

# **Scope of Practice**



# Academy of Nutrition and Dietetics: Scope of Practice for the Registered Dietitian

The Academy Quality Management Committee and Scope of Practice Subcommittee of the Quality Management Committee

HE ACADEMY OF NUTRITION and Dietetics (Academy) is the world's largest organization of food and nutrition practitioners and the professional association for credentialed dietetics practitioners—registered dietitians (RDs) and dietetic technicians, registered (DTRs). The Academy's mission is to empower members to be the nation's food and nutrition leaders. The Scope of Practice for the Registered Dietitian reflects the position of the Academy on the essential role of the RD in the direction and delivery of food and nutrition services.

The Scope of Practice for the Registered Dietitian is used in conjunction with the Academy's Scope of Practice in Nutrition and Dietetics, 1 the 2012 Standards of Practice in Nutrition Care and the Standards of Professional Performance for Registered Dietitians.<sup>2</sup> The Standards of Practice address activities related to direct patient and client care. The Standards of Professional Performance address behaviors related to the professional role of RDs. These standards reflect the minimum competent level of dietetics practice and professional performance for RDs. A companion document addresses the Scope of Practice for the Dietetic Technician, Registered.3

Statement of Potential Conflict of Interest: The authors have no potential conflict of interest to disclose.

To take the Continuing Professional Education quiz for this article, log in to www.eatright.org, click the "myAcademy" link under your name at the top of the homepage, select "Journal Quiz" from the menu on your myAcademy page, click "Journal Article Quiz" on the next page, and then click the "Additional Journal CPE Articles" button to view a list of available quizzes, from which you may select the quiz for this article.

2212-2672/\$36.00 doi: 10.1016/j.jand.2012.12.008 Available online 28 February 2013

RDs are committed to optimizing the nation's health and advancing the profession of nutrition and dietetics through safe, person-centered, culturally competent, quality food and nutrition services. Food and nutrition services provided by RDs assist individuals and populations in developing and maintaining eating and lifestyle behaviors that enhance health and quality of life. RD services span a continuum that includes nutrition care, foodservice systems and food systems management, education, research, technology, business, communication, health promotion, disease prevention, and nutrition policy.

## **PURPOSE**

The document describes the Scope of Practice for RDs. RDs are educated and trained in food and nutrition and are integral members and leaders of interdisciplinary teams in health care, foodservice systems, education, and other practice environments. They provide services in varied settings, including health care, business and industry, communities and public health systems, schools, colleges and universities, the military, government, research, fitness centers, private practice, and communications. The purpose of the document is to:

- Identify the education and credentialing requirements for the RD in accordance with the Accreditation Council for Education in Nutrition and Dietetics (ACEND) and the Commission on Dietetic Registration (CDR), which is the credentialing agency for the Academy.
- 2. Describe the scope of practice for the RD.
- Educate colleagues in other health care professions, educators, students, prospective students, foodservice providers, health care administrators, regu-

Approved November 2012 by the Quality Management Committee of the Academy of Nutrition and Dietetics (Academy) and the Academy House of Delegates. Scheduled review date: November 2017.

Questions regarding the Scope of Practice for the Registered Dietitian may be addressed to the Academy Quality Management Staff: Karen Hui, RD, LDN, manager, Practice Standards; and Sharon M. McCauley, MS, MBA, RD, LDN, FADA, director, Quality Management at quality@eatright.org.

- lators, insurers, business owners and managers, and the general public about the qualifications of the RD, competence, and professional services provided by RDs.
- 4. Describe the relationship of the RD to the DTR to illustrate the work of the RD/DTR team providing direct patient/client care, and to describe circumstances in which the DTR works under the supervision of an RD.<sup>4-6</sup>
- Guide the Academy, ACEND, and CDR in developing and promoting programs and services to advance the practice of nutrition and dietetics and the role of RDs as leaders in providing quality food and nutrition services.

# EDUCATION AND CREDENTIALING REQUIREMENTS

The RD designation is a national legally protected title. The RD is a voluntary professional credential granted to an individual who meets the qualifications established by ACEND and CDR.

#### **EDUCATION**

 Completion of the minimum of a Baccalaureate degree granted by a US regionally accredited university or college, or foreign equivalent. Coursework typically in-

- cludes food and nutrition sciences, foodservice systems management, community nutrition, lifespan nutrition, communications, business, computer science, psychology, sociology, anatomy and physiology, pharmacology, genetics, microbiology, organic chemistry, and biochemistry.
- Completion of required dietetics coursework and supervised practice through a Didactic Program in Dietetics and Dietetic Internship or a Coordinated Program in Dietetics accredited by ACEND, which is the accrediting agency for dietetics education programs of the Academy. ACEND is recognized by the US Department of Education as the accrediting agency for education programs that prepare RDs. For more information regarding the academic requirements and supervised practice for RDs, refer to ACEND's website at www.eatright.org/ACEND/.

#### **CREDENTIALING**

- Successful completion of the Registration Examination for Dietitians administered by CDR. The CDR RD certification program is fully accredited by the National Commission for Certifying Agencies, the accrediting arm of the Institute for Credentialing Excellence. Accreditation by the Institute for Credentialing Excellence reflects achievement of the highest standards of professional credentialing.7 For more information regarding RD credentialing, refer to CDR's website at www.cdrnet.org/.
- Compliance with the CDR Professional Development Portfolio requirements to maintain registration<sup>8</sup> including 75 hours of continuing education every 5 years.

For RDs, CDR offers Board Certification as a Specialist in focus areas of practice in recognition of documented practice experience and successful completion of an examination. The certification period is 5 years. Recertification is required to maintain the specialist credential. Current CDR Board-Certified Specialist Credentials are the following:

- Board Certification as a Specialist in Gerontological Nutrition (CSG);
- Board Certification as a Specialist in Oncology Nutrition (CSO);
- Board Certification as a Specialist in Pediatric Nutrition (CSP);
- Board Certification as a Specialist in Renal Nutrition (CSR);
- Board Certification as a Specialist in Sports Dietetics (CSSD); and
- Fellow of the American Dietetic Association (FADA) (Certification) (CDR is no longer accepting applications for the FADA).

In addition to CDR credentials, approximately 50% percent of RDs have earned advanced degrees at the master's or doctoral levels. <sup>10</sup> Refer to the section on non-CDR credential and CDR Certificate options for RDs for additional certifications and credentials that may be held by an RD to enhance qualifications, competence, and career options.

## WHAT IS A NUTRITIONIST?

There is no uniform definition for the title "nutritionist," and those states that define nutritionist in statutes or regulations define it variantly. <sup>11</sup> Some state licensure boards have enacted legislation that regulates use of the title nutritionist and/or sets specific qualifications for holding the title, often but not uniformly including an advanced degree in nutrition. The Academy believes that all RDs are nutritionists but not all nutritionists are RDs. Refer to your state licensure board for your state's specific licensing act.

## **SCOPE OF PRACTICE**

Scope of practice in nutrition and dietetics encompasses the range of roles, activities, and regulations within which nutrition and dietetics practitioners perform. For RDs, scope of practice focuses on food and nutrition and related services developed, directed, and provided by RDs to protect the public, community, and populations; enhance the health and well-being of patients/clients; and deliver quality products, programs, and services, including Medical Nutrition Therapy (MNT), across all focus areas. Focus areas include, but are not limited to, oncology, pediatrics, diabetes, nephrology, sports, nutrition support, extended care, corrections, weight management and obesity, wellness and prevention, behavioral health, This document, the Scope of Practice for the RD, does not supersede state practice acts (ie, licensure, certification, or title protection laws). However, if your state law does not define Scope of Practice, the information within this document may assist with identifying activities that may be permitted within your Scope of Practice based on your qualifications (ie, training, certifications, organization policies, referring practitioner-directed protocols, demonstrated and documented competence, and clinical privileges).

eating disorders and disordered eating, intellectual and developmental disabilities, mental illness, addictions, integrative and functional medicine, food and culinary and supermarkets, sustainable resilient healthy food and water systems, communities and public health, education, and management.

