation, the number of years worked in the foodservice industry, registration status and employment status. In addition, other independent variables relate to the health care foodservice departments: hospital classification, total number of meals served daily, number of beds in the hospital, management of the foodservice department and population of the city in which the hospital was located.

Several dependent variables were examined that relate to marketing

techniques used to market hospital foodservice: in-house patients, hospital employees, the community and hospital visitors. Other dependent variables were examined to determine the importance of marketing techniques: discounting, reputation, merchandising, public relations, patron surveys, advertising, new product development, sales promotions and product/service positioning.

These variables were selected because of the suggested impact they may have made on hospital foodservice marketing in the previous study by Pickens and Shanklin (1985). The marketing strategies are important to the current study because of the possible significant relationships that could be identified between foodservice administrators and their perceived importance of specific marketing strategies and current marketing techniques used.

Population and Sample

The sample, which is also the population in this study, consisted of 142 foodservice administrators working in all hospitals in the state of Indiana listed in the American Hospital Association Guide to the Health Care Field (1986). All hospitals are members of the American Hospital Association (AHA), Joint Commission on Accreditation of Hospitals (JCAH) and the American Osteopathic Association Accreditation (AOAA).

Data Collection

Planning and Development

Planning and development of this research was accomplished during the Spring, 1986, and Fall, 1986, semesters at Purdue University, Lafayette, IN, while the researcher was completing some courses. Data collection procedures and data analysis techniques appropriate to answer the research objectives were chosen (Borg and Gall, 1979).

Instrumentation

The research instrument (Appendix B) which was adapted from Pickens and Shanklin (1985) was a three page questionnaire with three sections. The first section (Section A) elicited general demographic information on the foodservice administrators and the hospitals in which they were employed. Section B was designed to determine the types of marketing techniques currently used by hospital foodservice departments. The marketing techniques in this section were divided into four categories (in-house patients, hospital employees, the community and hospital visitors) and respondents were instructed to indicate the techniques currently implemented in the foodservice department. Respondents were also instructed to add the techniques they employ that were not included in the list. Section C measured the respondents' attitudes toward the perceived importance of specific marketing strategies. Also included were the respondent's opinion toward the perceived relative importance of marketing and other management activities (menu planning and purchasing, education and training, administration, and therapeutics).

The research instrument was examined for content validity, clarity, and format by a panel made up of graduate faculty from Oklahoma State University. The graduate committee members were from the Food, Nutrition and Institution Administration Department, the School of Hotel and Restaurant Administration, and the Statistics Department. Modifications were made based on the panel's comments on the questions and clarity of instructions.

Pilot Test

A pilot study was conducted to validate the instrument. Hospital foodservice administrators in states outside of Indiana were selected from the membership list of the DietEcon Selection and Approval Committee, listed in the MedEcon Memo (1986). The respondents were asked to complete the questionnaire, to critique the instrument and cover letter (Appendix A), and to keep track of the total time it took from start to completion. Suggestions from the pilot study were incorporated into the questionnaire. The survey was printed on white paper, with reduced print on the front and back sides of one page and the front side of a second page.

Survey Procedure

The questionnaires, were mailed with two cover letters (Appendix A), on May 6, 1987, to the 142 foodservice administrators employed in Indiana hospitals listed in the American Hospital Association Guide to the Health Care Field. Included in the sample was the membership list of the American Society for Hospital Foodservice Administrators who had not indicated an institution by their name. Respondents were asked to

return the questionnaires on or before May 18, 1987. Postage, in the form of stamps affixed to a business letter envelope, was provided for the respondents to return the completed surveys. Follow-up phone calls were made on May 20, 1987, asking some of those who had not responded (57) to do so as soon as possible.

Data Analysis

Collected data requiring statistical analysis were coded and analyzed by the measurement of frequency of response, using an Apple IIe computer. The Apple Interactive Data Analysis (AIDA) and APP-STAT computer programs were used.

The size of the sample, the means and standard deviations were tabulated for all independent and dependent (96) variables. Standard statistical procedures including frequency tables, t-test, correlations, chi-square, analysis of variance (ANOVA) and multiple linear regression were used to analyze the data (Witte, 1985). Data which did not require statistical analysis were summarized and reported as appropriate to meet research objectives.

Section A, which contained questions 1-13, were multiple choice and were identified as the independent variables for this study. They can actually be divided into two groups of independent variables for analysis of the sample. Questions 1-8 describe personal data about the respondent and questions 9-13 describe demographic characteristics of the hospital and foodservice operation. The t-test of independent means was used to examine the difference between means of various non-continuous independent variables in questions 9 and 12. A demographic profile was constructed on the total sample using frequency tallies.

Section B, which contained questions divided into four catagories, were multiple choice and short answer and are identified as the dependent variables for analysis of marketing techniques currently used. Questions I-IV listed marketing techniques used for in-house patients, hospital employees, the community and hospital visitors. Chi-square values were computed to examine relationships between the independent and dependent variables.

Section C, which contained questions 1-9, measured the perceived importance of marketing strategies and are presented similar to a Likert Scale with ratings ranging from "not important" (1) to "important" (5). These questions are included in the dependent variables and analysis of variance was used for the relationship this section had to the independent variables. In addition, the t-test was used to examine the difference between means of various independent variables and the perceived importance of marketing strategies. Also, multiple regressions were performed on each of the ratings using three independent variables. Correlations were examined between the number of meals served and the importance of marketing ratings on dependent variables. Chi-square values were also used to examine the relationship between respondents' perceived importance of marketing and the marketing techniques actually used.

Included in Section C was a question containing dependent variables to measure the perceived relative importance of marketing to other management activities. The perceived percentage of time spent in management activities were analyzed using one-way analysis of variance (ANOVA), multiple regressions and correlations.

CHAPTER IV

RESULTS AND DISCUSSION

This study was conducted to analyze the current status of marketing in hospital foodservice departments, to determine specific marketing techniques used for in-house patients, hospital employees, the community and visitors, to determine the perceived importance of marketing techniques used by foodservice administrators, and to determine the perceived importance of marketing in relation to other management activities of the foodservice administrator. A three page questionnaire consisting of three sections with a total of 19 questions, as described in Chapter III, was developed.

The sample was composed of 142 foodservice administrators working in Indiana hospitals listed in the 1986 American Hospital Association Guide to the Health Care Field. Copies of the research instrument were sent to 142 foodservice administrators and 85 completed questionnaires were returned (60%). Follow-up phone calls were made to nonrespondents and seven additional questionnaires were returned. Data from 92 of the responses (65%) were analyzed.

This chapter analyzes the characteristics of respondents, the characteristics of institutions and current marketing techniques. This chapter also examines the effect of respondent and institutional characteristics on marketing techniques and on the perceived importance of marketing. Additionally, an investigation to examine the effect of

respondent and institutional characteristics on the perceived importance of marketing in relation to other management activities was conducted. Finally, data analysis necessary to test the null hypotheses are presented.

Characteristics of Respondents

To determine the characteristics of the survey participants, respondents were asked to complete a series of demographic questions. The demographic data analyzed included the respondents age group, sex and highest degree attained. Other information analyzed on the respondents included professional affiliation, total number of years work experience, registration status and employment status.

Age Group

Respondents were asked to indicate an age group rather than their precise ages. In this study, it was found that nearly one-half of the foodservice directors surveyed were in the 30-39 age group. Fifty-five percent (N=51) of the respondents were between 20 and 39 years of age, while 45 percent (N=41) were between 40 and 69 years of age. Table I illustrates the similarities and differences between age groups of foodservice directors in this study.

TABLE I

AGE GROUPS OF THE FOODSERVICE DIRECTORS

Age Group	Frequency	Percentage
(1) 20-29	11	11.96
(2) 30-39	40	43.48
(3) 40-49	17	18.48
(4) 50-59	13	14.13
(5) 60-69	11	11.96
	92	

Sex

Of the 84 respondents who indicated their sex, 18 percent (N=15) were male, and 82 percent (N=69) were female (Table II). Eight respondents did not indicate gender.

TABLE II

SEX OF THE FOODSERVICE DIRECTORS

Sex	Frequency	Percentage
(1) Male	15	17.86
(2) Female	69	82.14
	84	

Highest Degree Attained

The questionnaire asked respondents to indicate highest degree(s) attained and their major(s). Nearly one-half (48%) of the respondents have the bachelor's degree. The predominant major noted was Nutrition and Dietetics (n=20). Home Economics and Institutional Management were also among majors reported.

Master's degrees were the highest attained by 32 percent (N=29) of the respondents. The prevailing degree at this level was Nutrition and Dietetics (N=7). Other degrees included: Restaurant, Hotel and Institutional Management, Public Administration, Business Administration and Public Health Nutrition. Table III illustrates degrees of the foodservice directors. Two respondents did not indicate their degrees.

TABLE III

DEGREE OF THE FOODSERVICE DIRECTORS

Degree	Frequency	Percentage
(1) High School	13	14.13
(2) Associate	4	4.35
(3) Bachelor's	44	47.83
(4) Master's	29	31.52
	90	

Professional Affiliation

Foodservice directors responding to the survey were asked to indicate their professional affiliation(s). Respondents were to check all or any of the four possible categories, including an "Other" section. More specific information was requested from those responding to the "Other" category.

Sixty-six percent of the respondents (N=59) are members of the American Dietetic Association, while 51 percent (N=46) indicated their affiliation with the American Society for Hospital Foodservice Administrators. Only two respondents indicated an affiliation with the National Restaurant Association. Seventeen respondents indicated "Other" affiliations, which were the Dietary Managers Association (TABLE IV) and were the same respondents who indicated high school (N=13) and associate (N=4) degrees (previously in Table III).

TABLE IV

PROFESSIONAL AFFILIATIONS
OF THE FOODSERVICE DIRECTORS

Affiliation	Frequency	Percentage
(1) ADA	59	65.56
(2) ASHFSA	46	51.11
(3) NRA	2	2.22
(4) Other	17	18.80

Work Experience

Foodservice directors were asked to identify their total number of years of work experience. Nearly three-fourths of the survey participants indicated more than 10 years of work experience, while 28 percent (N=26) indicated 6-10 years of work experience (Table V).

TABLE V

TOTAL NUMBER OF YEARS WORK EXPERIENCE OF THE FOODSERVICE DIRECTORS

Number of years	Frequency	Percentage
(1) Less than 1	1	1.09
(2) 1-5	4	4.35
(3) 6-10	26	28.26
(4) More than 10	61	66.30
	92	

Registration Status

Respondents were asked to indicate their registration status. Seventy percent (N=57) were registered dietitians while 30 percent (N=25) were not (Table VI). Ten respondents did not indicate registration status.

TABLE VI

REGISTRATION STATUS OF FOODSERVICE DIRECTORS

R.D. Status	Frequency	Percentage
(1) Registered	57	69.51
(2) Nonregistered	25	30.49
	82	

Employment Status

The questionnaire asked respondents to indicate their employment status as, working full-time (35 hours per week or more) or part-time (34 hours per week or less). Nearly all (97%) of the survey participants indicated full-time employment, while three respondents indicated part-time employment (Table VII).

TABLE VII

EMPLOYMENT STATUS OF THE FOODSERVICE DIRECTORS

Employment	Frequency	Percentage
(1) Full-time	89	96.74
(2) Part-time	3	3.26
	92	

Characteristics of Institutions

To determine the characteristics of the survey institutions, respondents were asked to complete demographic questions about the institutions where they were employed. The demographic data analyzed included the hospital classification, the number of beds and management of the foodservice department. Other information analyzed on the institutional characteristics were the population of the city where the hospital was located, and the total number of meals served.

Hospital Classification

Respondents were asked to specify whether their hospitals were not-for-profit, for-profit, corporate owned, government operated (federal), government operated (city, county) and owned and managed by a hospital corporation. Included was an "Other" category where more specific information was requested. Respondents were to check all which applied. Of the 92 responses analyzed, 74 indicated whether their hospital was not-for-profit or for-profit. Of the 74 responses, 91 percent (N=67) were not-for-profit (Table VIII). This table was split into two sections, using the total responses indicating not-for-profit vs for-profit and the total responses indicating the ownership/management of the hospital. Responses were analyzed that indicated the profit status and the ownership/management of the hospital separately because several respondents checked only one response to this question, even though the survey instrument indicated "check all which apply."

TABLE VIII

HOSPITAL CLASSIFICATION [a]

Description	Frequency	Percentage
(1) Not-for-profit	67	90.54
(2) For-profit	7	9.46
Non-response	18	
	92	
(3) Corporate owned	9	22.50
(4) Federal	2	5.00
(5) City, County	22	55.00
(6) Hospital corp.	5	12.50
(7) Other	4	10.00
Non-response	52	
	92	

a multiple answers were allowed

Of the 92 responses, 40 indicated the ownership or operation of the hospital. Fifty-five percent (N=22) of those responses were classified as a government operated (city, county) hospital. Four respondents indicated "Other" to describe the hospital, which were three government operated (state) hospitals and one hospital/skilled nursing facility.

Number of Beds

Over one-half (N=52) of the 92 institutions responding to the survey were from hospitals with 51 to 200 beds. Twenty-eight percent (N=26) indicated their number of beds to be at 51 to 100 and another 28 percent had 101 to 200 beds. Only one hospital indicated the number of beds were more than 800 (Table IX).

TABLE IX

NUMBER OF BEDS IN HOSPITAL

Number of beds	Frequency	Percentage
(1) Less than 50	3	3.26
(2) 51-100	26	28.26
(3) 101-200	26	28.26
(4) 201-300	9	9.78
(5) 301-400	12	13.04
(6) 401-500	5	5.43
(7) 501-600	7	7.61
(8) 601-700	3	3.26
(9) 701-800	0	0.00
(10) More than 800	1	1.09
	92	

Management of the Foodservice Department

Respondents were asked to indicate whether the foodservice department was operated as the hospital or by a contract foodservice company. Of the 92 responses analyzed, 91 percent (N=84) were operated by the hospital while nine percent (N=8) were ran by a contract foodservice company (Table X).

TABLE X

MANAGEMENT OF THE FOODSERVICE DEPARTMENT

Employment	Frequency	Percentage
(1) hospital	84	91.30
(2) contract	8	8.70
(3) Other	0	0.00
	92	

Population of the City

Ninety percent of the hospitals were located in cities of 249,000 or less. Of this number, 47 percent (N=38) indicated a population of 10,000 to 49,000, 23 percent (N=19) indicated a population of less than 10,000, 17 percent (N=14) indicated a population of 50,000 to 99,000, 12 percent (N=10) indicated a population of 100,000 to 249,000. The

remaining participants (N=10) were from hospitals located in cities of 250,000 or more. Two respondents did not indicate the population of the city. Basically, nearly one-half (42%) of the 90 respondents indicated a population between 10,000 and 49,000 (Table XI).

TABLE XI

POPULATION OF CITY WHERE HOSPITAL IS LOCATED

Population	Frequency	Percentage
(1) Less than 10,000	19	21.11
(2) 10,000-49,000	38	42.22
(3) 50,000-99,000	14	15.56
(4) 100,000-249,000	10	11.11
(5) 250,000-499,000	2	2.22
(6) 500,000-749,000	0	0.00
(7) 750,000-1,000,000	4	4.44
(8) More than 1,000,000	3	3.33
	90	

MARKETING TECHNIQUES CURRENTLY UTILIZED

To determine the specific marketing techniques used by the foodservice department, respondents were instructed to indicate the techniques currently used at the time of the survey. This section of the instrument was divided into four groups and data was analyzed according to marketing techniques for in-house patients, hospital employees, the community and hospital visitors.

