# Management in Food and Nutrition Systems

"Food management RDs need to have technical expertise, knowledge, and interpersonal skills."

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# LEARNING OBJECTIVES

The student will be able to:

- 1. Know the areas of employment in systems in food and nutrition management.
- 2. Describe the activities and responsibilities of the management dietitian.
- 3. Know the range of opportunities and advancements in food and nutrition management.
- 4. Understand how the functions of management activities differ in clinical, institutional, and commercial foodservice.
- 5. Become aware of the impact of technology in future foodservice operations.

# INTRODUCTION

Food and food service are prominent in the history of the profession of dietetics. One of the main purposes of the first organized meeting of the American Dietetic Association (ADA) was to discuss ways of meeting food shortages during World War I. Many of the first members of the association served overseas feeding hospitalized soldiers and people living under wartime conditions. Cooking schools, scientists who produced the first tables of food values, early-day soup kitchens, and school lunch programs were among the forerunners of institutions that fed the public.<sup>2</sup>

Food service in hospitals was the primary focus of the first dietitians. During the 1890s, food service in hospitals was managed by the chef, the housekeeper, or the nursing department. In the early 1900s, however, many dietitians were in charge of dietary departments and had the responsibility for all food service as well as teaching nurses and providing diet therapy for patients with metabolic diseases. Hospital dietitians dealt with budgets, department organization, personnel management, and quality food service. Nutrition was recognized as an aspect of medicine, and food prescriptions were handled as apothecary compounds, thus creating a demand for special diet kitchens. The hospital dietitian had the same status as the superintendent of nurses and was recognized as the nutrition expert.<sup>3</sup>

Dietitians with food service management responsibilities became members of the Food Administration section in the ADA, and their practice

was referred to as *administrative dietetics*. The terminology now used is *management in food and nutrition systems*.

Management is discussed fully later in the text as a skill needed by dietitians in all areas of practice.

# ACTIVITIES OF ENTRY-LEVEL DIETITIANS AND DIETETIC TECHNICIANS

In 2010, the Commission on Dietetic Registration conducted a practice audit among dietitians and dietetic technicians and indicated the percentage of time spent in selected activities. Management activities of both groups are shown in **Table 7-1**.

Table 7-1. Management Activities of Entry-Level Dietitians and Dietetic Technicians

Activity (Percent)	RD	DTRª
Managing human resources		
Assign or schedule staff	15	25
Male decisions on personnel actions	10	23
Comply with labor relations	15	23
Evaluate performance of staff	22	31
Managing food and material resources		
Maintain safety and sanitation of food, facilities, or equipment	27	53
Monitor stage conditions	22	39
Develop menus for clients with normal needs	33	45
Evaluate food products by taste, smell, and appearance	33	50
Calculate quantities to purchase of food other material resources	9	21
Purchase food, nutritional supplements, equipment, or supplies	14	24
Assess client satisfaction with food and/or nutrition service	40	59
Adjust daily menu, food production, or distribution based on availability of food, labor, or equipment	11	30
Institute or maintain sustainability practices	8	18

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Activity (Percent)	RD	DTRª
Manage facilities		
Maintain facilities and equipment	11	24
Assure safety of employees, patients, clients, and customers	25	38

Table 7-1. Management Activities of Entry-Level Dietitians and Dietetic Technicians (Continued)

a. The higher percentages of involvement by dietetic technicians in many of the management categories reflect the areas in which technicians are most often employed. This was a survey of entry-level professionals, and it should be noted that more dietitians begin their careers in clinical areas of practice; this was borne out in those particular areas surveyed.

Notes: RD 5 registered dietitian; DTR 5 dietetic technician, registered.

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## AREAS OF EMPLOYMENT

In the 2015 membership survey, 11 percent of registered dietitians (RDs) and 17 percent of dietetic technicians, registered (DTRs) indicated their practice is in food and nutrition management. Further, 24 percent of practitioners are executives, directors, or managers, and another 17 percent are supervisors or coordinators.<sup>4</sup>

In the same study, it was reported that salaries for the food and nutrition manager are the highest of those in any practice area. The salaries reflect both geographic location and years of experience as the food and nutrition manager is nearly always a dietitian with work experience beyond entry level and may have an advanced degree or a business degree.

Dietitians in food and nutrition management typically affiliate with one or more of the following five dietetic practice groups: Management in Food and Nutrition Systems, Dietitians in Business and Communication, School Nutrition Services, Food and Culinary Professionals, and Hunger and Environmental Nutrition. In addition, clinical managers may belong to the Clinical Nutrition Management group. Dietitians in food and nutrition management may be identified through a wide range of titles, such as coordinator, specialist, executive dietitian, director of food and nutrition services, director of clinical nutrition, or chief administrator.