Unique to RDs is the qualification to provide MNT. MNT is a cost-effective, essential component of comprehensive nutrition care. 12-15 Diseases or conditions may be prevented, delayed, or managed, and quality of life improved in individuals receiving MNT. During an MNT intervention, RDs counsel individuals on behavioral and lifestyle changes that impact long-term eating habits and health.

MNT is an evidenced-based application of the Nutrition Care Process (NCP), including:

- performing a comprehensive nutrition assessment;
- determining the nutrition diagnosis;
- planning and implementing a nutrition intervention using evidence-based nutrition practice guidelines; and
- monitoring and evaluating an individual's progress toward goals.<sup>16</sup>

MNT services are provided by the RD for individuals and groups utilizing meal plans, medically prescribed diets and tube feedings, specialized intravenous solutions and specialized oral feedings, and the analysis of potential food and drug interactions. MNT involves in-depth individualized nutrition assessment; determination of the nutrition diagnosis; determination and application of the nutrition intervention personalized for the individual or group; and periodic monitoring, evaluation, reassessment and intervention tailored to manage or prevent the disease, injury, or condition.

On Monday, February 4, 2013, the Centers for Medicare & Medicaid Services (CMS) announced a proposed rule change\* that would, among other things, "Save hospitals significant resources by permitting registered dietitians to order patient diets independently, which they are trained to do, without requiring the supervision or approval of a physician or other practitioner. This frees up time for physicians and other practitioners to care for patients." This exciting development is designed to help health care providers operate more efficiently by getting rid of regulations that are out of date or no longer needed. It will apply only to registered dietitians (RDs) privileged by the hospital in which they work, and the change will not take effect until the rule is finalized later in 2013. The proposed rule, officially published in the Federal Register on Thursday, February 7, 2013, also specifically clarifies that RDs may be included on the medical staff, as they "have equally important roles to play on a medical staff and on the quality of medical care provided to patients in the hospital."

According to CMS, "Our intent in revising the provision was to provide the flexibility that hospitals need under federal law to maximize their medical staff opportunities for all practitioners, but within the regulatory boundaries of their State licensing and scope-of-practice laws. We believe that the greater flexibility for hospitals and medical staffs to enlist the services of non-physician practitioners to carry out the patient care duties for which they are trained and licensed will allow them to meet the needs of their

patients most efficiently and effectively."

For RD reference, the relevant portions of the proposed rule are on pages 9216, 9221-9224, 9233-9235, and 9244. Under the proposed rule, qualified dietitians will be explicitly permitted to become privileged by the hospital staff to a) order patient diets, b) order lab tests to monitor the effectiveness of dietary plans and orders, and c) make subsequent modifications to those diets based on the lab tests, if in accordance with state laws including scope of practice laws. CMS made this change because it "believe[s] that RDs are the professionals who are best qualified to assess a patient's nutritional status and to design and implement a nutritional treatment plan in consultation with the patient's interdisciplinary care team."

This proposed rule responds directly to the President's instructions in Executive Order 13563 urging federal agencies to reduce or revise outmoded or unnecessarily burdensome rules and regulations. Many of the proposed rule's provisions streamline the standards health care providers must meet in order to participate in the Medicare and Medicaid programs without jeopardizing beneficiary safety. The Academy submitted formal comments to CMS in December 2011 urging this very change, providing the evidentiary and scientific basis upon which CMS relied in the proposed rule.

It is recommended that RDs continue current facility/organization procedures in place for ordering patient diets (ie, current granted clinical privileges) and accept and implement disease-specific and condition-specific protocol orders from the referring practitioner, as outlined in this Scope of Practice for the Registered Dietitian until the final rule is effective later in 2013.

\*Medicare and Medicaid Programs; Part II—Regulatory provisions to promote program efficiency, transparency, and burden reduction; proposed rule. Fed Regist. 2013;78(26):9216-9245. http://www.gpo.gov/fdsys/pkg/FR-2013-02-07/pdf/2013-02421.pdf. Accessed February 14, 2013.

RDs involved in direct care perform MNT. Examples of medical conditions and diseases as outlined in the Academy's *Nutrition Care Manual*<sup>17</sup> for which RDs provide MNT include but are not limited to:

- musculoskeletal conditions: arthritis, amputations, osteoporosis, osteopenia, and orthopedics;
- neurological: epilepsy, Huntington's disease, amytrophic lateral sclerosis, multiple sclerosis, and Parkinson's disease;
- behavioral health: eating disorders, alcohol dependency, chemical dependency, disordered eating, mental illness, and addictions;
- critical illness or conditions: trauma, burns, wound care, pressure ulcers, malnutrition, and injury;
- oncology: care in the continuum of care:
- cardiovascular: cerebrovascular accident, transient ischemic attack, coronary artery disease, heart failure, lipid metabolism, and hypertension:
- renal: chronic kidney disease, decreased kidney function to kidney failure, dialysis, and transplantation:
- gastrointestinal: liver, cirrhosis, liver transplantation, pancreas, up-

- per and lower gastrointestinal, inflammatory bowel disease, irritable bowel syndrome, peptic ulcer disease, celiac disease, Crohn's disease, short bowel syndrome, and ulcerative colitis:
- diabetes: prediabetes, type 1 diabetes mellitus, type 2 diabetes, and gestational;
- developmental disabilities: intellectual, autism spectrum disorders, Down syndrome, Prader-Willi syndrome, spina bifida, and inborn errors of metabolism;
- sports nutrition and performance;
- genetic disorders: cystic fibrosis, inborn errors of metabolism, phenylketonuria, and Wilson's disease;
- food allergies: food allergies and food insensitivity;
- anemia: nutritional deficiencies;
- weight management: bariatric, overweight, and obesity;
- pediatrics: failure to thrive: and
- pulmonary: emphysema, chronic bronchitis, and asthma.

RDs assess the nutrition health needs of patients/clients and develop nutrition-related priorities, goals, and objectives in order to establish and implement nutrition care plans. RDs provide nutrition counseling and nutrition education as

components of preventative, curative, and restorative health care. RDs conduct nutrition case finding and make referrals to appropriate resources and programs. RDs evaluate, educate, and counsel related to food—drug and drug—nutrient interactions as well as determine appropriate nutrition quality standards in foodservice and nutrition programs. RDs supervise and teach nutrition and dietetics personnel, supervise dietetic technicians, dietetic and nutrition students, and dietetic and nutrition interns in the provision of nutrition care services.

RDs accept and implement verbal orders, written orders, or electronically transmitted orders from the referring practitioner based on federal and state laws and regulations and organization policies. RDs implement established and approved disease-specific and condition-specific protocol orders from the referring practitioner for timely accessible nutrition care. RDs perform health care functions as delegated by the referring practitioner in collaboration with other health care team members. RDs may assign nutrition care tasks to administrative and technical support personnel (ie, DTR).

