



Academy of Nutrition and Dietetics: Revised 2014 Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics

Patricia L. Steinmuller, MS, RDN, CSSD, LN; Laura J. Kruskall, PhD, RDN, CSSD, LD, FACSM; Christine A. Karpinski, PhD, RD, CSSD, LDN; Melinda M. Manore, PhD, RDN, CSSD, FACSM; Michele A. Macedonio, MS, RDN, CSSD, LD; Nanna L. Meyer, PhD, RDN, CSSD, FACSM

ABSTRACT

Sports nutrition and dietetics addresses relationships of nutrition with physical activity, including weight management, exercise, and physical performance. Nutrition plays a key role in the prevention and treatment of obesity and chronic disease and for maintenance of health, and the ability to engage in physical activity, sports, and other aspects of physical performance. Thus, the Sports, Cardiovascular, and Wellness Nutrition Dietetic Practice Group, with guidance from the Academy of Nutrition and Dietetics Quality Management Committee, has developed the Revised 2014 Standards of Practice and Standards of Professional Performance as a resource for Registered Dietitian Nutritionists working in sports nutrition and dietetics to assess their current skill levels and to identify areas for further professional development in this emerging practice area. The revised document reflects advances in sports nutrition and dietetics practice since the original standards were published in 2009 and replaces those standards. The Standards of Practice represents the four steps in the Nutrition Care Process as applied to the care of patients/clients. The Standards of Professional Performance covers six standards of professional performance: quality in practice, competence and accountability, provision of services, application of research, communication and application of knowledge, and utilization and management of resources. Within each standard, specific indicators provide measurable action statements that illustrate how the standards can be applied to practice. The indicators describe three skill levels (competent, proficient, and expert) for Registered Dietitian Nutritionists working in sports nutrition and dietetics. The Standards of Practice and Standards of Professional Performance are complementary resources for Registered Dietitian Nutritionists in sports nutrition and dietetics practice.

J Acad Nutr Diet. 2014;114:631-641.

Editor's note: Figures 1, 2, and 5 that accompany this article are available online at www.andjrn.org

THE SPORTS, CARDIOVASCULAR, and Wellness Nutrition (SCAN) Dietetic Practice Group (DPG) of the Academy of Nutrition and Dietetics (Academy), under the guidance of the Academy Quality Management Committee, has revised the Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for Registered Dietitians (RDs) in Sports Dietetics originally published in March 2009.¹ The revised documents, Academy of Nutrition and

Dietetics: Revised 2014 Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics, reflect advances in sport nutrition and dietetics practice during the

past 5 years and replace the 2009 Standards. These documents build on the Academy of Nutrition and Dietetics Revised 2012 SOP in Nutrition Care

All registered dietitians are nutritionists—but not all nutritionists are registered dietitians. The Academy's Board of Directors and Commission on Dietetic Registration have determined that those who hold the credential Registered Dietitian (RD) may optionally use "Registered Dietitian Nutritionist" (RDN) instead. The two credentials have identical meanings. In this document, the expert working group has chosen to use the term RDN to refer to both registered dietitians and registered dietitian nutritionists.

Approved December 2013 by the Quality Management Committee of the Academy of Nutrition and Dietetics (Academy) and the Executive Committee of the Sports, Cardiovascular, and Wellness Nutrition Dietetic Practice Group of the Academy. **Scheduled review date: April 2018.** Questions regarding the Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists in Sports Nutrition and Dietetics may be addressed to Academy quality-management staff: Sharon McCauley, MS, MBA, RD, LDN, FADA, FAND, director, Quality Management at quality@eatright.org.

2212-2672/\$36.00
<http://dx.doi.org/10.1016/j.jand.2013.12.021>

and SOPP for RDs.² The Academy of Nutrition and Dietetics/Commission on Dietetic Registration's (CDR) Code of Ethics³ along with the Academy of Nutrition and Dietetics Revised 2012 SOP in Nutrition Care and SOPP for RDs² are tools within the Scope of Practice in Nutrition and Dietetics⁴ and Scope of Practice for the RD⁵ that guide the practice and performance of registered dietitian nutritionists (RDNs) in all settings.

The scope of practice in nutrition and dietetics is composed of statutory and individual components; includes the Code of Ethics; and 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.⁴ An RDN's statutory scope of practice may delineate the services an RDN is authorized to perform in a state where a practice act or certification exists.