Marketing Techniques used for In-House Patients

Respondents were asked to indicate the marketing technique(s) used to market hospital foodservice to in-house patients. Ninety percent (N=81) of the respondents used special holiday meals, 88 percent (N=79) used birthday cakes and 61 percent (N=55) used congratulation dinners for new parents as marketing techniques. No respondents indicated the use of buffet style pediatric carts, one respondent used elegant dining with families and four respondents used 24 hour room service as marketing techniques for in-house patients. Table XII illustrates marketing techniques for in-house patients.

Ten percent (N=9) used "Other" techniques, such as: in-house posters, room service 10 hours per day, outpatient meals following surgery, family picnics and ice cream socials, and special menus between a gourmet and regular selection, called "A Cut Above".

TABLE XII

MARKETING TECHNIQUES USED FOR IN-HOUSE PATIENTS

Marketing techniques	Frequency	Percentage
(1) 24 hour room service	4	4.44
(2) Gourmet menu selections	22	24.44
(3) Congratulation dinners	55	61.11
(4) Suite service	2	2.22
(5) Wine service	12	13.33
(6) Fruit baskets	15	16.67
(7) Restaurant-style menus	15	16.67
(8) Buffet style pediatric carts	0	0.00
(9) Elegant in-room dining	5	5.56
(10) Elegant dining with families	1	1.11
(11) Oncology "on demand" meals	26	28.89
(12) Birthday cakes	79	87.78
(13) Theme menus	32	35.56
(14) Special holiday meals	81	90.00
(15) Others	9	10.00

Marketing Techniques used for Hospital Employees

The four predominant techniques for hospital employees were: cafeteria service, vending, theme menus and provision of modified food for employees on modified diets (Table XIII). "Other" marketing techniques included: picnics, raffles, room service, holiday meals, appreciation meals, and educational programs. Free meal given on employee's birthday, board meeting refreshments, cafeteria menu posted on all floors, cafeteria specials daily at lower cost, calorie and sodium content of cafeteria items, special "bars" (Mexican, Oriental and baked potato), and telephone answering machine with cafeteria menu and specials announced, were also mentioned under "Other" techniques.

TABLE XIII

MARKETING TECHNIQUES USED FOR HOSPITAL EMPLOYEES

Marketing techniques	Frequency	Percentage
(1) Cafeteria service	87	96.67
(2) Fast food service	29	32.22
(3) Restaurant service	4	4.44
(4) Vending	64	71.11
(5) Free samples of new products	36	40.00
(6) Nutritional analysis of cafe food	31	34.44
(7) Modified food for employees	51	56.67
(8) Weight reduction programs	41	45.56
(9) Birthday cakes	8	8.89
(10) Box suppers	23	25.56
(11) Bakery items for sale	27	30.00
(12) Party trays for other depts.	34	37.78
(13) Theme menus	59	65.56
(14) Contest in cafeteria	49	54.44
(15) Special hours for late shifts	31	34.83
(16) Others	10	11.24

Marketing Techniques used for the Community

Eighty-six percent (N= 77) of the respondents indicated the use of nutrition counseling to market hospital foodservice to the community. Fifty-one percent (N=46) indicated the participation with local media in nutritional features and 50 percent (N=45) used nutritional programs for civic organizations and clubs as marketing techniques (Table XIV). One respondent used individual tray service or bulk feeding to school lunchrooms and two respondents provided lunch or coffee breaks to nearby office buildings lacking in-house facilities.

"Other" techniques included: weight reduction programs, provision of bakery and delicatessen products, provision of registered dietitian for district accounts, provision of meals for meetings held in conference rooms, and production of meals for adult day care and mental health centers.

TABLE XIV

MARKETING TECHNIQUES USED FOR THE COMMUNITY

Marketing techniques	Frequency	Percentage
(1) Weight reduction programs	49	54.44
(2) Nutrition counseling	77	85.56
(3) In-home programs	14	15.56
(4) Cong. site for senior citizen meals	7	7.78
(5) Lunch/coffee breaks to office blgs.	2	2.22
(6) Feeding to daycare centers	14	15.56
(7) Feeding to school lunchrooms	1	1.11
(8) Feeding to airlines	0	0.00
(9) Feeding to jails	3	3.33
(10) Vocational training	23	25.56
(11) Local media of nutritional feature	46	51.11
(12) Catering for events outside hospital	19	21.11
(13) Sale of nutritional products	13	14.44
(14) Convenience store	0	0.00
(15) Consultant services-other operation	42	46.67
(16) Consultant services-audits	4	4.44
(17) Nutritional programs-clubs	45	50.00
(18) Nutritional programs-schools	20	22.22
(19) Site for "Meals on Wheels"	36	40.00
(20) Others	6	6.67

Marketing Techniques Used For Visitors

Ninety percent (N=81) of the respondents indicated the use of cafeteria service as a marketing technique and 64 percent (N=58) used vending services for hospital visitors. Two respondents used restaurant service and five respondents indicated the use of a delicatessen to market the foodservice department (Table XV).

Ten percent (N=9) used "Other" techniques which included: room service and gourmet meals to new parents, provision of modified food for visitors on modified diets, and guest trays and free meals for parent of child age six or under.

TABLE XV

MARKETING TECHNIQUES USED FOR VISITORS

Marketing techniques	Frequency	Percentage
(1) Gourmet meal tickets in gift shop	18	20.00
(2) Vending services	58	64.44
(3) Delicatessen	5	5.56
(4) Cafeteria service	81	90.00
(5) Restaurant service	2	2.22
(6) Coffee shop	13	14.44
(7) Fast food areas	21	23.33
(8) Take-out food	35	38.89
(9) Bakery items for sale	19	21.11
(10) Others	9	10.00

Testing of Hypotheses

The hypotheses postulated in this study were:

H_1: Respondent characteristics will have no effect on the marketing techniques used in Indiana hospitals. Specific marketing techniques examined were:

a. techniques used for in-house patients

b. techniques used for hospital employees

c. techniques used for the community

d. techniques used for hospital visitors

The relationships between the 10 selected respondent characteristics and the four categories of marketing techniques referred to in the null hypothesis were determined with chi-square values. The marketing techniques used in each category were assigned by respondents by checking the blank beside each technique.

Chi-square values were computed for each of the current marketing stratgey items. Each of the items were tested for their independence in comparison to the respondent characteristics.

The analysis revealed that 21 of the 61 marketing techniques were significantly ($p < .05$) related to the 10 respondent characteristics. Table XVI contains the chi-square values examining the relationship between repondent characteristics and current marketing practices to in-house patients.

TABLE XVI

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENT CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO IN-HOUSE PATIENTS

	Respondent Characteristics									
Marketing	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
df=	4	1	3	1	1	1	1	3	1	1
24 Hr Room	1.97	0.01	0.55	0.02	0.22	1.97	0.09	0.31	0.26	1.09
Gourmet	4.41	1.18	4.71	0.50	0.78	0.00	0.73	1.78	1.06	0.10
Congrat	0.51	1.64	0.81	1.25	1.09	0.19	0.01	1.12	0.48	0.16
Suite	5.68	0.06	2.09	0.08	0.47	4.76	0.06	10.24[2]	1.98	2.98[1]
Wine	3.30	4.35[2]	4.84	2.20	0.87	0.38	0.08	1.53	4.67[1]	0.03
Fruit	3.94	1.68	3.92	0.69	2.58[1]	0.09	2.68[1]	2.48	2.18	0.00
Restaurant	0.61	0.51	0.89	0.46	0.26	0.17	0.78	3.38	2.18	0.00
In-Room	3.32[1]	0.24	2.98	0.42	0.00	2.90[1]	0.00	3.11	0.11	0.73
Dining/Fam	8.09[1]	0.68	2.20	0.11	0.00	10.37[3]	0.69	0.53	0.19	6.83[3]
Oncology	1.44	0.00	0.39	0.03	0.01	2.03	0.02	3.20	0.28	0.23
Birthday	0.28	0.02	2.11	1.42	0.01	0.29	4.37[2]	0.81	0.38	0.06
Theme Menu	5.61	1.42	5.68	0.25	0.54	1.42	0.43	4.86	0.01	0.48
Holiday	1.42	0.05	5.76	0.10	0.01	0.49	2.89[1]	9.60[2]	0.12	0.15

1 .10=> p > .05
2 .05=> p > .01
3 p= <.01

Respondent Characteristics: In-House Patients

The analyses indicated that five of the marketing techniques for in-house patients were significantly related ($p < .05$) to respondent characteristics. The independent variables, employment status ($X^2=6.83$)

and NRA membership (X^2=10.37) were significantly related ($p < .01$, df=1) to the in-house marketing technique of elegant congregate dining with families. Work experience was significantly ($p < .05$, df=3) related to suite service with waiters (X^2=10.24) and special holiday meals (X^2=9.60). Gender was significantly ($p < .05$, X^2=4.35, df=1) related to the use of wine service. Techniques, "buffet style pediatric carts" and "others" were omitted from the table due to lack of significant response.

Respondent Characteristics: Employees

Chi-square values were also computed to test whether respondent characteristics are independent from marketing techniques used for hospital employees. Table XVII contains the chi-square values examining the relationship between respondent characteristics and current marketing practices to hospital employees.

TABLE XVII

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENT CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO HOSPITAL EMPLOYEES

	Respondent Characteristics									
Marketing	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
df=	4	1	1	1	1	1	1	3	1	1
Cafe	1.91	0.01	0.78	0.42	1.48	2.90[1]	0.00	1.63	0.26	1.71
Fast Fd	0.95	0.69	0.26	0.21	1.00	1.76	0.12	0.64	0.28	0.34
Restrnt	6.80	0.01	1.41	0.02	0.22	1.97	0.09	2.20	0.11	1.09
Vending	4.01	0.05	2.22	0.45	7.34[3]	0.02	0.02	3.99	0.57	0.23
Samples	4.87	0.10	4.33	0.04	8.28[3]	0.19	1.11	1.48	0.70	0.70
Nut Anal	3.10	0.01	1.25	0.03	0.09	0.06	0.21	2.46	0.00	0.33
Mod Food	1.47	5.08[2]	2.26	0.00	0.03	0.24	0.47	4.89	0.12	2.02
Weight	1.58	0.00	1.97	0.15	1.70	0.72	0.02	3.30	0.70	0.02
Birthday	3.68	0.00	2.64	0.03	1.09	0.63	0.84	8.82[2]	0.80	0.23
Box Sup	2.93	0.09	6.58[1]	0.72	5.29[2]	0.00	0.18	0.37	0.71	0.13
Bakery	5.17	0.00	1.16	0.03	0.01	0.02	0.02	2.43	0.00	0.26
Party	1.22	0.10	2.36	0.00	0.00	0.16	0.03	3.54	0.20	0.20
Theme	16.02[3]	0.02	7.41[1]	0.12	1.63	0.08	3.15[1]	3.32	0.00	3.29[1]
Contests	3.38	0.39	1.11	0.05	3.65[1]	0.38	1.28	3.80	0.09	0.02
Spec Hrs	2.06	1.33	1.43	0.06	0.47	1.60	0.01	3.57	0.04	0.45

1 .10=> p >.05
2 .05=> p >.01
3 p=<.01

The analyses indicated that three of the marketing techniques for hospital employees were significantly related ($p < .05$) to respondent

characteristics. The independent variable, age, was significantly related ($p < .01$, $X^2=16.02$, df=4) to the employee marketing technique of theme menus. The independent variable, ASHFSA membership (df=1) was significantly related to the marketing techniques of vending ($p < .01$, $X^2=7.34$), free samples of new products being introduced ($p < .01$, $X^2=8.28$) and the use of box suppers ($p < .05$, $X^2=5.29$). Work experience again, was significantly ($p < .05$, $X^2=8.82$, df=3) related to the use of birthday cakes for delivery to employees. "Others" were omitted from the table due to lack of significant response.

Respondent Characteristics: Community

Chi-square values were computed to test whether respondent characteristics are independent from marketing techniques used for the community. Table XVIII contains the chi-square values examining the relationship between respondent characteristics and current marketing practices to the community.

TABLE XVIII

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENT CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO THE COMMUNITY

	Respondent Characteristics									
Marketing	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
df=	4	1	3	1	1	1	1	3	1	1
Weight	0.95	0.02	1.35	3.49[1]	8.87[3]	0.35	0.02	2.07	5.07[2]	0.02
Nutrit	2.20	0.18	1.48	0.35	1.67	0.17	0.78	3.73	0.07	0.01
In-Home	3.30	0.01	4.84	0.03	0.04	0.13	0.00	0.86	0.00	0.00
Seniors	1.61	2.37	2.21	0.01	0.00	0.81	0.62	4.40	0.08	0.34
Offices	1.84	0.68	0.61	0.08	0.47	4.76[2]	0.06	0.50	0.02	2.98[1]
Daycare	3.64	0.00	2.07	0.00	2.94[1]	0.17	0.45	0.86	0.07	0.00
Schools	1.32	0.68	2.20	0.11	0.00	10.37[3]	0.69	0.53	0.19	6.83[3]
Jails	2.90	0.01	3.18	0.35	1.29	2.90[1]	0.00	7.64[2]	0.59	1.71
Vocation	9.11[2]	0.05	2.86	0.03	0.13	0.00	0.04	2.22	0.00	0.13
Media	4.04	0.99	5.10	0.69	3.67[2]	0.47	0.86	3.49	0.00	
Catering	4.06	0.00	7.69[2]	0.00	0.86	3.45[1]	0.00	1.05	1.06	0.04
Nut Prod	1.42	0.17	3.65	0.00	0.26	0.17	0.01	1.79	1.12	0.01
Conslt/O	7.44	0.87	2.45	0.06	3.76[2]	0.38	0.00	1.03	0.77	1.12
Conslt/A	7.65[1]	0.09	2.37	0.02	2.22	1.97	0.09	0.31	0.11	1.09
Clubs	10.81[2]	0.10	2.73	0.94	1.15	0.47	1.64	4.22	0.15	0.00
Schools	3.12	0.44	5.06	0.50	0.42	0.01	0.01	0.76	0.08	0.06
MOW *	5.84	2.06	1.13	0.52	0.49	0.19	0.24	1.11	0.06	0.13
Others	4.85	0.43	4.24	0.24	0.13	1.06	0.20	9.30[2]	1.02	0.50

* Meals on wheels
1 .10= $\geq$ p $>$.05
2 .05= $>$ p $>$.01
3 p= $<$.01
Note: data not available indicates calculations could not be performed.

The analyses indicated that nine of the marketing techniques for the community were significantly ($p < .05$) related to respondent characteristics. The independent variables, employment status ($X^2=6.83$) and NRA membership ($X^2=10.37$) were significantly ($p < .01$, df=1) related to community marketing techniques of individual tray service or bulk feeding to school lunchrooms. The independent variable, ASHFSA membership (df=1) was significantly related to the community marketing technique of weight reduction programs ($p < .01$, $X^2=8.87$), local media in nutritional features ($p < .05$, $X^2=3.67$) and consultant services for other operations ($p < .05$, $X^2=3.76$). "Bulk feeding to airlines" and "convenience stores" were omitted from table due to lack of response.

Respondent Characteristics: Visitors

Chi-square values were computed to test whether respondent characteristics are independent from marketing techniques used for hospital visitors. Table XIX contains the chi-square values examining the relationship between respondent characteristics and current marketing practices to hospital visitors.