RDs conduct nutrition research or collaborate in nutrition research for the purpose of demonstrating nutrition outcomes or developing nutrition rec-

ommendations for individuals, specific groups, or the public. Evidence-based practice that involves complex and conscious decision making based on the best available research/evidence and on patient/client characteristics, situations, and preferences is a tenet of competent nutrition and dietetics practice for the RD. To guide the RD in making evidence-based decisions, the Academy has developed an Evidence Analysis Library and position (http:// www.eatright.org/positions/) and practice papers (http://www.eatright. org/members/practicepapers/). The Evidence Analysis Library is a synthesis of continuously updated nutrition research on important dietetics practice questions and is housed within an accessible, online, user-friendly library at http://www.adaevidencelibrary.com/. 18,19

Scope of Practice in Nutrition and Dietetics for the credentialed practitioner is composed of statutory and individual components. Statutory scope of practice is typically established within the practice act and interpreted and controlled by the agency or board that regulates the practice of the profession in a given state.<sup>1</sup>

• Statutory Scope of Practice. "Legal scopes of practice for the health care professions establish which professionals may provide which health care services, in which settings, and under which guidelines or parameters. With few exceptions, determining scopes of practice is a state-based activity. State legislatures consider and pass the practice acts, which become state statute or code. State regulatory agencies, such as medical and other health professions' boards, implement the laws by writing and enforcing rules and regulations detailing the acts."20 Requirements for continuing education can also be specified. The Academy's Definition of Terms describes the differences between licensure, statutory certification, and title protection (www.eatright.org/ scope).

• Individual Scope of Practice. Each RD has an individual scope of practice that is determined by education, training, credentialing, and demonstrated and documented competence to practice. An individual's scope of practice in nutrition and dietetics has flexible boundaries to capture the breadth of the individual's professional practice. Individuals and organizations must

ethically take responsibility for determining competence of each individual to provide a specific service.<sup>1</sup>

In keeping with the Code of Ethics,<sup>21</sup> individual RDs can only practice in areas in which they are qualified and have demonstrated competence to achieve ethical, safe, and quality outcomes in the delivery of food and nutrition services. Competent practitioners use upto-date knowledge, skills, and best practices; make sound decisions based on appropriate data; communicate effectively with patients, customers, and others: critically evaluate their own practice; identify the limits of their competence; and improve performance based on self-reflection, applied practice, and feedback from others.<sup>22</sup> In addition, professional competence involves the integrative ability to engage in clinical reasoning that facilitates problem solving and fosters patientcentered behaviors and participatory decision making.<sup>23</sup> RDs utilize the Academy's Scope of Practice Decision Tool, which is an online, interactive tool, to assist them in determining whether an activity is within their Scope of Practice.1

Depending on their knowledge, skills, expertise, individual interests, and competence, RDs can work in multiple practice areas and settings, or focus on a specific practice area or with a particular age group. Integral to the RD's commitment to lifelong learning is the recognition that additional knowledge, skills, and demonstrated competence are imperative to maintain currency with advances in practice and in adherence to evidence-based practice and best practices. Lifelong learning is supported by CDR's Portfolio Development Process, which requires RDs to determine their individual continuing professional education needs, develop action plans, and achieve their goals to maintain registration status with CDR.8

RDs apply evidenced-based practice utilizing the NCP.<sup>24</sup> The NCP provides RDs with a systematic decision-making/problem-solving method to manage nutrition care activities in multiple practice environments. In addition, the Academy has published the *International Dietetics & Nutrition Terminology Reference Manual: Standardized Language for the Nutrition Care Process* <sup>16</sup> to assist RDs who provide direct patient/client care in using standardized lan-

guage to document application of the NCP.<sup>25</sup>

# RD ROLES: SERVICES AND ACTIVITIES

The profession of nutrition and dietetics is dynamic, diverse, and continuously evolving. The breadth of practice within dietetics expands with advances in nutrition and food science, health care, and information technology, and is driven by public health initiatives and evidencebased research demonstrating the impact of food and nutrition on health status, disease prevention and treatment, quality of life, and the safety and wellbeing of the public. The cultural diversity of the nation, longer lifespans, federal and state legislative actions, and social and environmental trends affect professional practice and the goals and objectives of those served by the RD. Increasingly, quality health care depends on active participation by patients, clients, consumers, groups, and communities in decisions that promote health and well being, as well as fitness and performance. Integral to this effort, RDs play critical roles in leading the public in incorporating healthful food supplies, food choices, and eating behaviors into daily lives, and aiding individuals in making informed choices regarding food and nutrition.

RDs are nutrition and dietetics practitioners whose responsibilities include providing comprehensive food and nutrition services; developing food and nutrition programs; serving on national, state, and local food and nutrition boards; and contributing to development of nutrition policies for individuals, groups, and populations. RDs develop and translate national nutrition guidelines, for example, Institute of Medicine, 2010 Dietary Guidelines for Americans,<sup>26</sup> and practice guidelines of national health organizations and the federal government (eg, American Diabetes Association and American Heart Association) into practical application for the individuals and populations they serve.

Food, nutrition, and dietetic services and activities performed by RDs illustrate current practice and include but are not limited to the following:

 Develop, direct, manage, and evaluate departments, units, programs, or businesses providing food, foodservice, nutrition, and related services to in-

Nutrition Care Process	RD role	DTR role
Nutrition assessment	Perform	Assist with or initiate data collection as directed by the RD or per standard operating procedures, and begin documenting elements of the nutrition assessment for finalization by the RD
Nutrition diagnosis	Perform	Per RD-assigned <sup>a</sup> task, communicate and provide input to the RD, when applicable
Nutrition intervention	Determine/recommend or per established and approved disease-specific and condition-specific protocol orders from the referring practitioner, if applicable, initiate interventions; may assign <sup>a</sup> to appropriate support, administrative, and technical (DTR) staff	Implement/oversee standard operating procedures; assist with implementation of individualized patient/client interventions and education as assigned <sup>a</sup> by the RD
Nutrition monitoring and evaluation	Monitoring: determine/approve; may assign <sup>a</sup> elements of monitoring to appropriate support, administrative, and technical staff Evaluation: document outcome of interventions reflecting input from all sources to recognize contribution of DTR/nutrition care team members to patient/client experience and quality outcomes	Implement/oversee (duties performed by other nutrition, foodservice staff) standard operating procedures; complete, document, and report to the RD and others the results and observations of patient/client specific assigned monitoring activities

**Figure 1.** Nutrition Care Process: Roles of Registered Dietitians (RD) and Dietetic Technician, Registered (DTR). <sup>a</sup>The RD is ultimately responsible and accountable to the patient/client, employer/organization, and regulator for nutrition activities assigned to DTRs and other technical and support staff.