The RDN's individual scope of practice is determined by education, training, credentialing, and demonstrated and documented competence to practice. Individual scope of practice in nutrition and dietetics has flexible boundaries to capture the breadth of the individual's professional practice. The Scope of Practice Decision Tool, an online, interactive tool, permits an RDN to answer a series of questions to determine whether a particular activity is within his or her scope of practice. The tool is designed to assist an RDN in critically evaluating personal knowledge, skill, and demonstrated competence with criteria resources (access tool in the Academy Shop, www.eatright.org/shop/product.aspx?id=6442474794).

The Academy's Revised 2012 SOP in Nutrition Care and SOPP for RDs² reflect the minimum competent level of nutrition and dietetics practice and professional performance for RDNs. These standards serve as blueprints for the development of focus area SOP and SOPP for RDNs in competent, proficient, and expert levels of practice. The SOP in Nutrition Care is composed of four standards representing the four steps of the Nutrition Care Process (NCP) as applied to the care of patients/

clients.⁶ The SOPP consist of standards representing six domains of professionalism. The SOP and SOPP are designed to promote the provision of safe, effective, and efficient food and nutrition services; facilitate evidence-based practice; and serve as a professional evaluation resource.

These focus area standards for RDNs in sports nutrition and dietetics provide a guide for self-evaluation and expanding practice, a means of identifying areas for professional development, and a tool for demonstrating competence in the delivery of sports nutrition and dietetics care and services. RDNs use these standards to assess their current level of practice and to determine the education and training required to maintain currency in their focus area and advancement to a higher level of practice. In addition, the standards may be used to assist RDNs in transitioning their knowledge and skills to a new focus area of practice. Like the SOP in Nutrition Care and SOPP for RDs,² the indicators (ie, measurable action statements that illustrate how each standard can be applied in practice) (see [Figures 1 and 2](#) available online at www.andjrn.org, and [Figure 3](#)) for the SOP and SOPP for RDNs in Sports Nutrition and Dietetics were developed with input and consensus of content experts representing diverse practice and geographic perspectives. The SOP and SOPP for RDNs in Sports Nutrition and Dietetics were reviewed and approved by the Executive Committee of the SCAN DPG and the Academy Quality Management Committee.

THREE LEVELS OF PRACTICE

The Dreyfus model⁷ identifies levels of proficiency (novice, advanced beginner, competent, proficient, and expert) (refer to [Figure 3](#)) during the acquisition and development of knowledge and skills. This model is helpful in understanding the levels of practice described in the SOP and SOPP for RDNs in Sports Nutrition and Dietetics. In Academy focus areas, the levels are represented as competent, proficient, and expert practice levels.

Competent Practitioner

In dietetics, a competent practitioner is an RDN who is either just starting

practice after having obtained RDN registration by CDR or an experienced RDN who has recently assumed responsibility to provide nutrition services in a new focus area. A focus area is defined as an area of nutrition and dietetics practice that requires focused knowledge, skills, and experience.⁸ A competent practitioner who has obtained RDN status and is starting in professional employment acquires additional on-the-job skills and engages in tailored continuing education to further enhance knowledge and skills obtained in formal education. An RDN starts with technical training and professional interaction for advancement and expanding breadth of competence. A general practice RDN may include responsibilities across several areas of practice, including, but not limited to community, clinical, consultation and business, research, education, and food and nutrition management.⁸

Proficient Practitioner

A proficient practitioner is an RDN who is generally 3 or more years beyond entry into the profession, has obtained operational job performance skills, and is successful in the RDN's chosen focus area of practice.⁸ The proficient practitioner demonstrates additional knowledge, skills, and experience in a focus area of dietetics practice. An RDN may acquire specialist credentials, if available, to demonstrate proficiency in a focus area of practice.

Expert Practitioner

An expert practitioner is an RDN who is recognized within the profession and has mastered the highest degree of skill in or knowledge of a certain focus or generalized area of dietetics through additional knowledge, formal academic preparation, experience, or training.⁸ An expert practitioner exhibits a set of characteristics that include leadership and vision and demonstrates effectiveness in planning, achieving, evaluating, and communicating targeted outcomes. An expert practitioner may have an expanded or specialist role, or both, and may possess an advanced credential, if available, in a focus area of practice. Generally, the practice is more complex and the practitioner has a high degree of professional autonomy and responsibility.