Practice areas are often categorized by work settings, such as food and nutrition management in acute care, long-term care, and noninstitutional employment areas. To encompass the broader management area, clinical nutrition management, commercial food service, and school nutrition are added to this list. A discussion of each follows.

# Food and Nutrition Management in Acute Care

Food service in acute care is the type of service provided in hospitals or similar healthcare institutions in which patients receive short-term medical treatment, usually 1–5 days. Several characteristics of this type of food service are:

- 1. Fast turnover of patients with day-to-day fluctuations in the number of meals prepared and served.
- Special diets requiring different types of food preparation. In some instances, as many as 50 percent of all patients will require special or modified diets.
- 3. Selective menus for patients, increasing the number of food items prepared.
- 4. Multiple serving systems in an institution, such as individual tray service, decentralized service with pantries on patient floors, and restaurant-style service providing individualized patient service.

In some institutions, food is prepared in bulk, then preportioned and held until the time of meal service, when it is rethermalized and served. In others, food is prepared centrally just before meal service and either portioned individually or sent in bulk to patient areas for individual service. Production and food service systems vary, but in each system, the dietitian has overall responsibility for food production and service or may share this responsibility with a dietetic technician, chef, or manager. Whatever the scope of his or her responsibility, the dietitian must be knowledgeable in food production techniques, food purchasing, safety and sanitation, strategic planning, human relations, communication skills, managerial skills, and financial management.

# Food and Nutrition Management in Long-Term Care Facilities

The provision of food for clients in nursing homes, extended care facilities, and correctional institutions is included in the long-term care category. Food service in these institutions differs from that in acute care in that

clients are long term and are usually served in group settings. Central food production and few special diets are typical because most of the long-term clients will be following a normal, healthy eating pattern. The food service, especially in smaller nursing homes and extended care facilities, may be managed by a dietetic technician or by a certified dietary manager under the direction of a dietitian consultant. In correctional institutions, the day-to-day management is often provided by nonprofessionals under the direction of a dietitian consultant when one is available. All aspects of food service management are equally as important in long-term care as in the hospital with the added necessity of ensuring nutritional adequacy and acceptability over longer periods of time. In almost all long-term facilities, there are federal and state regulations relating to the provision of food services to clients that must be followed for the institution to receive government funding and provide quality care. The qualifications for the food service manager are also specified in the regulations.

# Food and Nutrition Management in Noninstitutional Settings

Management of food and nutrition in noninstitutional settings is typically provided in colleges and universities, employee cafeterias, and business and commercial enterprises. The food service may be for-profit or nonprofit, depending on the type of institution. Generally, institutions serving the public will be for profit while schools or businesses providing employee food services are more often nonprofit. Clients choose to patronize the food services offered and the type of food services may vary widely. A college or university, for instance, may offer cafeteria, dining room, restaurant, catering, and vending services. School and employee food service is often provided by cafeteria service along with vending and dining room service. Many businesses provide employee cafeterias or restaurant service. The dietitian's responsibility is to provide food that is safe and acceptable to the customers, meets financial expectations, and promotes good nutrition.

# School Nutrition Programs

School nutrition programs, offering either lunch or breakfast, or both, are available in 100,000 public schools through grade 12, nonprofit private schools, and residential child care institutions.<sup>5</sup> Over 31 million students from preschool through grade 12 were fed daily. An average of 11 million children per day participated in the federal school breakfast program in

2009. The programs are administered and partially funded by the federal government, and they must meet specific guidelines for nutritional quality of meals and for student eligibility. Free or reduced-price meals are provided based on the family economic status. The emphasis is on long-term health benefits for children through establishing good eating habits. The following is a position statement supporting school nutrition programs:

It is the position of the Academy, School Nutrition Association, and Society for Nutrition Education that comprehensive, integrated nutrition services in schools, kindergarten through grade 12, are an essential component of coordinated school health programs that will improve the nutritional status, health, and academic performance of our nation's children. Local school wellness policies may strengthen comprehensive nutrition services in schools by providing opportunities for multidisciplinary teams to identify and address local school needs.<sup>6</sup>

Dietitians in school nutrition programs need both managerial and nutrition education skills. That school nutrition programs provide satisfying careers to many is shown in a recent study of job satisfaction; dietitians with management responsibilities, including those in school child nutrition programs, showed the highest level of satisfaction with the nature of the work and a higher overall level of satisfaction compared to national indices.<sup>7</sup>

The customer is the most important consideration when offering school food service that meets strict guidelines for safety and nutritional quality while also controlling costs. Some programs use websites to promote offerings and others use newspaper advertising to publish menus and gain public support.