TABLE XIX

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENT CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO HOSPITAL VISITORS

	Respondent Characteristics									
Marketing	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
df=	4	1	1	1	1	1	1	3	1	1
Gourmet	3.84	0.17	4.45	1.74	1.47	0.03	0.28	2.58	4.11[2]	0.02
Vending	9.02[1]	0.44	1.26	0.43	4.65[2]	0.11	0.93	3.71	0.94	0.28
Deli	1.69	0.24	1.25	0.04	0.75	1.43	0.24	0.61	0.00	0.73
Cafe	1.18	0.00	3.81	1.35	0.60	0.49	0.02	0.63	2.39	0.15
Restnt	4.20	0.68	0.61	0.08	0.47	4.76[2]	0.06	1.07	0.02	2.98[1]
Coffee	6.98	1.55	4.14	2.49	0.05	0.22	0.07	1.79	0.38	0.01
Fast Fd	3.06	1.50	5.20	0.03	0.78	2.95[1]	2.26	0.70	0.08	0.08
Take-Out	3.37	0.17	1.02	0.18	5.02[2]	0.15	0.15	1.87	0.36	0.16
Bakery	3.73	0.18	1.72	0.31	0.17	0.01	0.00	4.32	1.08	0.04

1 .10= >p >.05
2 .05= >p >.01
3 p=<.01

The analyses indicated that four of the marketing techniques for hospital visitors were significantly related ($p < .05$) to respondent characteristics. ASHFSA membership was significantly ($p < .05$, df=1) related to the use of vending ($X^2=4.65$)and take-out food ($X^2=5.02$). NRA membership was significantly ($p < .05$, df=1) related to the use of restaurant services ($X^2=4.76$) and a significant difference ($p < .10$) was noted for fast food areas ($X^2=2.95$). "Others" were omitted from table due to lack of significant response.

Eight significant ($p < .01$) relationships were noted between respondent characteristics and marketing techniques for in-house patients, hospital employees and the community (Tables XVI, XVII, and XVIII). Based on these relationships the researcher rejected parts a, b and c of H_1 and retained part d. Respondent characteristics effected marketing techniques for in-house patients, employees and the community, but had no effect on techniques for hospital visitors.

H_2: Institutional characteristics will have no effect on the marketing techniques used in Indiana hospitals. Specific marketing techniques examined were:

a. techniques for in-house patients

b. techniques for hospital employees

c. techniques for the community

d. techniques for hospital visitors

The relationships between the nine selected institutional characteristics and the four categories of marketing techniques referred to in the null hypothesis were determined with chi-square values.

Chi-square values were computed for each of the current marketing strategy items. Each of the items were tested for their independence in comparison to the institutional characteristics.

The analysis revealed that 12 of the 61 marketing techniques were significantly ($p < .05$) related to institutional characteristics. Table XX contains the chi-square values examining the relationships between institutional characteristics and current marketing practices to in-house patients.

TABLE XX

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN INSTITUTIONAL CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO IN-HOUSE PATIENTS

	Institutional Characteristics								
Marketing df=	N/Prof 1	Corp 1	Fed 1	City 1	H/Corp 1	Other 1	Beds 8	Mgt 1	Pop 6
Room service	0.05						7.47	0.07	3.36
Gourmet menus	0.04	0.02	0.68	0.10	0.51	0.10	15.62[2]	4.81[2]	10.19
Meals/parents	0.01	0.13	0.01	0.34	0.06	0.57	4.86	0.22	3.50
Suite service	0.58	0.00	4.12[1]	0.78	0.26	0.47	45.75[3]	0.66	14.15[2]
Wine service	0.26	0.09	2.50	0.04	0.04	0.13	11.83		13.57[2]
Fruit baskets	0.03	2.21	1.22	1.49	0.05	0.00	25.38[3]	0.03	25.74[3]
Restaurant		3.73	1.70		0.00	0.02	12.52	1.34	
In-room dining	0.00	0.00	4.12[1]	0.78	0.26	0.47	14.88[1]	0.01	6.66
Dining/families	1.95						2.63	2.11	1.33
Oncology meals	0.26	0.01	0.22	0.09	0.00	0.59	12.93	0.02	5.10
Birthday cakes	0.05	0.02	0.68	0.10	0.27	1.08	8.02	0.29	3.05
Theme menus	0.00	0.29	0.16	0.63	0.01	0.07	10.24	1.64	7.60
Holiday meals	0.01	0.09	2.50	0.04	0.04	0.13	5.74	0.14	8.13

1 .10=> p >.05
2 .05=> p >.01
3 p=<.01
Note: data not available indicates calculations could not be performed.

Institutional Characteristics: In-House Patients

The analyses indicated that four of the marketing techniques for in-house patients were significantly related ($p < .05$) to institutional characteristics. The independent variable, number of beds (df=8) was

significantly related to the in-house marketing techniques of gourmet meals ($p < .05$, $X^2=15.62$), suite service with waiters ($p < .01$, $X^2=45.75$) and fruit baskets ($p < .01$, $X^2=25.38$). The independent variable, population of the city ($df=6$) was significantly related to the techniques of fruit baskets ($p < .01$, $X^2=25.74$), suite service ($p < .05$, $X^2=14.15$) and the use of wine ($p < .05$, $X^2=13.57$).

Institutional Characteristics: Employees

Chi-square values were also computed to test whether institutional characteristics are independent from marketing techniques used for hospital employees. Table XXI contains the chi-square values examining the relationship between institutional characteristics and current marketing practices to hospital employees.

TABLE XXI

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN INSTITUTIONAL CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO HOSPITAL EMPLOYEES

	Institutional Characteristics								
Marketing	N/Prof	Corp	Fed	City	H/Corp	Other	Beds	Mgt	Pop
df=	1	1	1	1	1	1	8	1	6
Cafeteria	0.58	0.09	2.50	0.04	0.04	0.13	12.87	0.23	11.19[1]
Fast food	0.64	0.11	0.39	0.13	0.13	0.31	20.36[3]	2.32	11.14[1]
Restaurant	0.05	3.08[1]	4.12[2]	0.78	0.26	0.47	33.72[3]	0.07	29.71[3]
Vending	0.13	0.01	0.22	0.09	0.00	0.59	16.87[2]	0.44	3.36
Free samples	0.12	0.57	0.22	0.09	0.00	0.59	10.34	0.28	2.24
Nut/analysis	1.02	0.02	0.68	0.10	0.27	0.10	10.07	0.04	4.95
Modified diets	1.59	0.34	0.00	0.13	0.02	0.17	9.40	2.31	11.94[1]
Weight program	0.33	0.13	0.01	0.53	0.06	0.09	7.18	0.01	1.43
Birthday cakes	0.05	0.00	4.12[2]	0.33	0.26	0.47	19.34[3]	0.08	3.57
Box supper	0.12	1.51	0.39	0.13	0.13	0.31	11.28	0.15	10.40[1]
Bakery items	0.20	0.55	0.05	0.02	0.27	1.36	7.03	0.01	12.01[1]
Party trays	0.21	2.54	0.22	0.17	0.00	0.59	7.35	0.16	7.56
Theme menus	0.08	1.37	0.01	0.00	2.81[1]	3.31[1]	17.65[2]	3.09[1]	12.28[1]
Contests	0.07	2.31	0.05	0.28	0.22	0.01	8.12	2.54	4.82
Special hours	0.06	2.64[1]	0.14	0.86	0.05	0.81	16.39[2]	0.05	8.64

1 .10=> p > .05
2 .05=> p > .01
3 p=<.01

The analyses indicated that five of the marketing techniques for hospital employees were significantly ($p < .05$) related to institutional

characteristics. The independent variable, number of beds was significantly ($p < .05$, $df=8$) related to the employee marketing techniques of vending ($X^2=16.87$), theme menus ($X^2=17.65$) and special hours of operation for late shifts ($X^2=16.39$). The number of beds were significantly ($p < .01$) related to fast-food service ($X^2=20.36$), restaurant service ($X^2=33.72$) and birthday cakes available for delivery to employees ($X^2=19.34$).

Institutional Characteristics: Community

Chi-square values were computed to test whether institutional characteristics are independent from marketing techniques used for the community. Table XXII contains the chi-square values examining the relationship between institutional characteristics and current marketing practices to the community.

TABLE XXII

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN INSTITUTIONAL CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO THE COMMUNITY

	Institutional Characteristics								
Marketing	N/Prof	Corp	Fed	City	H/Corp	Other	Beds	Mgt	Pop
df=	1	1	1	1	1	1	8	1	6
Weight program	0.38	2.31	0.05	0.02	0.22	1.36	6.27	0.01	2.65
Nut/counseling	0.62	0.01	0.30	2.25	0.04	3.02[1]	8.58	0.48	4.50
In-home program	0.58	0.09	2.50	0.04	0.04	0.13	12.45	0.58	5.55
Senior/cit meal	0.05						3.73	0.03	11.80[1]
Meals/offices	0.58						8.36	0.66	17.96[3]
Meals/daycare	0.27	0.31	1.70	1.88	0.00	0.02	13.63[1]	0.07	3.34
Meals/schools	1.95						6.57	2.11	5.35
Meals/jails	0.58	0.39	8.99[3]	0.01	1.22	1.70	2.91	0.23	4.44
Vocation train	1.24	0.01	0.30	0.00	0.04	0.29	11.41	0.15	11.08[1]
Nutrition/media	0.54								
Catering	0.96	0.60	1.22	0.51	0.05	0.00	9.41	0.54	4.85
Nut/Products	0.36	0.31	1.70	0.09	0.00	0.02	8.61	0.48	3.35
Consult/Others	0.76	0.11	0.11	0.05	0.05	0.02	9.48	0.03	3.35
Consult/Audits	0.05						8.23	0.07	2.55
Nut/schools	0.00	0.11	0.39	0.13	0.13	0.31	5.03	0.06	2.55
MOW *	0.07	0.02	0.08	0.03	2.72[1]	1.14	9.67	3.02[1]	11.02[1]

* Meals on wheels
1 .10=> p> .05
2 .05=> p> .01
3 p=<.01
Note: data not available indicates calculations could not be performed.

The analyses indicated that two of the marketing techniques for the community were significantly ($p < .01$) related to institutional characteristics. The independent variable, population of the city, was significantly ($p < .01$, $X^2 = 17.96$, $df = 8$) related to the community marketing technique of lunch or coffee breaks to nearby office buildings lacking in-house facilities. The independent variable, government operated (federal) hospitals, was significantly ($p < .01$, $X^2 = 8.99$, $df = 1$) related to the marketing technique of individual tray service or bulk feeding to jails.

Institutional Characteristics: Visitors

Chi-square values were computed to test whether institutional characteristcs are independent from marketing techniques used for hospital visitors. Table XXIII contains the chi-square values examining the relationship between institutional characteristics and current marketing practices to hospital visitors.

TABLE XXIII

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN INSTITUTIONAL CHARACTERISTICS AND CURRENT MARKETING PRACTICES TO HOSPITAL VISITORS

	Institutional Characteristics								
Marketing df=	N/Prof 1	Corp 1	Fed 1	City 1	H/Corp 1	Other 1	Beds 8	Mgt 1	Pop 6
Gourmet meals	1.14	0.01	0.90	0.03	5.07[2]	0.04	6.97	3.10[1]	6.02
Vending	0.01	0.02	0.08	0.27	0.12	0.00	6.77	1.08	3.60
Delicatessen	0.05	0.39	8.99[3]	0.01	1.22	1.70	17.74[2]	0.01	9.40
Cafeteria	0.01	0.02	0.68	1.33	0.51	1.08	10.59	0.14	5.21
Restaurant	1.95	0.39	8.99[3]	0.01	1.22	1.70	13.73[1]	0.66	4.14
Coffee shop	0.26	0.47	1.70	0.57	0.00	0.02	16.81[2]	0.13	3.33
Fast food	0.04	0.32	0.52	0.54	0.28	0.20	29.76[3]	0.10	16.54[3]
Take-out food	0.14	0.11	0.39	0.13	0.13	0.31	14.05[1]	0.09	19.46[3]
Bakery items	0.00	0.11	0.39	0.13	0.13	0.31	9.62	0.03	8.59

1 .10=> p >.05
2 .05=> p >.01
3 p=<.01

The analyses indicated that three of the marketing techniques for hospital visitors were significantly related ($p < .05$) to institutional characteristics. The independent variable, population of the city, was significantly ($p < .01$, df=1) related to the visitor marketing techniques of fast food areas ($X^2=16.54$) and take-out food ($X^2=19.46$). The independent variable, government operated (federal) hospitals, was significantly ($p < .01$, df=1) related to the marketing techniques of delicatessens ($X^2=8.99$) and restaurant service ($X^2=8.99$). The

independent variable, number of beds (df=6) was significantly related to the marketing techniques of fast-food areas ($p < .01$, $X^2=29.76$), delicatessens ($p < .05$, $X^2=17.74$) and coffee shops ($p < .05$, $X^2=16.81$). Hospitals owned and managed by hospital corporations were significantly ($p < .05$, $X^2=5.07$, df=1) related to the use of gourmet meal tickets for visitors.

Fourteen significant ($p < .01$) relationships were noted between institutional characteristics and marketing techniques for in-house patients, hospital employees and visitors (Tables XX, XXI, XXIII). Based on these relationships the researcher rejected parts a, b and d of H_2 and retained part c. Institutional characteristics effected marketing techniques for in-house patients, employees and visitors, but had no effect on techniques for the community.

H_3: Respondent characteristics will have no effect on the perceived importance of marketing techniques. Specific techniques examined were:

a. discounting
b. reputation
c. merchandising
d. public relations
e. patron surveys
f. advertising
g. new product development
h. sales promotion
i. product/service/positioning

The relationships between the 10 selected respondent characteristics and the nine marketing techniques referred to in the

null hypothesis were determined by 1) performing one-way analyses of variance (ANOVA) on each of the ratings of marketing techniques using respondent characteristics; as independent variables and by 2) performing a multiple regression on each of the ratings using a three variable set of respondent characteristics. The amount of variance in the ratings that was accounted for by the three independent variables was examined. The perceived opinion of "not important," to "important" was assigned by respondents by circling the corresponding number on a scale of one to five; one being "not important," and five of "important" (Table XXIX).