- dividuals, groups, and the general public.
- Develop, administer, evaluate, and consult regarding food and nutrition policy, including quality standards and performance improvement in foodservice and nutrition programs.
- Collaborate in or conduct food and nutrition research to demonstrate food and nutrition-related outcomes and to develop food and nutrition policy and recommendations for individuals, groups, and special populations.
- Consult, educate, and advocate on behalf of individuals, groups, and special populations regarding food, culinary, nutrition and health issues, food security and insecurity, and nutrition programs and resources.
- Manage nutrition care, collaborate with other health and nutrition professionals, and refer to appropriate nutrition resources and programs or other health professionals according

- to the needs of the individual patient or client.
- 6. Provide performance-based food and nutrition services to physically active individuals (ie, athletes, firefighters, law enforcement officers, and the military).
- Apply the Academy's NCP<sup>24</sup> in providing nutrition care of individuals: 1) conduct nutrition assessments; 2) diagnose nutrition problems; 3) develop nutrition-related priorities, goals, and objectives; and 4) establish, implement, and provide ongoing management and revision of interventions based on the patient's/client's response to nutrition care. Role delineation for the RD that supervises a DTR in delivering nutrition care to patients/clients is outlined in Figure 1; the DTR and other support staff work under the supervision of the RD when engaged in direct patient/client nutrition care activities in any setting.
- 8. Recommend, perform, and interpret test results as related to

nutrition status: blood pressure, anthropometric measurements (eg, height and weight, skin fold thickness, waist circumference, calculation of body mass index with classification for malnutrition and obesity), and indirect calorimetry measurement, laboratory tests, and waived pointof-care laboratory testing (eg, blood glucose, cholesterol). Accept verbal, written, or electronic orders as delegated by the referring practitioner for laboratory tests and waived point-of-care laboratory testing. Waived testing means those noncritical tests approved by US Food and Drug Administration for home use that are simple and accurate as to render the likelihood of erroneous results negligible, or pose no reasonable risk of harm if performed incorrectly. Waived test lists are\viewed on the web at http:// wwwn.cdc.gov/dls/waivedtests/ and http://www.cms.gov/ Regulations-and-Guidance/Legis lation/CLIA/downloads/waivetbl. pdf.

- 9. Perform assessment of a patient's nutritional status working closely with interdisciplinary team members for care coordination (eg, ability to swallow, in the case of patients with dysphagia, with the speech language pathologist; consulting on drug—food interactions in an anticoagulation clinic with a pharmacist; and planning medication titrations for parenteral nutrition with a nurse and pharmacist).
- Complete a nutrition-focused physical assessment through an evaluation of body systems, muscle and subcutaneous fat wasting, oral health, suck/swallow/breathe ability, skin condition, appetite, and affect.
- Assess, recommend, and implement established and approved disease-specific and conditionspecific protocol orders from the referring practitioner, executing interventions per protocol to meet individual nutrient and energy needs, including but not limited to prescribed diets; modification of food textures for dentition and individual preferences; nutritional supplements; dietary supplements; nutrition support therapies, for example, enteral nutrition (tube feedings) and parenteral nutrition support (specialized intravenous solutions) for neonates, adolescents, and adults; placement of feeding tube; provide feeding therapy (pediatric oral aversion); and implement protocol or physician-order-driven medication titration (eg, insulin, vitamins/trace elements added to parenteral nutrition formula). Adjust medications per established and approved diseasespecific and condition-specific protocol orders from the referring practitioner for timely accessible nutrition care.
- Provide MNT in direct care of medical diseases and conditions across the continuum of care.
- Provide nutrition counseling; nutrition behavioral therapy; lactation counseling; health coaching; and nutrition, physical activity, exercise counseling, and health education as

- components of preventative, therapeutic, and restorative health care.
- 14. Evaluate, educate, and counsel related to nutritional genomics, gene-diet and disease interactions, and food-drug, drug-nutrient, and supplement-drug-nutrient interactions.
- Educate dietetics students, dietetics interns, health care professionals, and others as faculty in academic programs, or as preceptors for a supervised practice experience.
- 16. Educate the public about healthy lifestyles (nutrition, physical activity, health-related behaviors) and food choices in venues such as school classrooms, community classes and groups, supermarkets, electronic learning formats, and social media.
- 17. Educate the public regarding food security, food safety, sustainable resilient healthy food and water systems, and environmental food and nutrition issues.
- 18. Perform human resource functions consistent with job responsibilities: recruitment, hiring, orientation and training, scheduling, supervision, competence assessment, performance evaluation, mentoring for professional development, practice advancement, and progressive discipline including termination.
- 19. Supervise DTR,5 dietetics students, dietetics interns, and administrative and support personnel assisting in the provision of direct patient/client nutrition care. Assignment of tasks takes into consideration components of the NCP (data collection, implementation and monitoring of nutrition plan, and nutrition education) and the training and competence of the DTR and other support staff in performing the assigned functions with a specific patient/client or population. The RD is ultimately accountable to the patient/client, physician, regulators, and ac-

- crediting organizations for functions assigned to support staff.
- Design and implement outcomes-based quality assurance and performance improvement activities to document outcomes of services; compliance with regulations, policies, and procedures; and monitor and address customer satisfaction.
- 21. Supervise, manage, or direct foodservice operations from food and equipment purchasing and procurement through service—addressing food safety and sanitation, menu development and food production, customer service, financial management, electronic applications, emergency preparedness and management, and kitchen design and redesign.
- 22. Provide food, nutrition, and culinary expertise in the design, development, and production of food products and menus, including selection of ingredients, methods of preparation, nutrient analysis of recipes and nutrient characteristics, and measure customer satisfaction in the production and development of food products, recipes, and menus.
- 23. Develop and use electronic information management tools for practice, research, and education. This includes electronic systems for managing patient information (electronic health record or personal health record), nutrient database systems for evaluating nutritional composition, foodservice and nutrition system management software, and web-based applications, telehealth and social media for patient education, public information, business, education, and outreach.

Advances in health care, public health and environmental initiatives, information technology, and various practice area market segments will offer opportunities for new services and roles for RDs. With appropriate qualifications and demonstrated competence, RDs can provide new services within the provisions of their individual scope of practice, statutory scope of practice (if applicable), federal or state laws and regulations, and organizational policies and procedures.

RDs operate within the directives of applicable federal and state laws and regulations, policies, and procedures established by the organization in which they are employed, and designated roles and responsibilities. To determine whether an activity is within the Scope of Practice of the RD, the practitioner compares his or her knowledge, skill, and demonstrated competence necessary to perform the activity in a safe and ethical manner. The Academy's Scope of Practice Decision Tool, which is an online, interactive tool, is specifically designed to assist practitioners with this process.

# RD ROLES: PRACTICE AREAS (ALPHABETICAL ORDER)

The majority of RDs are employed in health care settings (eg, hospitals, clinics, mental health centers, rehabilitation centers, dialysis centers, bariatric centers, extended care facilities)10 addressing wellness, prevention, and nutritional management of diseases and medical conditions. RDs work collaboratively as members and leaders of interdisciplinary health care teams that may include any of the following: physicians, doctors of osteopathic medicine, podiatrists, physician assistants, nurses, nurse practitioners, pharmacists, speech-language pathologists, occupational therapists, physical therapists, psychiatrists, psychologists, social workers, dentists, dental hygienists, exercise physiologists, respiratory therapists, athletic trainers, lactation consultants, and others.

Other settings in which RDs work include nonprofit organizations, state and local health departments, food trust organizations, communities and public health agencies, health insurance companies, child care programs, schools, home care, colleges and universities, government agencies, the military, and research. A growing number of RDs work in the food, pharmaceutical, and health care-related businesses, private practice, the media, integrative and functional medicine, corporate wellness, physical activity and athletic performance, health care informatics, food security, sustainable food and water systems, and emerging areas.