# Clinical Nutrition Management

As discussed earlier, the clinical nutrition manager is the professional who directs the activities of a clinical unit in hospitals and healthcare institutions. This may include responsibility for one or more units and the supervision of other professionals in clinical areas. The clinical manager performs many of the same management functions as the food service dietitian—management of human, financial, and material resources. The clinical dietitian who progresses from an entry-level position to a management position will normally have 5–10 years or more of experience and may not be involved in day-to-day activities directly related to patient care.

#### Commercial Food Service

Commercial food service is described as retail and hospitality food service establishments that prepare food for immediate consumption on or off premises. The types of establishments employing dietitians include independent restaurants, catering services, casual and family dining restaurants, and fine dining restaurants. Supermarket chains, limited service (fast-food) chains, and hotel chains also have high potential for dietetic services. Five specific areas of need in these institutions are nutrition education, healthful menu planning, recipe and menu analysis, marketing, and quality assurance.

Skills in public relations, communications, marketing, purchasing, and financial management are expected of dietitians who work in commercial food services. Therefore, additional training and experience are often needed by the dietitian to be fully qualified for these roles.

# Additional Areas of Opportunity

Additional opportunities for dietitians in food service management include positions in food corporations, such as research and development, consumer affairs, communications, government liaison, emergency feeding for displaced persons, disaster planning centers, military-based homeless shelters and food distribution centers, worldwide religious ministries and government food programs, adult and child care programs, and academic units with food, nutrition, or hospitality programs. Many dietitians are employed in contract food service companies that provide for-profit management services. Hospitals, colleges and universities, schools, employee cafeterias in businesses, hotels and restaurants, and healthcare institutions may contract with a company who manages food services for a negotiated fee. The companies hire and often train their own personnel, including dietitian managers.

# CHARACTERISTICS OF SUCCESSFUL FOOD AND NUTRITION MANAGERS

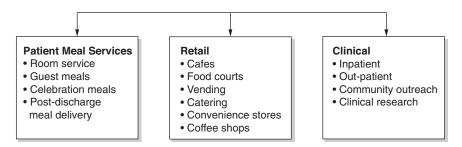
Employment areas in food and nutrition management require registered dietitian nutritionist (RDN) leaders who are effective in the management of human, material, and financial resources. Food and nutrition services in healthcare facilities are becoming more complex in meeting the demands of the administration, patients, and clients. From a historical standpoint,

meal service to patients was the primary focus of foodservice departments in healthcare especially in hospitals. Services are now expected in other units within an institution as shown in **Figure 7-1**.

With this expansion of services offered, the RDN and DTR have a wide scope of practice responsibilities in healthcare systems as well as in business, industry, and consulting. These include planning, organizing, staffing, budgeting, directing, and controlling. Managers must make decisions in the best interests of both the department and the institution and be able to communicate effectiveness to the organization's leadership. The productivity of the department is directly related to the quality of the managerial decisions and to the outcomes of departmental efforts.

According to Puckett,<sup>9</sup> today's management RDN must, at a minimum, possess competencies in the following areas:

- Environmental protection rules
- The political environment
- Marketing and customer satisfaction
- · Continual quality improvement
- · Work design and productivity
- Innovative cost-containment measures
- Food consumption patterns
- Human resource trends
- Food and water safety
- · Disaster and emergency planning
- Project and process management
- Cultural diversity in the marketplace



**FIGURE 7-1.** Scope of Services.

Reproduced from Practice Paper of the Academy of Nutrition and Dietetics: Principles of Productivity in Food and Nutrition Services: Applications in the 21st Century Health Care Reform Era. *J Acad Nutr Diet* 2015;115(7):1141–1147.

Competencies typical of visionary leaders who are effective in their position and in the organization and who are successful in their practice are shown in **Table 7-2**.

As in other areas of practice, the RDN in food service management usually begins at a *competent* level of knowledge and skills at entry-level following registration. The next stage is *proficiency* in operational skills and the possible beginning of specialist credentials followed by the *expert* who continues to build on his/her knowledge, skills, and credentials.<sup>10</sup>

# Table 7-2. Competencies Needed by Healthcare Food Service Managers

#### Successful healthcare food service managers will:

- Use management techniques to cultivate relationships in and out of the institution and achieve cooperation through teamwork.
- Demonstrate effective communications to achieve understanding of personnel and departmental policies.
- Achieve an organizational structure, mission statement, policies, and procedures that effect necessary changes when indicated.
- Possess technological knowledge of food service, practice experience, and external business and administrative needs.
- Use management techniques based on sound character, compassion, insight, and personal integrity.
- Exhibit personal behaviors and attitudes consistent with professional and institutional goals.
- · Pursue professional knowledge and growth.
- Possess effective supervisory and managerial skills to derive optimal employee performance.
- · Achieve ways to enhance performance and growth of employee.
- Understand the policies of the institution and an ability to interface effectively with superiors.
- Exhibit effective use of resource (fiscal, personnel, and material) to facilitate planning and current operations.
- Possess analytic and decision-making techniques to achieve maximum quality for customer and clients.
- Formulate a creative vision that integrates mutually satisfying department and institutional goals.