TABLE XXIX

F VALUES OF ONE WAY ANOVA EXAMINING THE EFFECT OF RESPONDENT CHARACTERISTICS ON PERCEIVED IMPORTANCE OF MARKETING

	Respondent Characteristics									
Techniques	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
Discount	0.92	4.46[2]	0.21	0.10	0.94	1.43	0.00	0.54	0.43	0.55
df=	4,87	1,82	3,86	1,88	1,88	1,88	1,88	1,85	1,80	1,90
Reputat	0.59	0.68	1.20	0.72	0.30	0.81	0.03	0.33	0.56	1.01
df=	4,85	1,80	3,84	1,86	1,86	1,86	1,86	1,86	1,79	1,88
Merchan	1.45	1.33	0.80	0.02	2.05	2.09	3.33[1]	0.51	0.00	0.83
df=	4,86	1,82	3,85	1,87	1,87	1,87	1,87	1,84	1,79	1,89
Pub/rel	3.25[3]	1.51	0.93	1.32	0.55	1.92	2.12	0.11	0.57	0.20
df=	4,86	1,81	3,85	1,87	1,87	1,87	1,87	1,84	1,79	1,89
Surveys	1.86	3.99[2]	1.64	12.22[3]	0.18	2.29	0.69	0.08	10.18[3]	1.14
df=	4,87	1,82	3,86	1,88	1,88	1,88	1,88	1,85	1,80	1,90
Advertise	2.06[1]	0.38	0.33	0.57	3.20[1]	1.15	3.76[2]	1.18	0.23	1.79
df=	4,86	1,81	3,85	1,87	1,87	1,87	1,87	1,85	1,79	1,89
Prod/dev	2.93[2]	0.13	0.81	0.40	0.77	2.41	1.11	0.01	0.60	0.61
df=	4,86	1,81	3,85	1,87	1,87	1,87	1,87	1,84	1,79	1,89
Sales pro	0.34	0.23	2.59[2]	0.35	1.60	0.12	1.05	0.74	1.07	0.19
df=	4,84	1,79	3,83	1,85	1,85	1,85	1,85	1,82	1,77	1,87
Prod/pos	0.63	3.08[1]	1.37	2.33	0.01	0.30	0.01	0.00	1.57	0.59
df=	4,85	1,80	3,84	1,86	1,86	1,86	1,86	1,83	1,79	1,88

1 .10=> p >.05
2 .05=> p >.01
3 p=<.01

Five significant relationships were found at p=< .05. Three significant relationships were found at p= <.01. One-way ANOVA's indicated there was a significant (p <.05, F=4.46, df=1,82) relationship between sex of the foodservice directors and discounting. Female

foodservice directors (m=4.03) were more likely to rate discounting significantly more important than male (m=3.40) foodservice directors. The analyses also indicated a significant ($p < .05$, $F=3.76$, $df=1,87$) relationship between "Other" professional affiliation and advertising. As previously seen in Table IV of this chapter, respondents indicating "Other" were members of the Dietary Managers Association.

By using one-way ANOVA's, three significant relationships were recognized between respondent characteristics and the use of patron surveys. The analyses revealed that there was a significant ($p < .05$, $F=3.99$, $df=1,82$) relationship between gender and patron surveys. Male foodservice directors (m=4.40) were more likely to rate surveys significantly more important than female (m=3.83) foodservice directors. There was also a significant ($p= .001$, $F=12.22$, $df=1,88$) relationship between ADA membership and surveys. Non-members of ADA (m=4.42) were more likely to rate surveys significantly more important than members of ADA (m=3.68). The analyses also indicated a significant ($p= .002$, $F=10.18$, $df=1,80$) relationship between registration status and surveys. Non-registered (m=4.40) respondents were more likely to rate surveys significantly more important than registered (m=3.65) respondents. Foodservice directors who perceive surveys as important appear to consider the feedback from customers as beneficial, improving on weaknesses and marketing the foodservice department in general.

The analyses indicated a significant ($p < .01$, $F=3.25$, $df=4,86$) relationship between the age of foodservice directors and the importance of public relations. Post hoc analyses were computed using a least significant difference (LSD) statistic and revealed that foodservice directors between the ages of 20 and 29 rated public relations

significantly ($p < .05$) more important ($m=4.27$) than directors between the ages of 60 and 69 ($m=3.55$). Respondents between the ages of 50 and 59 tended to rate public relations ($p < .10$) more important ($m=4.62$) than respondents between the ages of 30 and 39 ($m=4.15$). Respondents between the ages of 30 and 39 rated public relations significantly ($p < .05$) more important ($m=4.15$) than respondents between the ages of 60 and 69 ($m=3.55$). Respondents between the ages of 40 and 49 rated public relations significantly ($p < .01$) more important ($m=4.44$) than respondents between the ages of 60 and 69 ($m=3.55$). Respondents between the ages of 50 and 59 rated public relations significantly ($p < .01$) more important ($m=4.62$) than respondents between the ages of 60 and 69 ($m=3.55$).

One-way ANOVA's indicated a significant ($p < .05$, $F=2.93$, $df=4,86$) relationship between the age of foodservice directors and the importance of product development. Post hoc analyses computed using a least significant difference (LSD) statistic revealed that foodservice directors between the ages of 20 and 29 rated product development significantly ($p < .05$) more important ($m=4.27$) than directors between the ages of 40 and 49 ($m=3.65$). The analysis indicated that respondents between the ages of 20 and 29 rated product development significantly more ($p < .05$) important ($m=4.27$) than respondents between the ages of 60 and 69 ($m=3.55$). Respondents between the ages of 30 and 39 rated product development significantly ($p < .01$) more important ($m=4.23$) than respondents between the ages of 40 and 49 ($m=3.65$). Respondents between the ages of 30 and 39 rated product development significantly ($p < .01$) more important ($m=4.23$) than respondents between the ages of 60 and 69 ($m=3.55$). Respondents between the ages of 50 and 59 rated product

development significantly ($p < .05$) more important ($m=4.31$) than respondents between the ages of 40 and 49 ($m=3.65$). Respondents between the ages of 50 and 59 rated product development significantly ($p < .05$) more important ($m=4.31$) than respondents between the ages of 60 and 69 ($m=3.55$).

The analyses indicated a significant ($p < .05$, $F=2.59$, $df=3,83$) relationship between the degree of the foodservice directors and the rating of sales promotions. Post hoc analyses computed revealed that foodservice directors with either a high school degree ($p < .10$) or a bachelor's degree ($p < .01$) rated sales promotion significantly higher than respondents with a master's degree.

Each of the ratings of marketing techniques were further analyzed by performing a multiple regression using a three variable set of respondent characteristics. These variables were age, degree and work experience. Only advertising and product development yielded significant results (Table XXX).

TABLE XXX

R^2 VALUES FROM MULTIPLE REGRESSION STATEMENTS EXAMINING THE RESULTS OF SELECTED RESPONDENT CHARACTERISTICS ON RATINGS OF MARKETING TECHNIQUES

	Respondent Characteristics			
	Age Degree Work Experience		Age	Degree	Work Experience
Techniques	R^2 values		t-values		
df=	3,77				
Advertising	.090[1]		1.95[1]	1.17	0.63
Product Develop	.083[1]		2.21[2]	1.06	0.07

1 .10= >p >.05
2 .05= >p >.01
3 p= <01

The set of three respondent characteristics accounted for a trend toward a significant ($p < .10$) percentage of the variance in the dependent variables advertising (R^2=.090) and new product development (R^2=.083). For the variable, new product development, age added a significant ($p < .05$, $t=2.21$) portion of variance when added to degree and work experience. For advertising, age also added a significant portion ($p < .10$, $t=1.95$) of variance when added to degree and work experience.

Five ($p < .05$) and three ($p < .01$) significant relationships were noted between respondent characteristics and the perceived importance of marketing ratings (Table XXIX). Based on these relationships the researcher rejected parts a, d, e, f, g and h of H_3 and retained parts b, c and i. Respondent characteristics effected the perceived

importance of discounting, public relations, patron surveys, advertising, new product development and sales promotions, but had no effect on reputation, merchandising and product/service/positioning.

H_4: Institutional characteristics will have no effect on the perceived importance of marketing techniques. Nine specific techniques as listed in H_3 were examined (p.71).

The relationships between the nine institutional characteristics, and the nine marketing techniques referred to in the null hypothesis were determined by 1) performing one-way ANOVA's on each of the ratings using institutional characteristics; as independent variables (Table XXXI) and by 2) examining correlations between the number of meals served and each of the ratings (Table XXXII) and by 3) performing a multiple regression on each of the marketing ratings using a three variable set of institutional characteristics. The amount of variance in the ratings that was accounted for by the three independent variables were examined (Table XXXIII).

TABLE XXXI

F VALUES OF ONE WAY ANOVA EXAMINING THE EFFECT OF INSTITUTIONAL CHARACTERISTICS ON PERCEIVED IMPORTANCE OF MARKETING

	Institutional Characteristics								
Techniques	N/Prof	Corp	Fed	City	H/Corp	Other	Beds	Mgt	Pop
Discounting	0.48	2.27	0.05	4.00[2]	0.22	1.16	2.02[2]	1.09	0.67
df=	1,72	1,38	1,38	1,38	1,38	1,38	8,83	1,90	7,83
Reputation	2.22[2]	0.04	9.60[3]	0.16	1.79	0.18	1.80[1]	1.54	0.51
df=	1,71	1,36	1,36	1,36	1,36	1,36	8,81	1,88	7,81
Merchandising	2.03	1.88	0.24	1.66	1.13	0.15	1.92	2.94[1]	0.85
df=	1,71	1,38	1,38	1,38	1,38	1,38	8,82	1,89	7,82
Public rel	0.30	0.02	1.34	0.05	1.88	0.01	1.82	0.56	0.22
df=	1,71	1,38	1,38	1,38	1,38	1,38	8,82	1,89	7,82
Surveys	1.74	0.06	0.55	2.29	4.58[2]	0.01	0.87	2.69	0.74
df=	1,72	1,38	1,38	1,38	1,38	1,38	8,83	1,90	7,83
Advertising	0.73	1.16	0.00	2.29	2.95	0.16	0.53	7.17[3]	0.52
df=	1,72	1,37	1,37	1,37	1,37	1,37	8,82	1,89	7,82
Product dev.	0.45	0.02	0.48	0.23	0.76	1.91	0.58	0.03	0.54
df=	1,71	1,38	1,38	1,38	1,38	1,38	8,82	1,89	7,82
Sales promo	3.50[1]	0.83	0.02	0.17	3.71	1.63	0.51	1.10	0.45
df=	1,69	1,37	1,37	1,37	1,37	1,37	8,80	1,87	7,80
Prod/Serv/Pos.	2.51	2.00	0.47	2.62	2.07	0.77	0.71	1.28	0.84
df=	1,70	1,38	1,38	1,38	1,38	1,38	8,81	1,88	7,81

1 .10= > p > .05
2 .05= > p > .01
3 p= <.01

Four significant relationships were found at p= < .05 and two significant relationships were found at p=< .01. Three significant relationships were recognized between the type of hospital and the perceived importance of marketing. The analyses indicated a significant

relationship ($p < .05$) between the institutional characteristic, type of hospital and discounting. Respondents employed in a government operated (city, county) hospital were more likely to rate discounting significantly ($p < .05$, $F=4.00$, $df=1,38$) more important ($m=4.14$) than respondents employed in other types of hospitals ($m=3.44$). The analyses indicated a significant relationship ($p < .05$) between the type of hospital and the importance of surveys. Respondents ($m=4.8$) employed in a hospital owned and managed by a hospital corporation were more likely to rate surveys significantly ($p < .05$, $F=4.58$, $df=1,38$) more important than respondents ($m=3.94$) employed in other types of hospitals. The analyses indicated a highly significant relationship ($p= .004$) between the type of hospital and the perceived importance of reputation of the foodservice department. Respondents ($m=4.69$) employed in hospitals other than government operated (federal) rated reputation significantly ($p < .01$, $F=9.60$, $df=1,36$) more important than respondents ($m=3.50$) employed in federal hospitals.

The one-way ANOVA's indicated a trend ($p < .10$, $F=1.80$, $df=8,81$) toward significance between another institutional characteristic, number of beds, and again, the respondents rating of reputation. Post hoc analyses were computed using a least significant difference (LSD) statistic, revealing that foodservice directors employed in hospitals with a number of beds of 51 to 100 rated reputation significantly higher ($p < .01$, $m=4.65$) than respondents in hospitals with a number of beds less than 50 ($m=3.67$). Respondents in hospitals with a number of beds of 101 to 200 rated reputation significantly ($p < .01$) higher ($m=4.69$) than respondents in hospitals with a number of beds less than 50 ($m=3.67$). The majority of respondents were noted to be from hospitals

with the number of beds at 51 to 200 (Table IX). Respondents in hospitals with a number of beds of 201 to 300 rated reputation significantly ($p < .05$) higher ($m=4.63$) than respondents in hospitals with a number of beds less than 50 ($m=3.67$). Respondents in hospitals with a number of beds of 301 to 400 rated reputation significantly ($p=.006$) higher ($m=4.91$) than respondents with a number of beds less than 50 ($m=3.67$). Respondents in hospitals with a number of beds of 301 to 400 rated reputation significantly ($p < .05$) higher ($m=4.91$) than respondents in hospitals with a number of beds of 501 to 600 ($m=4.17$). Respondents in hospitals with a number of beds of 301 to 400 rated reputation significantly ($p < .05$) higher ($m=4.91$) than respondents in hospitals with a number of beds of 601 to 700 ($m=4.00$). The analyses indicated a trend toward a significant relationship between number of beds and the respondents ratings of reputation. The difference between the means suggested ($p < .10$) that respondents employed in hospitals with a number of beds of 401 to 500 rated reputation significantly higher ($m=4.6$) than respondents in hospitals with a number of beds less than 50 ($m=3.67$). The findings on reputation of the foodservice department compared to number of beds of the hospital suggest that a smaller hospital may not have to compete with other hospitals in the community, as opposed to larger hospitals, where reputation may be more important due to competition among hospitals.

The analyses indicated there was a significant ($p < .05$, $F=2.02$, $df=8,83$) relationship between the institutional characteristic, number of beds and discounting. Post hoc analyses were computed revealing that foodservice directors employed in hospitals with a number of beds of 51 to 100 rated discounting significantly ($p < .05$) more important ($m=4.12$)

than directors in hospitals with a number of beds of 401 to 500 (m=3.00). One-way ANOVA's indicated that respondents in hospitals with a number of beds of 201 to 300 rated discounting significantly ($p < .05$) more important (m=4.25) than respondents in hospitals with a number of beds of 401 to 500 (m=3.00). The analyses indicated a trend toward a significant relationship between number of beds and discounting. The difference between the means suggested ($p < .10$) that respondents in hospitals with a number of beds of 101 to 200 rated discounting more important (3.92) than respondents in hospitals with a number of beds of 401 to 500 (m=3.00).

The analyses indicated a significant relationship between management of the foodservice department and the respondents ratings of advertising and merchandising. The analyses revealed that respondents employed by a contract foodservice company were more likely to rate advertising ($p=.009$, $F=7.17$, $df=1,89$) and merchandising ($p < .10$, $F=2.94$, $df=1,89$) more important than respondents employed by the hospital.

Correlation coeficients and the associated p values were computed between the number of meals served and the ratings of marketing techniques in order to examine their relationship. Table XXXII presents the r values and the associated p values.

TABLE XXXII

r AND ASSOCIATED p VALUES OF CORRELATIONS BETWEEN THE NUMBER OF MEALS SERVED AND THE IMPORTANCE OF MARKETING RATINGS OF SPECIFIC MARKETING STRATEGIES

	r	p
Discounting	-.377	.001[3]
Reputation	-.182	.105[1]
Merchandising	.124	.275
Public relations	.186	.094[1]
Patron surveys	-.106	.650
Advertising	-.045	.693
Product development	-.011	.921
Sales promotion	-.123	.282
Product/Service/Positioning	-.110	.664

1 .10= >p >.05
2 .05= >p >.01
3 p=<.01

The institutional characteristic, total number of meals served daily was correlated with respondents ratings of the nine marketing techniques. The correlation between total number of meals and reputation (r= -.182) suggested (p <.10) that as the number of meals served daily increase the rating of reputation as a marketing technique decreases. In contrast, the correlation between number of meals and public relations (r=.186) suggested (p =.09) that as the number of meals increases, foodservice directors are more likely to rate public relations higher. A highly significant (p =.001) negative correlation

(r= -.377) resulted between the total number of meals and the ratings of discounting. As the number of meals served increases, foodservice directors are more likely to rate discounting as less important.

Each of the ratings of marketing techniques were further analyzed by performing a multiple regression using a three variable set of institutional characteristics. These variables were total meals served daily, population of the city and the number of beds of the hospital (Table XXXIII).