Within the Academy, members establish Dietetic Practice Groups and Member Interest Groups to focus on specific areas of practice and on issues or activities of mutual interest. RDs

may assume leadership roles and responsibilities in any of the practice areas and settings. Examples of areas and settings where RDs practice include but are not limited to the following:

- Acute, ambulatory/outpatient, home care, and extended health care. RDs participate in, manage, and direct nutrition programs and services to identify and evaluate individuals for nutritional risk, provide consultation to the physician and interdisciplinary health care team on nutrition aspects of a patient's/client's treatment plan, provide MNT and nutrition education and counseling, and care coordination and management to address prevention and treatment of one or more acute or chronic conditions or diseases. RDs provide and coordinate food and nutrition services and programs in health care settings such as hospitals, longterm acute care facilities, ambulatory clinics, primary care medical homes, community health centers, bariatric centers, behavioral health centers, Veterans Affairs' facilities, home care, assisted living, skilled nursing, extended care, continuing care communities, and correctional facilities.
- Business and communications. RDs are employed as chief executive officers, vice presidents, directors, and managers in business and communications, where they participate, manage, and direct in areas such as news and communications, consumer affairs, public relations, food commodity boards, food and culinary nutrition, supermarkets, human resources, nutrition and foodservice computer applications, product development, marketing, sales, product distribution, and consumer education. RDs are authors of books, professional and lay articles, print and electronic publications, newsletters, editorials, columns, social media, and other forms of electronic media, and journalists, speakers, commentators, television and radio personalities, and spokespersons. They are website managers and developers.
- Community and public health. RDs with public health and community expertise are directors, managers, supervisors, educators, counselors, consultants, and researchers working in a variety of settings from the national to state and local levels, such as government agencies, community and profes-

sional organizations, and schools, RDs monitor, educate, and advise the public and populations about nutrition-related issues and concerns. RDs design, implement, monitor, evaluate, and supervise staff involved in federally funded nutrition programs (eg, Special Supplemental Nutrition Program for Women, Infants and Children; Supplemental Nutrition Assistance Program; Expanded Food and Nutrition Education Program; and Indian Health Services) and community programs that promote equitable food systems, food safety, and population-based strategies to promote healthful eating and lifestyle behaviors. RDs provide and coordinate nutrition services and programs including MNT to individuals and groups; collaborate with others to develop nutrition programs and services; plan and deliver training and education for health personnel; and advocate for sound food and nutrition policies and programs at the federal, state, and local levels. RDs contribute to emergency preparedness and coordinate food and nutrition services during disasters.

- Entrepreneurial and private practice. RDs in private practice are entrepreneurs and innovators in providing nutrition products and services to consumers, industry, media, and businesses. They are chief executive officers, business owners, consultants, professional speakers, writers, journalists, chefs, educators, health and wellness coaches, and spokespersons. They may work under contract for organizations and government agencies, such as health care or food companies, businesses and corporations, employee wellness programs, and the media. RDs provide comprehensive food and nutrition services to individuals, groups, foodservice and restaurant managers, food vendors and distributors, athletes, sports teams, and company employees. RDs act as expert witnesses and consultants on legal matters related to food and nutrition. RDs provide MNT to individuals and groups in all populations. To locate an RD, select "Find a Registered Dietitian" on the Academy's website at www.eatright.org.
- Foodservice systems. RDs manage and direct foodservice operations in health care and other institutions and commercial settings or are employed in these capacities as employees of con-

tract foodservice management companies (eg, hospitals, schools, colleges and universities, continuing care communities, rehabilitation centers, extended care settings, government facilities, and correctional facilities), and commercial settings (restaurants, food vending and distribution, catering). Responsibilities include participating in, managing, or directing any or all of the following: menu and recipe management; food, supplies, and equipment purchasing; food receiving, storage, preparation, and service; financial management; human resource management; food safety and sanitation programs; waste management, water conservation and composting programs; vending services and catering for special events; foodservice in emergency situations, and kitchen design/ redesign. RDs use a wide variety of electronic tools to manage data and may specialize in the development and management of specific technological applications related to foodservice operations.

• Integrative and functional medicine. RDs are skilled in functional and integrative medicine, nutritional genomics, whole foods, nutrition supplements and dietary supplements and utilizing the NCP in a broad range of holistic and therapeutic modalities. RDs promote the integration of conventional nutrition practices, clinical judgment, and evidence-based alternatives through research, education, and practice. RDs are leaders in evidence-based and practice-based therapies, including personalized nutritional genomics, gene-diet and disease interactions, holistic health care, and functional nutrition therapies using the Integrative and Functional Medical Nutrition Therapy Radial (http://www.integrativerd.org/ site.cfm?page=ifmnt\_radial\_guide). The Integrative and Functional Medical Nutrition Therapy Radial is a model for critical thinking that embraces both the science and art of personalized nutrition care with consideration of multiple conventional or alternative medicine disciplines using five key areas: lifestyle, systems (signs and symptoms), core imbalances, metabolic pathways, and biomarkers.

• Management and leadership. RDs serve in all levels of management (eg, supervisor, manager, unit manager, di-

rector, system director, administrator, vice president, president, chief operations, or executive officer, owner). Practice settings for RDs include health care organizations, businesses, and corporate settings such as food distribution, group purchasing, wellness/health coaching, nonprofits, association management, and government agencies. Responsibilities range from managing a unit, department, and multidepartments to system-wide operations in multiple facilities. Focus areas include health care administration, food and nutrition services, clinical nutrition services, foodservice systems, multidepartment management, clinical services and care coordination with multiple disciplines (eg, diabetes education center, wound care program, bariatric center, medical home management), public health agency overseeing health promotion and disease prevention, promotion of programs in states and communities, research, community health program/agency serving a specific client population, and corporate wellness and/or providing consulting services to an organization seeking a specific product or service.

• Military service. RDs serve as Active Duty and Reserve Component commissioned officers in the US Armed Forces (Army, Navy, and Air Force) and work as civilians alongside active duty and reserve RDs. RDs provide nutrition expertise worldwide to active duty and retired service members, their families. and other veterans who are eligible for care in the military health care system. RDs provide nutrition expertise for the Department of Defense and are responsible for enhancing human health and performance through policy development, applied nutrition research, comprehensive nutrition assessment, education, and intervention. Practice areas include clinical dietetics, health promotion, wellness and physical activity, community nutrition, and foodservice management. RDs serve as consultants for military readiness, medical education, military training, development of operational meals, Army and Navy Special Operations Forces, and overseas Department of Defense school nutrition programs. RDs educate, counsel, and advise soldiers about fueling for operations, recovering from training/ missions and injury/illness, such as burns and trauma, achieving and maintaining mission-specific body composition, optimizing mental function, and preparing for arduous environments. In addition, RDs manage, develop curriculum, and provide instruction for the US Military Dietetic Internship Consortium and the US Military-Baylor University Masters Program in Nutrition.

• **Nutrition informatics.** Informatics is the intersection of information, nutrition, and technology and is supported by the use of information standards, processes, and technology. RDs are leaders in the effective retrieval, organization, storage, and optimum use of information, data, and knowledge for food and nutrition-related problemsolving and decision making. RDs design and implement nutrition software and nutrition education tools, develop and use technology for recipe and menu management, perform or oversee nutritional analysis of product ingredients to comply with state and federal regulations for food labeling and restaurant menu nutrient analysis, and participate in the design and implementation of electronic health records for acute care, outpatient and extended health care settings, and other consumer tools for managing health care data.<sup>27,28</sup> RDs participate in the larger informatics community through collaborative development efforts for standards, terminology, and educational modalities. RDs are informatics educators to students and practitioners and conduct research on informatics tools and processes to enhance practice.