Adapted from *Journal of the American Dietetic Association*, 95, Watabe-Dawson, M. "Visionary Leaders Are Key to Success in Food Service," p. 13. Copyright 1995, with permission from Elsevier.

## **EXPANDED OPPORTUNITIES**

Entry-level dietitians with management responsibilities are employed primarily in food service or clinical nutrition service operations. The predominant responsibilities at this level involve technical skills that ensure that food is procured, managed, prepared, and delivered to patients and other clients, and that appropriate nutrition services are provided. With experience and perhaps advanced study, conceptual skills are utilized to identify problem areas requiring attention, to select appropriate techniques, analyze alternative strategies, and select solutions consistent with organization goals.

From entry-level positions, dietitians may advance to the assistant or associate director level of a department and eventually to director or chief administrator. They may manage multidepartmental units or a complex of smaller hospitals, specialty clinics, or long-term care centers. They may become the chief operating officer of a healthcare facility.

Dietitians directing food and nutrition services must have a diversified, multipurpose, broad-based education and experiences from which to draw for expanded roles. They must be familiar with applicable computer software, business organization, marketing, labor relations, industrial engineering, writing and media relations, public relations, financial management data evaluation, policy formation and problem solving, decision making, negotiation, behavior modification techniques, and dealing with challenges.

# **EXPANSION OF ROLES**

Expanded roles may include new and challenging positions that come from the foundation the dietitian receives and that may not even generally be associated with dietetics. In health care, for instance, there is heightened consumer interest in what constitutes healthy food. The food industry wants effective marketing of its products, including information about safety and nutrient value, and wants to develop new products. All these areas represent opportunities in consumer education, writing, food safety, media positions, public policy, food demonstration, and more.

Disaster planning and emergency training is a further need for the food service manager. In events such as floods, hurricanes, earthquakes,

and fires, the availability of food and water becomes of paramount concern. 11 "Nutrition security," defined as "secure access to appropriate diets, a sanitary environment and adequate health services and care," may become huge issues if they are not met.<sup>12</sup> Fortunately there are many evidence-based food-related resources available to RDNs and DTRs for personal training and to share with clients and others in public health and healthcare settings. The Food and Drug Administration, the Centers for Disease Control and Prevention, organizations, and the Internet all provide resource materials. The U.S. Department of Agriculture also maintains a hot line for food safety information.<sup>12</sup> A tutorial on disaster planning is available from the Academy. 13 Many local, state, and national groups provide credible sources of information and training in these areas. The RDN or DTR may also consider obtaining certificates of training offered by groups such as the Food Marketing Institute, the National Restaurant Association, the National Registry of Food Safety Professionals, and others. Such certifications can be further used to meet requirements for professional development and to maintain state licensure credentials.14

Interesting and informative accounts of events during actual world disasters such as the Japanese earthquake and Hurricane Sandy in New Orleans give insight into how food and nutrition issues can be handled. 15,16

A new dimension in foodservice management is the use of automation to simplify many tasks—especially those of a repetitive or dangerous nature. With the rapid advances in technology today, machines may take over many foodservice tasks in the future. An example of one type of automation under development is an optical scanner that analyzes food for nutrient content, actual ingredients, and any additives or contaminants. <sup>17</sup> A database of standard foods and food varieties is to be developed after which it will be possible to test whether the food contains what the label claims and allowing reliable and immediate information to the manager.

Machines could conceivably take over tasks such as cleaning, trash collecting, controlling temperatures, tray delivery and pickup, managing storerooms, loading and unloading dish machines, and others. The foodservice manager needs to be cognizant of emerging technological trends such as these in order to make decisions about their applicability in practice. <sup>18</sup>

## **SUMMARY**

The dietitian in food service management has career opportunities in food, food production and service, management, and the higher levels of activities associated with management and leadership. For the motivated and skilled dietitians, higher salary levels and greater degrees of responsibility and self-actualization can be realized.

# **DEFINITIONS**

*Food production.* The process of preparing and serving food, including purchasing, storage, and processing.

*Food services.* Production and service of food; also refers to the unit or group responsible for feeding groups.

*Food service systems.* Activities that together form the inputs, transformation, and outputs that make up an entire food operation.

Human resources. The personnel in an organization.

*Management.* The administration and coordination of the activities and functions in an organizational unit.

*Quality assurance.* The certification of the continual, optimal, effective, and efficient outcomes of a service or program.

*Resource allocation.* The equitable distribution of financial, physical, and human capital.

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