TABLE XXXIII

R^2 VALUES FROM MULTIPLE REGRESSION STATEMENTS EXAMINING THE RESULTS OF SELECTED INSTITUTIONAL CHARACTERISTICS ON RATINGS OF MARKETING TECHNIQUES

	Institutional Characteristics			
	Total Meals Served Daily Population of City Number of Beds			
Techniques	R^2 values	Meals	Population	Beds
		t-values		
df=	3,68			
Discounting	.256[3]	3.07[3]	2.35[2]	1.04
Patron surveys	.158[3]	2.88[2]	2.31[2]	1.63
Advertising	.091[1]	2.01[2]	1.34	1.70
Sales promotion	.097[1]	2.07[3]	2.02[2]	0.51
Prod/Serv/Position	.136[3]	2.98[3]	1.58	2.31[2]

1 .10=> p> .05
2 .05=> p> .01
3 p=<.01
Note: df=3,74 for product/service/positioning

The set of three institutional characteristics accounted for a significant percentage of the variance in the dependent varaibles, discounting ($p < .01$, $R^2 = .256$), advertising ($p < .10$, $R^2 = .091$), sales promotion ($p < .01$, $R^2 = .097$), surveys ($p < .01$, $R^2 = .158$), and product/service/positioning ($p < .01$, $R^2 = .136$). For the variable, discounting, total meals ($p < .01$, $t = 3.07$) and population ($p < .05$, $t = 2.35$) added a significant portion of variance when added to number of beds. For the variable, surveys, total meals ($p < .05$, $t = 2.88$) and population ($p < .05$, $t = 2.31$) added a significant portion of variance when added to number of beds. For product/sevice/positioning, the number of beds ($p < .05$, $t = 2.31$) and total meals ($p < .01$, $t = 2.98$) added a significant portion of variance when added to population. For advertising, a trend for total meals ($p < .05$, $t = 2.01$) added a significant portion of variance, when added to population and number of beds. For sales promotion, a trend for total meals ($p < .05$, $t = 2.07$) and population ($p < .05$, $t = 2.02$) added a significant portion of variance, when added to number of beds.

Four ($p < .05$) and two ($p < .01$) significant relationships were noted between institutional characteristics and the perceived importance of marketing ratings (Table XXX). Based on these relationships the researcher rejected parts a, b, e, f and i of H_4 and retained parts c, d, g and h. Institutional characteristics effected the perceived importance of discounting, reputation, patron surveys, advertising and product/service/positioning, but had no effect on merchandising, public relations, new product development and sales promotion.

H_5: Respondent characteristics will have no effect on the perceived importance of marketing relative to:

a. menu planning and purchasing

b. education and training

c. administration (budgeting, supervising, reports)

d. therapeutics

The relationships between the respondent characteristics and the four management activities referred to in the null hypothesis were determined by 1) performing one-way ANOVA'S on each of the management activities using respondent characteristics; as independent variables (Table XXXIV) and by 2) performing a multiple regression on each of the management activities using a three variable set of respondent characteristics. The percentage of time spent in each activity was assigned by respondents (Table XXXV).

TABLE XXXIV

F VALUES OF ONE WAY ANOVA EXAMINING THE EFFECT OF RESPONDENT CHARACTERISTICS ON PERCEIVED RELATIVE IMPORTANCE OF MARKETING

	Respondent Characteristics									
Mgmt Activ	Age	Sex	Degree	ADA	ASHFSA	NRA	Other	Exper	RD	Emp
df=	4,85	1,80	3,84	1,86	1,86	1,86	1,86	1,83	1,78	1,88
Menu Plan	0.83	1.44	0.53	0.37	1.18	0.66	0.00	1.10	0.02	1.54
Educ/Train	1.16	0.18	0.49	0.12	0.04	0.84	0.99	5.22[2]	0.83	1.09
Marketing	1.25	0.00	2.72[2]	0.04	5.73[3]	0.02	2.72	0.47	0.16	0.31
Admin.	0.51	6.18[3]	0.20	4.30[2]	8.73[3]	1.39	0.59	0.22	1.53	2.23
Therap	0.31	4.20[2]	1.06	4.39[2]	13.28[3]	1.42	0.05	0.00	4.12[2]	14.08[3]

1 .10= >p >.05
2 .05= >p >.01
3 p=<.01

Six significant relationships were found at p= < 0.5. Five significant relationships were found at p= <.01. One-way ANOVA's indicated a significant relationship (p <.05, F=5.22, df=1,83) between the respondents number of years work experience in foodservice and the amount of management time spent on education and training in the foodservice department. As previously seen in Table V of this chapter, a significant difference was noticed between work experience of five years or less (N=5) and over six years (N=87) by respondents. Respondents with more than 10 years (m=3.95) of experience spent more time on education and training than respondents with six to 10 years (m=3.77) of experience.

Respondents were also asked to indicate the percentage of

management time spent on marketing. The analyses revealed two significant relationships between respondent characteristics and the amount of time spent on marketing in foodservice departments. The analyses indicated a significant ($p < .05$, $F=2.72$, $df=3,84$) relationship between degree and marketing. Post hoc analyses were computed using a least significant difference (LSD) statistic revealing that foodservice directors with a bachelors degree spend significantly more time in marketing activities than foodservice directors with a high school degree ($p < .05$) and directors with a masters degree ($p < .01$). The analyses also indicated a significant ($p= .018$, $F=5.73$, $df=1,86$) relationship between members of ASHFSA and marketing. Members of ASHFSA ($m=12.52$) spent significantly more time in marketing activities than non-members ($m=8.76$) of ASHFSA).

One-way ANOVA's revealed there were three significant relationships between respondent characteristics and the amount of management time spent on administrative activities. The analyses indicated a significant ($p < .01$, $F=6.18$, $df=1$) relationship between sex and administrative activities. Male foodservice directors ($m=56.27$) spent more management time in administrative activities than female ($m=44.45$) foodservice directors. The analyses indicated a significant ($p < .05$, $F=4.30$, $df=1,86$) relationship between members of ADA and administrative activities. Non-members of ADA ($m=51.10$) were more likely to spend more time in administrative activities than members ($m=43.42$) of ADA. The analyses also indicated a highly significant relationship ($p= .004$, $F=8.73$, $df=1,86$) between members of ASHFSA and administrative activities. Members of ASHFSA ($m=51.00$) spent more management time in administrative activities than non-members ($m=40.79$) of ASHFSA.

The analyses revealed five significant relationships between respondent characteristics and the amount of management time spent on therapeutic activities. The analyses indicated a significant ($p < .05$, $F=4.39$, $df=1,86$) relationship between members of ADA and therapeutic activities. Members of ADA ($m=14.81$) spent more time on therapeutic activities than non-members ($m=7.97$) of ADA. The analyses indicated a significant ($p < .05$, $F= 4.12$, $df=1,78$) relationship between registration status and therapeutic activities. Respondents who were registered dietitians ($m=15.16$) spent more time on therapeutic activities than non-registered ($m=7.88$) respondents. The analyses indicated a significant ($p < .05$, $F=4.20$, $df=1,80$) relationship between gender and therapeutic activities. Female foodservice directors ($m=13.24$) were more likely to spend more management time in therapeutic activities than male ($m=4.73$) foodservice directors. One-way ANOVA's revealed a highly significant ($p= .001$, $F=13.28$, $df=1,86$) relationship between members of ASHFSA and therapeutic activities. Non-members ($m=18.07$) of ASHFSA spent more time in therapeutic activities than members ($m=7.22$) of ASHFSA. The analyses indicated another highly significant ($p= .001$, $F=14.08$, $df=1,88$) relationship between employment status and therapeutic activities. Respondents employed part-time ($m=41.67$) spent more management time on therapeutic activities than respondents ($m=11.10$) employed full-time.

Each of the selected management activities were further analyzed by performing a multiple regression using the three variable set of respondent characteristics. These variables were work experience, degree and age of the foodservice directors (Table XXXV).

TABLE XXXV

R^2 VALUES FROM MULTIPLE REGRESSION STATEMENTS EXAMINING THE RESULTS OF SELECTED RESPONDENT CHARACTERISTICS ON SELECTED MANAGEMENT ACTIVITIES TO DETERMINE THE PERCEIVED RELATIVE IMPORTANCE OF MARKETING

	Respondent Characteristics				
	Work Experience Degree Age		Work Experience	Degree	Age
Management Activities	R^2 values		t-values		
df=	3,82				
Administration	.078[1]		2.30[2]	0.17	2.30[2]

1 .10=> p >.05
2 .05=> p >.01
3 p=<.01

The results of the multiple regression analyses suggested ($p< .10$, $R^2=.078$) that the set of three respondent characteristics may be able to account for a percentage of the variance in the dependent variable, administration. Age (t=2.30) and work experience (t=2.30) accounted for a significantly ($p <.05$) greater portion of that variance than degree.

H_6: Institutional characteristics will have no effect on the perceived importance of marketing relative to four specific management actvities as listed in H_5 were examined (p 86).

The relationships between the nine institutional characteristics, and the four management activities referred to in the null hypothesis were determined by 1) performing one-way ANOVA's on each of the management activities using institutional characteristics; as independent variables (Table XXXVI) and by 2) examining correlations

between the number of meals served and each of the management activities (Table XXXVII) and by 3) performing a multiple regression on each of the management activities using a three variable set of institutional characteristics (Table XXXVIII).

TABLE XXXVI

F VALUES OF ONE WAY ANOVA EXAMINING THE EFFECT OF INSTITUTIONAL CHARACTERISTICS ON PERCEIVED RELATIVE IMPORTANCE OF MARKETING

	Institutional Characteristics								
Mgmt Activ	N/Prof	Corp	Fed	City	H/Corp	Other	Beds	Mgt	Pop
df=	1,71	1,37	1,37	1,37	1,37	1,37	8,81	1,88	7,81
Menu Plan/Purch	2.08	0.08	0.71	0.05	1.48	0.30	1.63	2.49	1.33
Educ/Training	0.26	0.68	0.72	4.83[2]	3.03	0.05	1.44	0.34	2.79[3]
Marketing	0.06	1.40	0.07	0.41	0.46	2.23	3.50[3]	0.50	1.69
Administration	2.02	0.74	1.85	0.63	0.55	1.27	3.73[3]	6.12[3]	3.82[3]
Therapeutics	0.16	0.16	0.87	4.22[2]	0.89	0.52	4.09[3]	3.30[1]	2.03[1]

1 .10= > p > .05
2 .05= > p > .01
3 p=< .01

Two significant (p = <.05) and six (p =< .01) relationships were found between institutional characteristics and management activities. The analyses revealed a significant relationship (p= .01, F=2.79, df=7,81) between population of the city and amount of time spent on education and training by respondents. Post hoc analyses were computed

using a least significant difference (LSD) statistic revealing that respondents in larger cities of 750,000 to 1,000,000 spent significantly more ($p < .01$) time ($m=23.75$) in education and training activities than respondents in cities of less than 10,000 ($m=11.42$). Respondents in cities with a population more than 1,000,000 spent significantly more time ($p < .01$, $m=21.67$) in education and training activities than respondents in cities of less than 10,000 ($m=11.42$). Respondents in cities with a population of 750,000 to 1,000,000 spent significantly more ($p = .001$) time ($m=23.75$) in education and training than respondents in cities of 10,000 to 49,000 ($m=11.78$). Respondents in cities with a population more than 1,000,000 spent significantly ($p < .01$) more time ($m=21.67$) in education and training than respondents in cities of 10,000 to 49,000 ($m=11.78$).

Post hoc analyses revealed that respondents in cities of 750,000 to 1,000,000 spent significantly ($p=.004$) more time ($m=23.75$) in education and training than respondents in cities of 50,000 to 99,000 ($m=12.57$). Respondents in cities more than 1,000,000 spent significantly ($p < .05$) more time ($m=21.67$) in education and training than respondents in cities of 50,000 to 99,000 ($m=12.57$). Respondents in cities of 750,000 to 1,000,000 spent significantly ($p=.003$) more time ($m=23.75$) in education and training than respondents in cities of 100,000 to 249,000 ($m=11.44$). Post hoc analyses also indicated that respondents in cities more than 1,000,000 spent significantly ($p < .05$) more time ($m=21.67$) in education and training than respondents in cities of 100,000 to 249,000 ($m=11.44$). Respondents in cities of 750,000 to 1,000,000 spent significantly ($p=.006$) more time ($m=23.75$) in education and training than respondents in cities of 250,000 to 499,000 ($m=7.50$). Respondents in cities more

than 1,000,000 spent significantly ($p < .05$) more time (m=21.67) in education and training than respondents in cities of 250,000 to 499,000 (m=7.50)

The analysis indicated a significant ($p < .05$, $F=4.83$, $df=1,37$) relationship between government operated (city, county) hospitals and the amount of time spent on education and training by respondents. Respondents (m=16.59) employed in hospitals other than city, county hospitals spent more time on education and training than respondents (m=11.59) employed in the city, county hospitals.

The analyses indicated a highly significant relationship ($p= .002$, $F=3.50$, $df=8,81$) between number of beds and the amount of time respondents spent on marketing activities. Post hoc analyses were computed using a least significant difference (LSD) statistic and revealed that foodservice directors employed in hospitals with a number of beds of 201 to 300 spend significantly ($p < .05$) more time (13.75) on marketing activities than directors in hospitals with a number of beds less than 50 (m=5.0).

A trend toward significance ($p < .10$) was noted for the remaining analyses between number of beds and the amount of time spent on marketing: The difference between the means suggested that respondents with a number of beds of 201 to 300 spend more time (m=13.75) on marketing activities than respondents with a number of beds of 51 to 100 (m=8.81). Respondents with a number of beds of 301 to 400 spend more time (m=12.25) on marketing activities than respondents with a number of beds less than 50 (m=5.0).

The analyses revealed three significant relationships between institutional characteristics and the amount of management time spent on

administration. The analyses indicated a significant relationship (p=.001, F=3.73, df=8,81) between number of beds and the amount of time spent on administration. Post hoc analyses computed using a least significant difference (LSD) statistic revealed that respondents with the number of beds of 501 to 600 spent significantly (p <.05) more time (m=53.57) on administration than respondents with the number of beds of less than 50 (m=33.33). Respondents with a number of beds of 601 to 700 spent significantly (p <.01) more time (m=80.00) on administration than respondents with the number of beds of less than 50 (m=33.33). Respondents with the number of beds of 301 to 400 spent significantly more (p <.05) time (m=51.83) on administration than respondents with the number of beds of 51 to 100 (m=41.19). Respondents with a number of beds of 401 to 500 spent significantly (p <.01) more time (M=59.00) on administration than respondents with a number of beds of 51 to 100 (m=40.19). Respondents with a number of beds of 501 to 600 spent significantly (p <.05) more time (m=53.57) on administration than respondents with a number of beds of 51 to 100 (m=40.19). Respondents with a number of beds of 601 to 700 spent significantly (p =.001) more time (m=80.00) on administration than respondents with a number of beds of 51 to 100 (m=40.19).

Post hoc alalyses also revealed that respondents with a number of beds of 401 to 500 spent significantly (p <.05) more time (m=42.68) on administration than respondents with a number of beds of 101 to 200 (m=42.68). Respondents with a number of beds of 601 to 700 spent significantly (p=.003) more time (m=80.00) on administration than respondents with a number of beds of 101 to 200 (m=42.68). Respondents with a number of beds of 601 to 700 spent significantly (p <.01) more

time (m=80.00) on administration than respondents with a number of beds of 201 to 300 (m=46.88). Respondents with a number of beds of 501 to 600 spent significantly ($p < .01$) more time (m=53.57) on administration than respondents with a number of beds of 301 to 400 (m=51.83). Respondents with a number of beds of 601 to 700 spent significantly more ($p < .01$) time (m=80.00) on administration than respondents with a number of beds of 501 to 600 (m=53.57).