• Preventive care, wellness, and weight management. RDs are leaders in evidence-based nutrition practices that address wellness and disease prevention at all stages of the lifespan. Recognizing that nutrition and physical activity interact to improve the quality of life, RDs provide nutrition counseling and guidance for active lifestyles that are consistent with achieving risk reduction from chronic disease, proactive health maintenance, and optimal nutrient intake for healthy lifestyles. RDs address prevention and treatment of overweight and obesity throughout the lifespan. RDs interact with the public, scientific organizations, and industry to provide nutrition and weight-management services and programs to patients, clients, and customers. National weight-management companies/cor-

Credentialing agency	Credential
American Academy of Professional Coders	Certified Professional Coder (CPC)
American Association of Diabetes Educators	Board Certified in Advanced Diabetes Management (BC-ADM)
American Association of Family and Consumer Sciences	Certified in Family and Consumer Sciences (CFCS)
American College of Healthcare Executives	Board Certified as a Fellow of the American College of Healthcare Executives (FACHE)
American College of Sports Medicine	ACSM Certified Personal Trainer (CPT) ACSM Certified Health/Fitness Specialist (HFS)
American Council on Exercise	ACE-certified Lifestyle and Weight Management Coach ACE-certified Personal Trainer ACE-certified Group Fitness Instructor ACE-certified Advanced Health & Fitness Specialist
American Institute of Health Care Professionals	Health Care Life Coach-Certified (HCLC-C)
Board of Certification, Inc. for the Athletic Trainer	Athletic Trainer
Certifying Board of Dietary Managers Association of Nutrition & Foodservice Professionals	Certified Dietary Manager (CDM)
Commission for Case Manager Certification	Certified Case Manager (CCM)
Healthcare Quality Certification Commission	Certified Professional in Healthcare Quality (CPHQ)
Health Science Institute	Chronic Care Professional (CCP) Registered Health Coach (RHC)
Institute for Business Growth	Certified Business Coach (CBC)
International Association of Culinary Professionals	Certified Culinary Professional (CCP)
International Association of Eating Disorders Professionals	Certified Eating Disorders Registered Dietitian (CEDRD)
National Academy of Certified Care Managers	Care Manager Certified (CMC)
National Board of Nutrition Support Certification, Inc, American Society of Parenteral and Enteral Nutrition (A.S.P.E.N.)	Certified Nutrition Support Clinician (CNSC)
National Certification Board for Diabetes Educators	Certified Diabetes Educator (CDE)
National Commission for Health Education Credentialing, Inc	Certified Health Education Specialist (CHES)
National Environmental Health Association	Certified Professional-Food Safety (CP-FS) Registered Environmental Health Specialist/Registered Sanitarian (REHS/RS)
National Strength and Conditioning Association	NSCA-Certified Strength and Conditioning Specialist (CSCS) NSCA-Certified Personal Trainer (NSCA-CPT)
Project Management Institute	Certified Associate in Project Management (CAPM) Project Management Professional (PMP)
School Nutrition Association	School Nutrition Specialist (SNS)
The International Board of Lactation Consultant Examiners, Inc	International Board Certified Lactation Consultant (IBCLC)
Wellcoaches Corporation	Wellcoaches Certified Professionals (WCP) Wellcoaches Certified Health Coach Wellcoaches Certified Wellness Coach

**Figure 2.** Credentials held by Registered Dietitians (not all inclusive).

Table. Commission on Dietetic Registration Certificate of Training Programs<sup>a</sup>

Title	No. of continuing professional education units
Certificate of Training in Adult Weight Management Program	35
Level 2 Certificate of Training in Adult Weight Management Program	50
Certificate of Training in Childhood and Adolescent Weight Management	32

<sup>&</sup>lt;sup>a</sup>The Commission on Dietetic Registration Certificate of Training Programs are intensive training programs that include a self-study module and pretest, onsite program, and a take-home post-test.

porations employ RDs at the corporate level. RDs are employed as developers, managers, coordinators, and providers of corporate wellness programs, as program staff and as consultants providing health, weight management, wellness programs, fitness programs, and individualized nutrition counseling.

- **Research.** RDs promote, participate in, conduct, and apply research related to food, nutrition, and dietetics. RDs assist with, manage, and disseminate findings from research projects conducted in clinical, community, health care, foodservice, laboratory, and academic settings. RDs are employed in a variety of settings, including general clinical research centers, translational centers, teaching hospitals, nonprofit research entities, academia, food and pharmaceutical companies, and municipal, state, and federal government (eg, National Institutes of Health, US Department of Agriculture, and Centers for Disease Control and Prevention). They are employed in research settings to direct and manage grants, oversee and conduct food and nutrition-related research, author publications, and guide development and implementation of food and nutrition policy.
- School nutrition. RDs are employed in child nutrition programs at the local, state, and national levels to contribute to healthy school environments. They work as educators, agency directors, researchers, and directors of school nutrition programs. Responsibilities include adherence to US Department of Agriculture Food and Nutrition Service guidance and regulations and providing or consulting on schoolbased special diets. RDs are employed as corporate dietitians supplying products or services to school nutrition operations and as consultants in school

- nutrition and wellness. RDs provide leadership in a variety of initiatives supported and sponsored by the US Department of Agriculture Food and Nutrition Service and various national, state, and local food and nutrition organizations and alliances.
- **Sports nutrition.** RDs educate and counsel clients of all ages and abilities regarding the relationships between food, health, fitness, physical activity, exercise, and athletic performance. They are employed in rehabilitation; sports medicine clinics; community and medical fitness centers; amateur, collegiate, and professional sport organizations; the US Olympic Committee; academia; the military; sports performance entities; sports food business and industry; and communications. RDs are members of interdisciplinary sports medicine and athletic performance teams, manage foodservice budgets and foodservice to athletic teams, and conduct research in sports nutrition and exercise science. RDs evaluate dietary and sports supplements for safety, efficacy, and quality. RDs educate athletes regarding banned substances in sports. RDs work in prevention and nutrition intervention of eating disorders, disordered eating, and the female athlete triad. RDs develop nutrition programs and counsel professional firefighters, law enforcement officers, and others whose job requirements include physical performance and/or maintenance of specified levels of physical conditioning or body weight and body composition.
- Sustainable resilient healthy food and water systems. RDs are leaders and managers in sustainable and accessible food and water systems.<sup>29</sup> RDs are employed in food banks, food pantries, farms, nongovernment organizations

in natural resource conservation and farming groups, local, state and federal government, private practice consulting, writing, and speaking, academia, foodservice systems management from farm to institution. RDs serve in leadership capacities on food policy councils, sustainability committees, and food gardening groups. They promote increased appreciation for and understanding of food security and resiliency, agricultural production and environmental nutrition issues. RDs educate and support policies, systems and environments that advance sustainable healthy food and water systems related to current and emerging food production, processing, distribution, marketing, retail, and waste management practices.30

- US Public Health Service. RDs are members of the Commissioned Corps of the US Public Health Service. RDs work in the US Department of Health and Human Services and in other federal agencies and programs, including the Health Resources and Services Administration, Food and Drug Administration, National Institutes of Health, Centers for Disease Control and Prevention, and Centers for Medicare and Medicaid Services. RDs in the US Public Health Service may be deployed to sites of national emergencies within the United States.
- Universities and other academic settings. RDs are program directors and faculty for Didactic Programs in Dietetics and program directors and faculty for Dietetic Internships and Dietetic Technician Programs. RDs are faculty and administrators in universities, community colleges, culinary programs, and academic medical centers. They direct and manage nutrition services and nutrition education programs. RDs instruct students in food, nutrition, health care, and health-related disciplines; sustainable resilient healthy food and water systems; foodservice management; and public health.