The analyses indicated a trend toward significance between number of beds and the amount of time respondents spend on administrative activities. The difference between the means suggested ($p < .10$) that respondents employed in hospitals with a number of beds of 401 to 500 spend significantly more time (m=59.0) on administration than respondents in hospitals with a number of beds less than 50 (m=33.33).

The analyses indicated a significant relationship ($p < .01$, $F=6.12$, $df=1,88$) between management of the foodservice department and the amount of time spent on administration. Respondents employed by a contract foodservice company (m=60.00) spent more time in administrative activities than respondents (m=44.74) employed by the hospital.

The analyses indicated a highly significant relationship ($p = .002$, $F=3.82$, $df=7,81$) between population of the city where hospitals were located and administration. Post hoc analyses revealed that respondents in cities with a population of 100,000 to 249,000 spent significantly more ($p < .01$) time (m=62.22) on administration than respondents in cities with a population of less than 10,000 (m=40.95). Respondents in cities with a population of 250,000 to 499,000 spent significantly more ($p < .01$) time (m=77.50) on administration than respondents in cities with a population of less than 10,000 (m=40.95). Respondents in cities

with a population of 100,000 to 249,000 spent significantly ($p < .01$) more time (m=62.22) on administration than respondents in cities of 10,000 to 49,000 (m=43.95). Respondents in cities with a population of 250,000 to 499,000 spent significantly ($p < .01$) more time (m=77.50) on administration than respondents with a population of 10,000 to 49,000 (m=43.95). Respondents in cities with a population of 100,000-249,000 spent significantly more ($p < .05$) time (m=62.22) on administration than respondents in cities of 50,000 to 99,000 (m=48.57). The analysis indicated that respondents in cities with a population of 250,000 to 499,000 spent significantly ($p < .01$) more time (m=77.50) on administration than respondents in cities with a population of 50,000 to 99,000 (m=48.57).

Post hoc analyses computed using a least significant difference (LSD) statistic revealed that foodservice directors employed in hospitals with a number of beds of 51 to 100 spend significantly more time ($p < .01$, m=23.19) on therapeutic activities than directors with a number of beds of 100-200 (m=11.28). The analyses indicated that respondents with a number of beds of 51 to 100 spend significantly more time ($p < .01$, m=23.19) on therapeutic activities than respondents with a number of beds of 200-300 (m=2.50). Respondents with a number of beds of 51 to 100 spend significantly ($p < .01$) more time (m=23.19) on therapeutics than respondents with a number of beds of 301 to 400 (m=4.83). Respondents with a number of beds of 51 to 100 spend significantly ($p < .05$) more time (m= 23.19) on therapeutics than respondents with a number of beds of 401 to 500 (m=11.0). Respondents with a number of beds of 51 to 100 spend significantly ($p < .01$) more time (23.19) than respondents with a number of beds of 501 to 600

(m=3.71). The analyses indicated that respondents with a number of beds of 51 to 100 spend significantly ($p < .01$) more time (23.19) than respondents with a number of beds of 601 to 700 (m=0.66).

The analysis indicated a significant ($p < .05$, $F=4.22$, $df=1,37$) relationship between city, county hospitals and therapeutics. Respondents (m=18.23) employed in city, county hospitals spent more time on therapeutics than respondents (m=8.53) employed in other hospitals.

Correlation coefficients and the associated p values were computed between the number of meals served and management activities in order to examine their relationship. Table XXXVII presents the r values and the associated p values.

TABLE XXXVII

r AND ASSOCIATED p VALUES OF CORRELATIONS BETWEEN THE NUMBER OF MEALS SERVED AND THE IMPORTANCE OF MARKETING RELATIVE TO OTHER MANAGEMENT ACTIVITIES

	r	p
Menu Planning & Purchasing	-.300	.007[3]
Education & Training	.160	.152
Marketing	.540	.001[3]
Administration	.192	.084[1]
Therapeutic	-.341	.002[2]

1 .10=>P>.05
2 .05=>P>.01
3 P=<.01

The institutional characteristic, total number of meals served daily was correlated with the percentages of time respondents reported spent in management activites. The correlation between total number of meals and menu planning and purchasing ($r = -.300$) suggested ($p < .01$) that as the number of meals served daily increase, the amount of time spent in menu planning and purchasing decreases. The correlation between number of meals and therapeutic ($r = -.341$) suggested ($p < .01$) that as the number of meals served increase, the amount of time spent in therapeutic activities decreases. In contrast, the correlation between the number of meals and administration ($r = .192$) suggested ($p < .10$) as the number of meals increase, foodservice directors are more likely to spend more time in administrative activities. Also, the correlation between number of meals and marketing ($r = .540$) suggested ($p = .001$) that as the number of meals increase, directors are more likely to spend more time on marketing activities.

Each of the management activities were further analyzed by performing a multiple regression using the three variable set of institutional characteristics. These variables were total meals served daily, population of the city and number of beds of the hospital (Table XXXVIII).

TABLE XXXVIII

R^2 VALUES FFROM MULTIPLE REGRESSION STATEMENTS EXAMINING THE RESULTS OF INSTITUTIONAL CHARACTERISTICS ON SELECTED MANAGEMENT ACTIVITIES TO DETERMINE THE PERCEIVED RELATIVE IMPORTANCE OF MARKETING

	Institutional Characteristics			
	Total Meals Served Daily Population of City Number of Beds	Meals	Population	Beds
Management Activities	R^2 values		t-values	
df=	3,74			
Menu Planning	.136[3]	1.49	1.21	1.47
Education and Training	.119[2]	0.29	2.35[2]	0.71
Marketing	.388[3]	6.14[3]	1.16	3.33[3]
Administration	.246[3]	1.20	1.36	4.45[3]
Therapeutics	.252[3]	0.01	1.21	2.84[3]

1 .10= >p >.05
2 .05= >p >.01
3 p= <.01

The set of three institutional characteristics accounted for a significant ($p < .01$) percentage of the variance in all of the selected dependent variables. For the variable, education and training (R^2=.119), population added a significant ($p < .05$, t=2.35) portion of the variance when added to total meals served and number of beds. For the variable, marketing (R^2=.388), total meals served daily (t=6.14) and the number of beds (t=3.33) added a significant ($p < .01$) portion of the variance when added to population. For the variable, administration (R^2=.246), the number of beds added a significant ($p < .01$, t=4.45)

portion of the variance, when added to total meals served and population. For the variable, therapeutics (R^2=.252), the number of beds added a significant ($p < .01$, $t=2.84$) portion of the variance, when added to total number of meals served and population.

Two ($p < .05$) and six ($p < .01$) significant relationships were noted between institutional characteristics and the perceived relative importance of marketing scores (Table XXXII). Based on these relationships, the researcher rejected parts b, c, d and e of H_6 and retained part a. Institutional characteristics effected the perceived importance of marketing relative to education and training, administration and therapeutics, but had no effect on menu planning and purchasing.

H_7: There will be no association between respondents perceived relative importance of marketing and marketing techniques actually used.

Respondents were instructed to indicate the percentage of time spent on marketing in relation to other management activities (Table XXXIX).

TABLE XXXIX

MARKETING ACTIVITIES OF FOODSERVICE DIRECTORS
FREQUENCY OF RESPONSE

Amount of Time Spent in Marketing	Frequency	Percentage
0%	2	2.22
2%	1	1.11
3%	2	2.22
4%	1	1.11
5%	24	26.67
6%	1	1.11
7%	3	3.33
10%	33	36.67
15%	9	10.00
20%	10	11.11
25%	1	1.11
30%	1	1.11
40%	1	1.11
45%	1	1.11
	90	

The frequency distribution revealed that of the 90 responses, over one-half (62%) spent at least 10% of their management time on marketing activities. Twenty-four respondents indicated spending five percent, 33 indicated spending 10%, nine indicated spending 15% percent, and 10 respondents spent 20% of their time on marketing. One respondent spent 45% of their time on marketing activities, which was the highest

response noted.

Respondents indicated the percentage of time spent on marketing to determine the perceived importance of marketing in relation to other management activities. These continuous variables were converted into non-parametric variables, analyzing three groups of percentages of time spent in marketing. Based on the pattern of usage and by approximations, the lower 37.77% included the 34 lowest ratings of marketing indicated by respondents, the middle 36.67% included 33 average ratings and the upper 25.55% included 23 highest ratings of marketing. These were grouped and coded into three categorical levels for marketing.

The relationships between the respondents' perceived relative importance of marketing and marketing techniques actually used for in-house patients and employees referred to in the null hypothesis, were determined using chi-square values (Table XXXX).

TABLE XXXX

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENTS PERCEIVED RELATIVE IMPORTANCE OF MARKETING AND MARKETING TECHNIQUES USED FOR IN-HOUSE PATIENTS AND EMPLOYEES

In-house Patients	X^2	Employees	X^2
	df= 2		df= 2
Room service	0.35	Cafeteria	1.55
Gourmet menus	6.19^2	Fast food	2.36
Congratulation meals	1.03	Restaurant	0.35
Suite service	5.87^2	Vending	1.50
Wine service	0.61	Free samples	5.26^1
Fruit baskets	7.22^2	Nut analysis	0.29
Restaurant menus	0.98	Modified diets	2.57
Pediatric carts		Weight programs	2.86
In-room dining	1.24	Birthday cakes	2.68
Dining/families	1.72	Box suppers	4.53^1
Oncology meals	3.71	Bakery items	5.86^2
Birthday cakes	4.51^1	Party trays	0.65
Theme menus	3.38	Theme menus	7.43^2
Holiday meals	1.80	Contests	2.14
Others	1.80	Special hours	6.18^2
		Others	2.52

1 .10=> p > .05
2 .05=> p > .01
3 p=< .01
Note: data not available indicates calculations could not be performed.

The analyses revealed that three of the marketing techniques used for in-house patients were significantly ($p < .05$) related to the perceived importance of marketing, and not independent from that variable. The use of gourmet menu selections ($X^2=6.19$), suite service with waiters ($X^2=5.87$), and fruit baskets ($X^2=7.22$) were significantly ($p < .05$, df=2) related to how important marketing is perceived to be, according to the percentage (Table XXXIX) of time spent in marketing activities by foodservice directors. A trend ($p < .10$) toward significance ($X^2=4.51$, df=2) was also noted between the use of birthday cakes or recognition for patients and respondents perceived relative importance of marketing. The ANOVA's presented in Tables XVI and XX suggests that institutional characteristics of foodservice directors have a greater effect on the perceived importance of marketing and the techniques actually used for in-house patients. The number of beds ($p < .01$) and population of the city ($p < .05$) were significantly related to the use of suite service and fruit baskets.

In addition, the analyses indicated that three of the marketing techniques used for hospital employees were significantly ($p < .05$) related to the perceived importance of marketing, not independent from that variable. The use of bakery items for sale through the cafeteria ($X^2=5.86$), theme menus ($X^2=7.43$) and special hours of operation for late shifts ($X^2=6.18$) were significantly ($p < .05$, df=2) related to how important marketing is perceived. A trend toward significance ($p < .10$, df=2) was also noted between the use of free samples of new products being introduced ($X^2=5.26$) and box suppers ($X^2=4.53$) and respondents perceived relative importance of marketing. The ANOVA's presented in Tables XVII and XXI suggests that number of beds ($p < .05$) of the

hospital and age ($p < .01$) of respondents significantly effect the perceived relative importance of marketing and the actual use of theme menus for employees. Number of beds again, was significantly ($p < .05$) related to special hours of operation for late shifts.

The relationships between the respondents perceived relative importance of marketing and marketing techniques actually used for the community and visitors referred to in the null hypothesis, were determined using chi-square values (Table XXXXI).

TABLE XXXXI

CHI-SQUARE VALUES EXAMINING THE RELATIONSHIP BETWEEN RESPONDENTS PERCEIVED RELATIVE IMPORTANCE OF MARKETING AND MARKETING TECHNIQUES ACTUALLY USED FOR COMMUNITY AND VISITORS

Community	X^2	Visitors	X^2
	df= 2		df= 2
Weight programs	0.14	Gourmet meals	2.85
Nutrition counseling	0.99	Vending services	2.79
In-home programs	1.29	Delicatessen	0.84
Senior citizen meals	0.53	Cafeteria	3.66
Meals/office	1.31	Restaurant	0.71
Meals/daycare	4.34	Coffee shop	0.99
Meals/schools	2.90	Fast-food areas	2.91
Meals/airlines		Take-out food	2.56
Meals/jails	3.17	Bakery items	4.15
Vocational programs	0.63	Others	4.24
Nutrition to media	7.01^2		
Catering	2.10		
Nutritional products	0.41		
Convenience store			
Consultant/others	4.82^1		
Consultant/audits	0.35		
Nutrition/civic	3.97		
Nutrition/schools	5.59^1		
Meals on wheels	2.38		
Others	1.15		

1 .10=>p>.05
2 .05=>p>.01
3 p=<.01

Note: data not available indicates calculations could not be performed.

The analysis revealed that one of the marketing techniques used for the community was significantly ($p < .05$) related to the perceived importance of marketing, independent from other management activities, by respondents. The participation with local media in nutritional features was significantly ($p < .05$, $X^2=7.01$, $df=2$) related to how important marketing is perceived to be, according to the percentage of time spent in marketing activities by foodservice directors (Table XXXXI). A trend toward significance ($p < .10$, $df=2$) was also noted between the use of consultant services for other operations ($X^2=4.82$) and nutritional programs for school children ($X^2=5.59$) and respondents perceived relative importance of marketing. The ANOVA's presented in Tables XVIII and XXII suggests that respondent characteristics of foodservice directors have a greater effect on the perceived relative importance of marketing and the use of marketing techniques used for the community. ASHFSA members tend to use local media in nutritional features and provide consultant service to other operations as well.

Seven significant ($p < .05$) relationships were noted between respondents' perceived relative importance of marketing and marketing techniques actually used (Tables XXXX and XXXXI). Based on these relationships, the researcher rejected H_7. Respondents' perceived relative importance of marketing was associated with marketing techniques actually used.

CHAPTER V

SUMMARY, RECOMMENDATIONS AND IMPLICATIONS

Marketing has been viewed as a business activity over the past 30 years. The interest in marketing began where it primarily increased new product development and provided strategies for getting the product to the users, Parks and Moody (1986). Today, marketing has expanded dramatically to almost every business activity with the idea that the customer should be the primary focus of any business.

Hospitals face increasing pressure to contain costs, while providing high quality health care to the patients and community they serve. The review of literature has indicated that hospital foodservice departments have recently begun to market their departments by offering services to patients, employees, the community and visitors (Kahn, 1983; Erickson, 1987; Wright, 1986; Rose, 1983; Pickens and Shanklin, 1985). Not only have hospital foodservice departments provided high quality meals for a patient's recovery and total wellness, but these departments have created their own profit-making and goodwill-producing ventures.

As the importance of marketing in hospital foodservice departments becomes more evident, it would seem appropriate that the administrators of these departments begin taking the challenge to market themselves and the departments they represent. Literature dealing specifically with the development and/or expansion of marketing strategies in health care foodservice departments is limited. Much has been done, however, by a

small number of researchers and foodservice administrators with the interest and creative ideas to make marketing in hospital foodservice departments successful.

This study was undertaken to ascertain and analyze current marketing techniques used in hospital foodservice departments; to analyze the perceived importance of marketing techniques by foodservice directors; to determine the importance of marketing techniques based on selected respondent and institutional characteristics; and to analyze the perceived importance of marketing in relation to other management activities by the foodservice director. A three page questionnaire consisting of three sections with a total of 19 questions was developed (Appendix B). A panel of experts made up of four Oklahoma State University graduate faculty from the Departments of Statistics; Food, Nutrition and Institution Administration and the School of Hotel and Restaurant Administration, as well as two foodservice directors employed in hospitals outside of Indiana, examined the instrument for content validity, clarity and format. A cover letter written by the researcher and a cover letter by a hospital administrator accompanied the survey.

Characteristics of Respondents

Nearly one-half of the respondents were between the ages of 30 and 39 years of age. Eighty-two percent of the foodservice directors were female, while 18 percent were male.

Forty-eight percent of the survey participants indicated their

highest degree to be at the bachelor's level, while 32 percent held a master's degree. These results are similar to the findings of Pickens and Shanklin's (1985) marketing survey, where 50.9 percent indicated their highest degree to be at the bachelor's level and 23.3 percent held a master's degree. There seemed to be a larger percentage with a master's degree in the current study.

Sixty-six percent of the respondents indicated their professional affiliation with The American Dietetic Association and 70 percent of the respondents were registered dietitians. Fifty-one percent indicated their affiliation with The American Society for Hospital Food Service Directors (ASHFSA), while 17 respondents had indicated their affiliation with The Dietary Managers Association (DMA).

Nearly all (97%) respondents were employed full-time. Sixty-six percent of the foodservice directors indicated more than 10 years of work experience, while 28 percent had 6-10 years of experience. The results on work experience supported the findings of Pickens and Shanklin's survey, where 62.9 percent indicated having more than 10 years of work experience, and 21.9 percent had 6-10 years of experience. The results of the current study suggests not only did the respondents have a high level of professional knowledge, but that, the level of work experience was slightly higher than the previous study.

Characteristics of Institutions

Ninety-one percent of the respondents, who had indicated the profit status of the hospital, were employed by not-for-profit operations. Fifty-five percent of the respondents, who had indicated the ownership of the hospital, were employed by government operated (city, county)

hospitals.

Over one-half of the foodservice directors were employed in hospitals with 51 to 200 beds. These results also supported the findings of the Pickens and Shanklin survey, where 50.2 percent were employed in hospitals with 51 to 200 beds.

Ninety percent of the hospitals were located in cities of 249,000 or less. Nearly one-half of the survey participants indicated a population between 10,000 and 49,000.

The foodservice department was managed as part of the hospital in 91% percent of the operations represented by the respondents. In contrast to Pickens and Shanklin's (1985) survey, the present study revealed an increase in the number of departments that were managed by the hospital and a decrease in the number of departments that were managed by a contract foodservice company. These findings have led the researcher to believe that geographic location could be a reason why the difference in the Texas and the current study occurred. Contract foodservice companies may be more prevelant in southern states as opposed to the region for the current study and with research on marketing in health care foodservice departments, differences can be examined.

Analysis of Marketing Techniques Used for In-House Patients

Ninety percent of the foodservice directors indicated the use of special holiday meals. Eighty-eight percent used birthday cakes and 61 percent used congratulation dinners for new parents as marketing techniques.

Analysis of Marketing Techniques Used for Hospital Employees

The most predominant technique (97%) used by respondents was cafeteria service. Sixty-six percent used theme menus and 57 percent used the provision of modified food for employees on modified diets. Thirteen "Other" marketing techniques were also listed by respondents. One unique technique a respondent listed was, a telephone answering machine with the cafeteria menu and specials announced daily.

Analysis of Marketing Techniques Used for the Community

Eighty-six percent of the survey participants used nutritional counseling to market hospital foodservice to the community. This technique was previously reported in the review of literature, which offers a method for foodservice administrators to aggressively market their departments (Kahn, 1983). Fifty-one percent used nutritional programs for civic organizations and clubs.

Analysis of Marketing Techniques Used for Hospital Visitors

The majority of respondents (90%) used cafeteria service and 64 percent used vending services. Ten "Other" techniques were also listed by respondents. Another technique the researcher thought offered uniqueness, included the provision of modified food for visitors on modified diets.

Testing of Hypotheses

The relationships between 61 current marketing techniques and 10 respondent characteristics (age group, sex, degree, professional affiliation, work experience, registration status and employment status)

were determined by chi-square values. The findings between respondent characteristics and current marketing practices actually used suggests that foodservice directors who are members of ASHFSA consistently use marketing techniques to patients, employees, the community and visitors. These respondents are exposed to new ideas shared through frequent meetings and correspondence among the membership, which are then used and noted in this research, for their departments. NRA membership and length of experience were characteristics of directors who used marketing techniques as well.

A total of eight significant relationships ($p < .01$) were noted between current marketing techniques and the 10 selected respondent characteristics (Tables XVI, XVII and XVIII). Based on these relationships the researcher rejected parts a, b and c of H_1 and retained part d. Respondent characteristics effected marketing techniques for in-house patients, employees and the community, but had no effect on techniques for hospital visitors.

The relationships between the 61 current marketing techniques and the nine institutional characteristics (not-for-profit, for-profit, corporate owned, government operated-federal, government operated-city, county, hospital corporation, other hospitals, number of beds, management of the department and population of the city) were determined by chi-square values. The findings between institutional characteristics and current marketing techniques actually used suggests that number of beds of the hospital and population of the city consistantly effected the use of marketing techniques to patients, employees, the community and visitors

A total of 14 significant relationships ($p < .01$) were noted between

current marketing techniques and the nine selected institutional characteristcs (Tables XX, XXI, XXIII). Based on these relationships, the researcher rejected parts a, b and d of H_2 and retained part c. Institutional characteristics effected marketing techniques for in-house patients, employees and visitors, but had no effect on techniques for in-house patients and the community.

The relationships between the nine ratings of marketing techniques (discounting, reputation, merchandising, public relations, patron surveys, advertising, product development, sales promotions, product/service/positiioning) and the respondent characteristics were determined with one-way analyses of variance (ANOVA). Respondents who were non-members of ADA, as well as non-registered dietitians, tended to rate patron surveys significantly ($p < .01$) more important, as opposed to members of ADA and registered dietitians. The researcher suggests that registered dietitians and ADA members are very focused on nutrition and dietetics and that non-ADA members and non-registered dietitians could have a different education base with greater emphasis placed on management and marketing skills.

Foodservice directors between the ages of 30 and 39 tended to rate public relations and product development more important, as opposed to respondents between the ages of 60 and 69. Findings on age suggest that the younger ages of directors were more likely to perceive these two marketing techniques as important. These findings were further supported by the set of three respondent characteristics for product development, with age being more significant than degree of the foodservice directors or work experience. Members of the Dietary Managers Association tend to rate advertising as an important marketing

technique, which was further supported by the set of three respondent characteristics, with age again, being more significant than degree and work experience. Advertising and public relations should not be overlooked and are considered low cost marketing techniques. Even "word-of-mouth" advertising can mean success or failure to the foodservice department, as described in Chapter II (Stokes Report, 1987).

A total of five ($p < .05$) and three ($p < .01$) significant relationships were noted between perceived importance of marketing ratings and the selected respondent characteristics (Table XXIX). Based on these relationships, the researcher rejected parts a, d, e, f, g, and h of H_3 and retained parts b, c and i. Respondent characteristics effected the perceived importance of discounting, public relations, patron surveys, advertising, new product development and sales promotion, but had no effect on reputation, merchandising and product/service/positioning.

The relationships between the nine ratings of marketing techniques and the institutional characteristics were determined with one-way (ANOVA). Respondents representing institutions other than government operated (federal) rated reputation significantly ($p < .01$) more important than respondents employed in federal hospitals.

Foodservice directors employed in hospitals with a number of beds of 51 to 200 (who were the majority of respondents, Table IX) rated discounting more important, as opposed to directors in hospitals with a number of beds of 401 to 500. In contrast, ratings by respondents from hospitals of 51 to 200 beds rated reputation more important than from hospitals with a number of beds less than 50. The examination of number

of beds and the ratings, discounting and reputation resulted in an interesting comparison for the correlations of total number of meals served and these two ratings. Discounting was rated more important for the smaller hospitals and fewer number of meals served. Reputation was rated more important, however, for larger hospitals. In contrast, the correlation between the number of meals and reputation suggested that the larger number of meals served caused reputation to be less important by respondents. These findings suggest that reputation was important according to the number of beds, but when the total number of meals, in addition to patient meals are considered, reputation became less important.

Survey participants employed by a contract foodservice company rated advertising significantly ($p < .01$) more important, as opposed to participants employed by the hospital. Furthermore, the findings between advertising and the set of three institutional characteristics suggest that the total number of meals were more significant than population of the city or the number of beds in the hospital.

A total of four ($p < .05$) and two ($p < .01$) significant relationships were noted between perceived importance of marketing ratings and the selected institutional characteristics (Table XXX). Based on these relationships, the researcher rejected parts a, b, e, f and i of H_4 and retained parts c, d, g and h. Institutional characteristics effected the perceived importance of discounting, reputation, patron surveys, advertising and product/service/positioning, but had no effect on merchandising, public relations, new product development and sales promotion.

The relationships between the four management activities (menu

planning, education and training, administration and therapeutics) and the respondent characteristics were determined with one-way (ANOVA). For the management activity, education and training, foodservice directors with more than 10 years of experience spent more time in this activity, than directors with less than 10 years work experience.

Members of ASHFSA spent more management time on administration, marketing and less time on therapeutic activities, than non-members. Since the membership of this organization is primarily foodservice directors, they are very focused on the administration of the foodservice department and topics of meetings emphasize this management activity. Foodservice administrators need to further sharpen their financial and business management skills, as noted in the review of literature. Industry observers agree that the foodservice department will have increased importance as competition intensifies among hospitals (Kahn, 1983). The findings on current marketing techniques to patients, employees, the community and visitors by ASHFSA members further support the amount of management time spent by these members in marketing activities. In addition, the findings indicate that ASHFSA members spend less time on therapeutic activities, because other members of the management team are responsible for this activity. Those individuals were noted as, registered dietitians, ADA members and respondents employed part-time.

Foodservice directors with a bachelor's degree spent significantly ($p < .05$) more time on marketing activities, as opposed to directors with a high school degree and directors with a master's degree. Male foodservice directors tended to spend significantly ($p < .01$) more management time on administrative activities, as opposed to female

directors. Female foodservice directors ($p < .05$) and directors employed part-time ($p < .01$) spent significantly more time on therapeutic activities, as opposed to male directors and directors employed full-time.

A total of six ($p < .05$) and five ($p < .01$) significant relationships were noted between perceived relative importance of marketing and the respondent characteristics (Table XXXI). Based on these relationships, the researcher rejected parts b, c, d, and e of H_5 and retained part a. Respondent characteristics effected the perceived importance of marketing relative to education and training; administration and therapeutics, but had no effect on menu planning and purchasing.

The relationships between the four management activities and the institutional characteristics were determined with one-way (ANOVA). Survey participants employed by a contract foodservice company and participants in hospitals with a number of beds of 601 to 700 spent significantly ($p < .01$) more time on administrative activities than participants employed by the hospital or with a number of beds of 101 to 200 (which were one-half of the majority of respondents, Table IX).

Findings on population of the city suggest that the increase in population causes more time to be spent by foodservice directors in education and training, as well as, administrative activities. These findings are further supported by the multiple regression statements with relation to education and training (Table XXXVIII). The analysis on education and training revealed that population was more significant than total meals served and the number of beds in the hospital.

Respondents employed in hospitals with a number of beds of 201 to 300 spent significantly ($p < .05$) more time on marketing activities than

respondents with a number of beds less than 50. From results on number of beds, it is suggested that respondents from the larger hospitals are more likely to participate in marketing and administrative activities. Number of beds had an opposite effect, however, with regard to therapeutic activities. Foodservice directors employed in hospitals with a number of beds of 51 to 100 spent significantly ($p < .01$) more time on therapeutic activities than directors with a number of beds of 600 to 700. These findings suggest that directors in smaller hospitals would be more likely spend more time in therapeutics, as opposed to directors in larger hospitals where therapeutic responsibilities may be delegated to clinical dietitians.

Eight significant (two at $p < .05$ and six $p < .01$) relationships were noted between perceived relative importance of marketing and institutional characteristics (Table XXXII). Based on these relationships, the researcher rejected parts b, c, d and e of H_6 and retained part a. Institutional characteristics effected the perceived importance of marketing relative to education and training; administration and therapeutics, but had no effect on menu planning and purchasing.

The relationships between respondents perceived relative importance of marketing and marketing techniques actually used were determined with chi-square values. The use of gourmet menu selections, suite service with waiters and fruit baskets to in-house patients were significantly related to the perceived relative importance of marketing by foodservice directors. Gourmet dinners and fruit baskets given as gifts have helped hospital foodservice directors utilize idle staff while helping their institutions acquire a "user-friendly" reputation as noted in Erickson

(1987). The use of suite service with waiters is further supported by the relationships between respondent and institutional characteristics and current marketing techniques used for in-house patients.

The use of bakery items for sale through the cafeteria, theme menus and special hours of operation for late shifts to hospital employees were significantly related to the perceived relative importance of marketing. The trend noted between the use of free samples of new products being introduced and box suppers were further supported by the relationships between respondent characteristics and current marketing techniques used for employees. Theme menus were used as a marketing technique by 63% of the respondents in the Pickens and Shanklin (1985) study. A unique theme menu called "Know your neighbor" noted in Chapter II is offered twice per month, allowing hospital employees to plan the cafeteria menu (Clancy 1986). The use of theme menus and special hours for late shifts are further supported by the relationships between institutional characteristics and current marketing techniques for employees.

The use of local media in nutritional features to the community and the trend noted between consultant services for other operations were significantly related to the perceived relative importance of marketing by foodservice directors. These findings are further supported by the relationships between respondent characteristics and current marketing techniques used for the community.

A total of seven significant ($p < .05$) relationships were found between respondents perceived relative importance of marketing and marketing techniques actually used (Tables XXXX and XXXXI). Based on these relationships, the researcher rejected H_7. Respondents perceived

relative importance of marketing was associated with marketing techniques actually used.

Recommendations

The results of this survey have led the researcher to identify several recommendations for future studies. It may be advantageous to separately analyze significant relationships between marketing techniques currently used and the independent variables of this study. The analyses revealed relationships between respondent and institutional characteristics, but a step further could be taken to determine what part of each characteristic was significant for each marketing technique. For example, the number of beds of a hospital and population of the city were significantly ($p < .01$) related to "fast-food areas" as visitor marketing techniques. But what size of hospital or what population of cities would be more likely to use fast-food areas to market the foodservice department to hospital visitors? Perhaps when determinations concerning specific characteristics of foodservice directors or the institutions where they are employed are analyzed, then marketing information can be targeted more appropriately. In addition, marketing techniques providing services to hotels in the community could be analyzed.

With regard to the research instrument itself, question number 9 of Section A could have been worded differently. The responses had to be divided between the profit status and ownership/management of the hospital, since many respondents only answered one part of this question, and not all that applied. In addition, the instrument could contain a question on the cost of marketing techniques in foodservice

departments of hospitals. How much are the departments spending now and how much would directors of foodservice departments be willing to spend?