# CREDENTIAL AND CERTIFICATE OPTIONS FOR RDs

Additional credentials that may be held by RDs and the respective credentialing agency are listed in Figure 2. This list is not all inclusive. Obtaining additional academic degree(s), various certificates or credentials are options that may be desirable or required for specific areas

#### Glossarv

Academy of Nutrition and Dietetics—Definition of Terms unless otherwise referenced (http://www.eatright.org/scope).

**Registered Dietitian (RD):** The CDR, the credentialing agency for the Academy, defines the Registered Dietitian as an individual who has met current minimum (Baccalaureate) academic requirements with successful completion of both specified didactic education and supervised-practice experiences through programs accredited by the ACEND of the Academy of Nutrition and Dietetics and who has successfully completed the Registration Examination for Dietitians. To maintain the RD credential, the RD must comply with the Professional Development Portfolio recertification requirements (accrue 75 units of approved continuing professional education every 5 years).

**Dietetic Technician, Registered (DTR):** CDR defines the Dietetic Technician, Registered as an individual who has met current minimum requirements through one of three routes: 1) successful completion of a minimum of an Associate degree and a Dietetic Technician Program as accredited by the ACEND of the Academy of Nutrition and Dietetics (Academy); 2) successful completion of a Baccalaureate degree; met current academic requirements (Didactic Program in Dietetics) as accredited by ACEND of the Academy; successfully completed a supervised practice program under the auspices of a Dietetic Technician Program as accredited by ACEND; or 3) completed a minimum of a Baccalaureate degree; successfully completed a Didactic Program in Dietetics as accredited by ACEND. ACEND. ACEND. ACEND. ACEND. ACEND. ACEND. Acend and the DTR credential, the DTR must comply with the Professional Development Portfolio recertification requirements (accrue 50 hours of approved continuing professional education every 5 years).

Scope of Practice in Nutrition and Dietetics: The Scope of Practice in Nutrition and Dietetics encompasses the range of roles, activities, and regulations within which nutrition and dietetics practitioners perform. For credentialed practitioners, Scope of Practice is typically established within the practice act and interpreted and controlled by the agency or board that regulates the practice of the profession in a given state

**Dietetics:** The integration, application, and communication of principles derived from food, nutrition, social, business, and basic sciences, to achieve and maintain optimal nutrition status of individuals through the development, provision, and management of effective food and nutrition services in a variety of settings.

**Medical Nutrition Therapy (MNT):** Medical nutrition therapy is an evidence-based application of the Nutrition Care Process. The provision of MNT (to a patient/client) may include one or more of the following: nutrition assessment/reassessment, nutrition diagnosis, nutrition intervention and nutrition monitoring, and evaluation, which typically results in the prevention, delay, or management of diseases and/or conditions.

**Nutrition Care Process (NCP):** The Academy's Nutrition Care Process is a process for identifying, planning for, and meeting nutritional needs and includes four steps: assessment, diagnosis, intervention, monitoring, and evaluation.

**Evidence-Based Practice:** Evidence-based practice is an approach to health care wherein health practitioners use the best evidence possible, that is, the most appropriate information available, to make decisions for individuals, groups, and populations. Evidence-based practice values, enhances, and builds on clinical expertise, knowledge of disease mechanisms, and pathophysiology. It involves complex and conscientious decision making based not only on the available evidence but also on client characteristics, situations, and preferences. It recognizes that health care is individualized and ever changing and involves uncertainties and probabilities. Evidence-based practice incorporates successful strategies that improve client outcomes and are derived from various sources of evidence, including research, national guidelines, policies, consensus statements, systematic analysis of experience, quality improvement data, specialized knowledge, and skills of experts.

**Integrative and Functional Medicine:** Sharing a systems biology approach to health care, both types of medicine encompass patient-centered, healing-oriented medicine that embraces conventional and complementary therapies. They represent a broader paradigm of medicine than the current dominant biomedical model. They were driven initially by consumer demand and are now increasingly accepted by health care providers and institutions. There are other terms describing this paradigm: personalized medicine, anti-aging, nutritional medicine, biological medicine, and a growing list of others.<sup>31</sup>

**Nutritional Genomics:** "An umbrella term that describes the application of genetic technology to food and nutrition and includes nutrigenetics and nutrigenomics." "It is the study of how dietary and other lifestyle choices influence the function of living beings at the molecular, cellular, organismal, and population levels." "Nutrigenetics concerns the individual's genetic make-up (DNA) and the proteins those genes produce and how well those proteins work." "Nutrigenomics is the study of how foods affect our genes and how individual genetic differences can affect the way we respond to nutrients (and other naturally occurring compounds) in the foods we eat "34"

of practice or employment settings. The Table lists Certificate of Training Programs offered by the CDR and the corresponding continuing professional education units for each program. Certificate programs offered by nationally recognized organizations also may be beneficial to RDs.

The Academy offers distance learning through online certificate of training programs, teleseminars, webinars, and self-study options on various topics for continuing education. Refer to the Academy's website under the Professional Development category (http://www.eatright.org/cpd).

### **SUMMARY**

The Scope of Practice for the RD provides standards and tools to guide competence in performing nutrition and dietetics practice. Composed of statutory and individual components, the RD's scope of practice is determined by state statute and the RD's individual scope of practice is based on education, training, credentialing, and demonstrated and documented competence in practice. The Scope of Practice for the RD reflects the Academy's position on the RD's scope of practice and the essential role of the RD in directing and coordinating safe, timely, person-centered care for the delivery of quality food and nutrition services.

#### References

- . Academy of Nutrition and Dietetics Quality Management Committee and Scope of Practice Subcommittee of the Quality Management Committee. Academy of Nutrition and Dietetics: Scope of Practice in Nutrition and Dietetics. J
- Academy of Nutrition and Dietetics Quality Management Committee and Scope of Practice Subcommittee of the Quality Management Committee. Academy of Nutrition and Dietetics: Revised 2012 Standards of Practice in Nutrition Care and Standards of Professional Performance for Registered Dietitians. J Acad Nutr Diet. 2013;113(6 suppl 2):S29-S45.
- 3. Academy of Nutrition and Dietetics Quality Management Committee and Scope of Practice Subcommittee of the Quality

- Management Committee. Academy of Nutrition and Dietetics: Scope of Practice for the Dietetic Technician, Registered. *J Acad Nutr Diet.* 2013;113(6 suppl 2):S46-S55.
- Academy of Nutrition and Dietetics. Practice tips: The RD/DTR team. http://www.eatright.org/scope. Accessed March 10, 2012
- Academy of Nutrition and Dietetics. Practice Tips: What Is Meant by "Under the Supervision of a Registered Dietitian"? http://www.eatright.org/scope. Accessed March 10. 2012.
- Academy of Nutrition and Dietetics. Practice Tips: DTR and Autonomy. http://www.eatright.org/scope. Accessed March 10, 2012.
- Commission on Dietetic Registration. Who is a registered dietitian (RD)? http://cdrnet.org/ about/who-is-a-registered-dietitian-rd. Accessed February 13, 2013.
- Weddle DO, Himburg SP, Collins N, Lewis R. The professional development portfolio process: Setting goals for credentialing. J Am Diet Assoc. 2002;102(10):1439-1444.
- Commission on Dietetic Registration. CDR Certifications. http://www.cdrnet.org/ certifications/board-certified-specialist. Accessed February 13, 2013.
- Ward, B. Compensation & benefits survey 2011: Moderate growth in registered dietitian and dietetic technician, registered, compensation in the past 2 years. J Acad Nutr Diet. 2012;112(1):29-40.
- Academy of Nutrition and Dietetics. Definition of Terms. http://www.eatright.org/ scope. Accessed November 15, 2012.
- Academy of Nutrition and Dietetics. Medical Nutrition Therapy (MNT). http://www. eatright.org/HealthProfessionals/content. aspx?id=6877&terms=MNT. Accessed March 10, 2012.
- 13. American Dietetic Association. Position of the American Dietetic Association: Costeffectiveness of medical nutrition therapy. *J Am Diet Assoc.* 1995;95(1):88-91.
- 14. American Dietetic Association. Position of the American Dietetic Association: Integration of medical nutrition therapy and