Finally, a larger sample could have been used. Since the percentage of responses was indeed acceptable, the percentage could be just as acceptable in a nation-wide survey. Furthermore, since one-half of the respondents were members of ASHFSA and are identified as already being administrative and marketing oriented, the national membership list of this organization could be used very effectively.

Implications

The relationships between the respondent characteristics and current marketing techniques were consistent with the relationships between the institutional characteristics and current marketing techniques. Based on these characteristics, the results revealed that foodservice directors in this study used marketing techniques for hospital employees more often, as opposed to patients, the community or to visitors. Based on these same characteristics, the results revealed that foodservice directors used marketing techniques for the community less often than to patients, employees and visitors.

From the summary of this chapter, it was noted that respondents work experience (respondent characteristic) and number of beds of the hospital (institutional characteristic) were related to the in-house patient marketing technique of suite service with waiters. These two independent variables were also related to the use of birthday cakes for delivery to employees. Members of NRA (respondent characteristic) and population of the city (institutional characteristic) where hospitals were located, both, had a significant relationship to the use of lunch

or coffee breaks to office buildings lacking facilities, a community marketing technique. Members of ASHFSA and DMA were both noted frequently as high users of marketing techniques. The institutional characteristic, number of beds of the hospital made a difference in marketing techniques for patients, employees and visitors, while population of the city was related to community marketing techniques.

Based on respondent and institutional characteristics, there was an effect on the respondents perceived importance of marketing techniques for discounting, patron surveys and advertising. The results indicated that there was less importance placed on merchandising and product/service/positioning (offering the right product in the appropriate place). The respondent and institutional characteristics effected respondents' perceived importance of marketing in relation to education and training, administration and therapeutics, however, no effect was noted for menu planning and purchasing, which the researcher suggests may be due to this activity being delegated to subordinates.

Members of ASHFSA, who were noted to be one-half of the respondents in the survey, and respondents with a bachelor's degree spent more time on marketing activities in relation to other management activities. Respondents employed in hospitals with a larger number of beds were more likely to spend more management time in marketing activities. The results of this study suggest that foodservice directors become more creative to generate revenue for their departments and the hospitals they respresent. Those key people in hospital foodservice departments should meet the challenges to market their services, because the opportunities are definitely present.

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APPENDIXES

APPENDIX A

CORRESPONDENCE

April 2, 1987

Dear Colleague:

I would like to ask your assistance in conducting a study on "Marketing Strategies in Health Care Foodservice Departments." Your participation in this endeavor will help me answer some key questions which have not been answered in past research such as 1) Do hospital foodservice directors believe marketing to be important to the success of the foodservice department? 2) What marketing techniques will be reported as important aspects of marketing?

Enclosed is a proof copy of a questionnaire, which will be used in completing my thesis. I would greatly appreciate it if you could please read through the first time, answering questions and keeping track of the total time it takes you from start to completion. Pretend that you are a participant, rather than an evaluator.

Then go back through the questionnaire and carefully examine it for content, clarity and format. Please make suggestions for additions, deletions or rewording. Look for terms or questions which could be easily misinterpreted or that you had difficulty answering. How could these be improved? Do the questions flow in a logical order? Please feel free to mark or write anywhere on the questionnaire copy. If you have any questions, please call me at 219-753-7541 (ext. 407).

My projected mailing date to participants is May 1. I will anxiously look forward to the return of your comments. Thank you for your time and professional assistance. Enclosed is a self-addressed, stamped envelope for your convenience.

Sincerely,

Diane C. Somers, R.D.

Diane C. Somers, R.D., Director
Dietary Department, Memorial Hospital

OSU

Oklahoma State University

DEPARTMENT OF FOOD, NUTRITION AND INSTITUTION ADMINISTRATION
COLLEGE OF HOME ECONOMICS

STILLWATER, OKLAHOMA 74078-0337
HOME ECONOMICS WEST 425
405-624-5039

May 1, 1987

Dear Colleague:

We would like to ask your assistance in a research survey on "Marketing Strategies in Healthcare Foodservice Departments." Your participation in this endeavor will assist in identifying marketing strategies utilized by foodservice directors in Indiana and marketing techniques believed to be important to the success of the foodservice department.

The information you convey to us will be held in strict confidence. At no time will you or the facilities you serve be identified in the research report. The code number on your questionnaire is merely to follow-up responses.

It will take approximately 15 minutes to complete this questionnaire. Please return the completed survey on or before Monday, May 18, 1987. If you have any questions, please call (219) 753-7541 and ask for Diane. Thank you for your cooperation and professional assistance.

Sincerely,

Diane C. Somers, R.D.

Diane C. Somers, R.D., Director
Dietary Department, Memorial Hospital
and Graduate Student

Lea L. Ebro

Lea L. Ebro, Ph.D., R.D.
Major Adviser

Logansport Memorial Hospital

May 5, 1987

Dear Colleague:

Please find enclosed a questionnaire that Diane Somers, R.D., a Master's Degree candidate and Dietary Director, has developed. Research regarding marketing activities in healthcare foodservice departments has been limited nationwide. Since there have been no studies conducted in Indiana on the subject, I support Diane as she completes this final phase of her research and I have participated in reviewing the questionnaire. We are asking the hospitals in Indiana to participate in this study.

It is hoped that this research will provide valuable information to professional organizations, healthcare institutions, educational institutions, the foodservice industry, and dietary directors like yourself. It is intended that this information be made available to participating dietary directors and the profession at large.

We would very much appreciate the timely completion of this questionnaire and it be returned in the self addressed, stamped envelope to Diane. Thank you for your assistance and participation in this study.

Sincerely,

Herbert L Fromm

HERBERT L. FROMM
Executive Director

HLF/ccm

APPENDIX B

RESEARCH INSTRUMENT

SECTION A: GENERAL INFORMATION

Instructions: Please check any or all which described you. It is important that you answer all of the questions.

1. Age Group:
   _____(1)20-29 _____(3)40-49 _____(5)60-69
   _____(2)30-39 _____(4)50-59 _____(6)70 or over

2. Sex: _____(1) Male _____(2) Female

3. Highest level of degree and area of specialization:
   _____(1) High school _____
   _____(2) Associate degree _____
   _____(3) Bachelor's degree _____
   _____(4) Master's degree _____
   _____(5) Ph.D. degree _____
   _____(6) Other (please specify)_____

4. Professional Affiliations:
   _____(1) American Dietetic Association (ADA)
   _____(2) American Society of Hospital Food Service Administrators (ASHFSA)
   _____(3) National Restaurant Association (NRA)
   _____(4) Other (please specify) _____

5. Total number of years of work experience in food service:
   _____(1) Less than 1 year _____(3) 6-10 years
   _____(2) 1-5 years _____(4) More than 10 years

6. Registration Status:
   _____(1) Registered (R.D.) _____(2) Nonregistered

7. Current position title:_____

8. Present employment status:
   _____(1) Full-time (35 hours per week or more)
   _____(2) Part-time (34 hours per week or less)

9. Description of hospital where you are currently employed:
   (Check all which apply)
   _____(1) Not for profit
   _____(2) For profit
   _____(3) Corporate owned
   _____(4) Government operated (federal)
   _____(5) Government operated (city, county)
   _____(6) Owned and managed by a hospital corporation
   _____(7) Other (please specify)_____

10. Average number of meals served daily: _____

11. Management of the food service department:
   _____(1) Employed by the hospital
   _____(2) Employed by a contract food service company
   _____(3) Other (please specify) _____

12. Population of the city in which your hospital is located:

_____(1) Less than 10,000	_____(5) 250,000-499,999
_____(2) 10,000-49,000	_____(6) 500,000-749,000
_____(3) 50,000-99,999	_____(7) 750,000-1,000,000
_____(4) 100,000-249,000	_____(8) More than 1,000,000

SECTION B: MARKETING TECHNIQUES CURRENTLY UTILIZED

Instructions: The purpose of this section is to ascertain marketing techniques currently utilized by your food service department. Please place a check mark in the blank beside the techniques that you currently implement. As you go through the list, please add the techniques that you employ that are not included in the list.

I. Which of the following marketing techniques do you utilize to market hospital food service to in-house patients? (More than one my be checked.)

_____ 1. Twenty-four hour room service
_____ 2. Gourmet menu selections
_____ 3. Congratulation dinners for new parents
_____ 4. Suite service with waiters
_____ 5. Wine Service
_____ 6. Fruit Baskets
_____ 7. Restaurant-style menus
_____ 8. Buffet style pediatric carts
_____ 9. Elegant in-room dining
_____10. Elegant congregate dining with families
_____11. Oncology "on demand" meals
_____12. Birthday cakes or recognition for patients
_____13. Theme menus
_____14. Special holiday meals
_____15. Others (please specify)_____
_____

II. Which of the following marketing techniques do you utilize to market hospital food service to hospital employees? (More than one may be checked.)

_____ 1. Cafeteria service
_____ 2. Fast food service
_____ 3. Restaurant service
_____ 4. Vending
_____ 5. Free samples of new products being introduced
_____ 6. Provision of nutritional analysis of cafeteria food
_____ 7. Modified food for employees on modified diets
_____ 8. Weight reduction programs
_____ 9. Birthday cakes available for delivery to employees
_____10. Box suppers (take-out food)
_____11. Bakery items for sale through the cafeteria
_____12. Party trays for special events in other departments
_____13. Theme menus
_____14. Contests in the cafeteria
_____15. Special hours of operation for late shifts
_____16. Others (please specify)_____
_____

III Which of the following marketing techniques do you utilize to market hospital food service to the community? (More than one may be checked.)

_____ 1. Weight reduction programs
_____ 2. Nutrition counseling
_____ 3. In-Home programs
_____ 4. Congregate site for senior citizen meals
_____ 5. Lunch or coffee breaks to nearby office buildings lacking in-house facilities
_____ 6. Individual tray service or bulk feeding to daycare centers
_____ 7. Individual tray service or bulk feeding to school lunchrooms
_____ 8. Individual tray service or bulk feeding to airlines
_____ 9. Individual tray service or bulk feeding to jails
_____10. Participation in vocational training programs that use food service as training stations.
_____11. Participation with local media in nutritional features
_____12. Catering available for community events outside hospital
_____13. Sale of nutritional support products
_____14. Convenience store
_____15. Consultant services available for other operations
_____16. Consultant services available for food management audits
_____17. Nutritional programs for civic organizations and clubs
_____18. Nutritional programs for school children
_____19. Congrgate site for "Meals on Wheels"
_____20. Others (please specify)_____
_____
_____

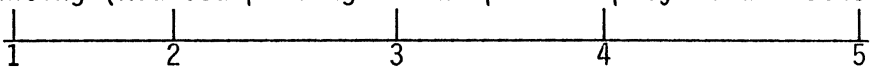
IV. Which of the following techniques do you utilize to market hospital food service to visitors? (More than one may be checked.)

_____ 1. Gourmet meals (tickets available through gift shop for purchase in lieu of flowers for patients)
_____ 2. Vending services
_____ 3. Delicatessen
_____ 4. Cafeteria service
_____ 5. Restaurant service
_____ 6. Coffee shop
_____ 7. Fast food areas
_____ 8. Take-out food
_____ 9. Bakery items for sale through cafeteria
_____10. Others (please specify)_____
_____

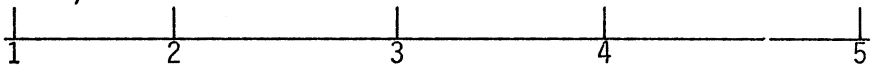
SECTION C: IMPORTANCE OF MARKETING TECHNIQUES

Instructions: For the following list of marketing techniques, please rate each technique according to how important you feel each technique is.

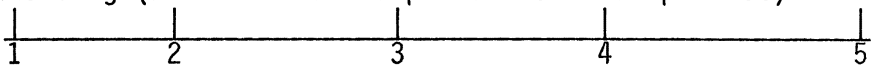
1. Discounting (Reduced pricing for hospital employees and others)



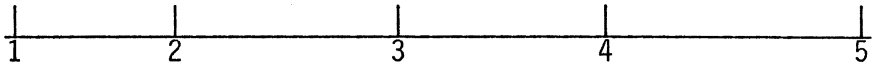
2. Reputation (General estimation which the department is held by the public)



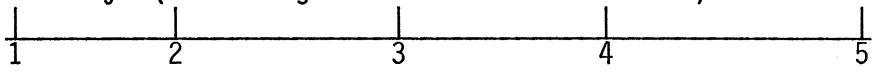
3. Merchandising (Presentation to promote sale of product)



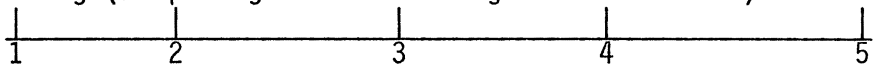
4. Public Relations (Activities to promote favorable relationship with public



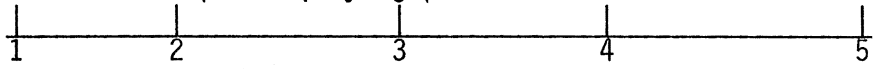
5. Patron Surveys (Obtaining feedback from customers)



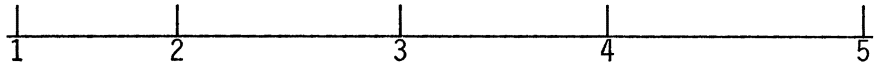
6. Advertising (Preparing & distributing advertisements)



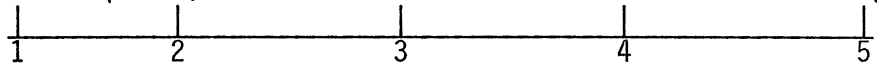
7. New Product Development (Trying products for first time for variety)



8. Sales Promotion (Attempt to sell or popularize a product at lower price)



9. Product/Service Positioning (Offering the right product in the appropriate place, i.e. color coordinated or salad bar arrangement)



For the next question, please assume you spend 100% of your time in management activities. For each activity, indicate the percentage of your management time spent in each of the following:

_____% Menu Planning and Purchasing
_____% Education and Training
_____% Marketing
_____% Administration (Budgeting, Supervising, Reports)
_____% Therapeutics
100% Total

VITA

Diane Connell Somers

Candidate for the Degree of

Master of Science

Thesis: ANALYSIS OF MARKETING STRATEGIES OF HEALTH CARE FOODSERVICE DEPARTMENTS IN INDIANA

Major Field: Food, Nutrition and Institution Administration

Biographical:

Personal Data: Born in Springfield, Missouri, October 2, 1956, the daughter of Arthur Marx, Jr. and Carol Marx, both presently residing in Springfield, Missouri; married to Donald Somers, Jr.; mother of Andrew Somers.

Education: Graduated from Greenwood High School, Springfield, Missouri, in May, 1974; received Bachelor of Arts degree from Drury College in May, 1978; attended Oral Roberts University from August 1978 to May 1979; completed Oklahoma State University Administrative Dietetic Internship in August 1980; acquired registration status (571535) in April, 1982; completed requirements for Master of Science degree at Oklahoma State University in December, 1987.

Professional Experience: Production Manager, Oklahoma State University Residence Halls Foodservice, August 1980-December 1981; Administrative Dietitian, City of Faith Medical and Research Center, December 1981-July 1982; Production Manager, Oklahoma State University Foodservice, August 1982-April 1983; Purchasing Dietitian, Methodist Hospital of Indiana, May 1983-November 1983; Director of Dietary, Memorial Hospital, Logansport, Indiana, June 1985 to the present.

Professional Organizations: National DietEcon Advisory Council; American Society for Hospital Foodservice Administrators; active member, American Dietetic Association and Indiana Dietetic Association; Junior League of Indianapolis.