- pharmacotherapy. *J Am Diet Assoc.* 2010; 110(6):950-956.
- Franz MJ, Powers MA, Leontos C, et al. The evidence for medical nutrition therapy in type 1 and type 2 diabetes in adults. J Am Diet Assoc. 2010;110(12):1852-1889.
- Academy of Nutrition and Dietetics. International Dietetics & Nutrition Terminology (IDNT) Reference Manual: Standardized Language for the Nutrition Care Process. 4th ed. Chicago, IL: Academy of Nutrition and Dietetics; 2012.
- Academy of Nutrition and Dietetics. Nutrition Care Manual. http://www.nutritioncaremanual.org. Accessed August 16, 2012.
- 18. Myers EF. ADA Evidence Analysis Library. *J Am Diet Assoc*. 2005;105(5 suppl 1):S79.
- Gilbride JA. Evidence analysis at ADA: A resource and a member skill. J Am Diet Assoc. 2006;106(8):1155.
- Dower C, Christian S, O'Neil E. Promising Scopes of Practice Models for Health Professions. 2007. San Francisco, CA: Center for the Health Professions, University of California, San Francisco. http://chpe. creighton.edu/events/roundtables/2009-2010/pdf/scope.pdf. Accessed March 15, 2012.
- American Dietetic Association/Commission on Dietetic Registration. Code of ethics for the profession of dietetics and process for consideration of ethical issues. J Am Diet Assoc. 2009;109(8):1461-1467.
- Gates G. Ethics opinion: Dietetics professionals are ethically obligated to maintain personal competence in practice. J Am Diet Assoc. 2003;103(5):633-635.
- Epstein RM, Hundert EM. Defining and assessing professional competence. *JAMA*. 2002;287(2):226-235.
- Writing Group of the Nutrition Care Process/Standardized Language Committee. Nutrition Care Process and Model Part I: The 2008 Update. J Am Diet Assoc. 2008; 108(7):1113-1117.
- Writing Group of the Nutrition Care Process/Standardized Language Committee. Nutrition care process part II: Using the International Dietetics and Nutrition Terminology to document the nutrition care

- process. J Am Diet Assoc. 2008;108(8): 1287-1293.
- US Department of Agriculture, Center for Nutrition Policy and Promotion. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010. Part A: Executive Summary. http://www.cnpp.usda.gov/Publications/ DietaryGuidelines/2010/DGAC/Report/A-ExecSummary.pdf. Accessed March 9, 2012.
- Ward G, Rogers D, Mueller C, Touger-Decker R, Sauer KL. Entry-level dietetics practice today: Results from the 2010 Commission on Dietetic Registration entry-level dietetics practice audit. J Am Diet Assoc. 2011;111(6):914-941.
- Aase S. You, Improved: Understanding the promises and challenges nutrition informatics poses for dietetics careers. J Am Diet Assoc. 2010;110(12):1794-1798.
- American Dietetic Association. Position of the American Dietetic Association: Food and nutrition professionals can implement practices to conserve natural resources and support ecological sustainability. J Am Diet Assoc. 2007;107(6):1033-1043.
- 30. American Dietetic Association. Position of the American Dietetic Association: Food and water safety. *J Am Diet Assoc.* 2009; 109(9):1449-1460.
- Jones DS, Hoffmann L, Quinn S. 21<sup>st</sup> Century Medicine: A New Model for Medical Education and Practice, 2009. The Institute for Functional Medicine. http://www.functionalmedicine.org/listing\_detail.aspx?id=2337&cid=34. Accessed March 9, 2012.
- 32. DeBusk RM, Fogarty CP, Ordovas JM, Kornman KS. Nutritional genomics in practice: Where do we begin? *J Am Diet Assoc.* 2005; 105(4):589-598.
- DeBusk R. Nutritional genomics: Implications for dietetics. Womens Health Rep. 2008; Spring.
- 34. NCMHD Center of Excellence for Nutritional Genomics. Home. http://nutrigenomics. ucdavis.edu/?page=Information. Accessed July 11, 2012.

## **AUTHOR INFORMATION**

Members of the Academy Quality Management Committee 2010-2011, 2011-2012, 2012-2013 and Scope of Practice Subcommittee of the Quality Management Committee 2010-2011, 2011-2012, 2012-2013: Joyce A. Price, MS, RD, LDN-Chair 2010-2011; Sue Kent, MS, RD, LD-Chair 2011-2012; Marsha R. Stieber, MSA, RD-Chair 2012-2013; Valaree M. Williams, MS, RD, LDN-Vice Chair 2012-2013; Joanne B. Shearer, MS, RD, LN; Charlotte B. Oakley, PhD, RD, FADA; Sharon A. Cox, MA, RD, LD; Mary J. Marian, MS, RD, CSO; Elise A. Smith, MA, RD, LD; Pamela Charney, PhD, RD; M. Patricia Fuhrman, MS, RD, LD, FADA; Isabel M. Parraga, PhD, RD, LD; Doris V. Derelian, JD, PhD, RD, FADA; Terry L. Brown, MPH, RD, CNSC, LD; Susan L. Smith, MBA, RD; Barbara J. Kamp, MS, RD; Gretchen Y. Robinson, MS, RD, LD, FADA; Margaret J. Tate, MS, RD; Carol J. Gilmore, MS, RD, LD, FADA; Patricia L. Steinmuller, MS, RD, CSSD, LN; Jean A. Anderson, MS, RD; Lois J. Hill, MS, RD, CSR, LD; Sandra J. McNeil, MA, RD, CDN, FADA; Bethany L. Daugherty, MS, RD, CD; Pauline Williams, PhD, MPA, RD, CD; Melissa N. Church, MS, RD, LD; Karen Hui, RD, LDN; and Sharon M. McCauley, MS, MBA, RD, LDN, FADA.

## **ACKNOWLEDGEMENTS**

The Academy Quality Management Committee and its Scope of Practice Subcommittee thank the following Academy members for their assistance with manuscript preparation: COL George A. Dilly, PhD, RD, LD, US Army; LTC Dianne T. Helinski, MHPE, RD, LD, US Army; Martin Yadrick, MBA, MS, RD, FADA; Elaine Ayres, MS, RD, FAC-PPM; Christina Ferroli, PhD, RD; Katrina A. Holt, MS, MPH, RD; Claire A. Heiser, MS, RD; Betsey Haughton, EdD, RD, LDN; Helene M. Kent, MPH, RD; Marsha Spence, PhD, MS-MPH, RD, LDN; Jamie S. Stang, PhD, MPH, RD, LN; Connie Mueller, MS, RD, SNS; Diane Duncan-Goldsmith, MS, RD, LD; Angie Tagtow, MS, RD, LD; Deborah Canter, PhD, RD, LD; Glenna McCollum, DMOL, MPH, RD; and Lindsay Hoggle, MS, RD, PMP.