These Standards, along with the Academy and CDR's Code of Ethics,³ answer the questions: Why is an RDN uniquely qualified to provide sports nutrition and dietetics care and services? What knowledge, skills, and competencies does an RDN need to demonstrate for the provision of safe, effective, and quality sports nutrition and dietetics care and services at the competent, proficient, and expert levels?

OVERVIEW

Public interest in the relationships of nutrition with physical activity (PA) and exercise has dramatically increased during the last 25 years, fueled in part by the rising incidence of obesity and chronic disease. In addition, interest in relationships between nutrition and sport and physical performance has greatly expanded due to an increase in the general population's participation in competitive exercise/training programs and events (eg, CrossFit, Tough Mudder, P90X routine).^{9,10} The focus area of sports nutrition and dietetics addresses all aspects of relationships of nutrition with PA. Although often used interchangeably, PA is any bodily movement produced by the contraction of skeletal muscle, while exercise is a subcategory of PA that is planned, structured, and repetitive in nature.¹¹ The term *exercise* refers to PA that contributes to health, fitness, and chronic disease prevention.¹¹ The term *training and conditioning* refers to PA that contributes to task-specific physical performance. The term *task-specific physical performance* encompasses PA related to sport, military training and military operations, and training and performance of law enforcement officers, firefighters, professional emergency responders, and others whose occupations require physical labor and/or maintenance of specified levels of physical conditioning or body weight and body composition.

Poor dietary habits and low levels of PA are strongly linked to overweight/obesity and some chronic diseases (eg, cardiovascular disease, hypertension, diabetes, and some cancers).¹² It is not surprising that interest in the synergistic roles of nutrition and PA has heightened.¹³⁻¹⁶ The role PA plays in promoting weight loss and preventing weight gain subsequent to weight loss is also well documented.^{11,17} The

importance of regular PA and adequate nutrition for attaining optimal weight and overall health has also been highlighted in a number of recent US Department of Health and Human Services and US Department of Agriculture documents. These include the 2010 Dietary Guidelines for Americans,¹⁸ Healthy People 2020,¹⁹ and the 2008 PA Guidelines Advisory Committee Report.¹¹ The 2008 PA Guidelines Advisory Committee Report¹¹ is the first report issued by the US Government specifically for the American public with regard to the health benefits of PA and includes a summary of the science supporting its recommendations. In 2013, the US Department of Health and Human Services released the PA Guidelines for Americans Midcourse Report, Strategies to Increase PA Among Youth.²⁰ This report further emphasizes the importance of PA for health in children and youth and outlines methods for achieving the recommended 60 minutes of PA per day. In addition, the Institute of Medicine issued Dietary Reference Intakes for energy intake in 2005, which, for the first time, specifically included recommendations for the level of PA required for weight maintenance and weight loss.²¹ Finally, the US Department of Agriculture, American College of Sports Medicine, and the Academy have also jointly emphasized the synergism of nutrition and PA for achieving energy balance.²² Thus, RDNs whose skills include weight management and nutrition for PA are well positioned to assist individuals and organizations in integrating nutrition with PA to promote overall health, wellness, and optimal physical performance.

SCAN DPG

In 1982 the SCAN DPG was established to bring together nutrition practitioners with expertise in sports and PA, cardiovascular health, wellness, and disordered eating and eating disorders. In 2004, Sports Dietetics-USA, a subunit within SCAN, was launched to promote nutrition practices that enhance lifelong health, fitness, and sports performance, and advance the vocation of sports nutrition and dietetics. The SCAN website (www.scandpg.org) offers sports nutrition fact sheets, webinars, and other resources targeted to practitioners and physically active individuals.

Board Certification as a Specialist in Sports Dietetics

In 2006, CDR launched the Board Certification as a Specialist in Sports Dietetics (CSSD). An RDN who has earned the CSSD has met minimum practice experience requirements and has successfully completed the CSSD examination. An RDN who has earned the CSSD certification has demonstrated, at minimum, proficient-level skills presented in this document. Increasingly, job descriptions for sports RDNs are written to require successful candidates to hold the CSSD certification. Eligibility criteria for the credential and other information are available from CDR (www.cdrnet.org). To enhance delivery and consistency of sports nutrition services to Olympic-caliber athletes, The US Olympic Committee sport nutrition team has initiated a US Olympic Committee Sport Dietitian Registry to maintain a roster of prescreened CSSDs as resources for National Governing Bodies of Olympic, Paralympic, and Pan American Sports.²³

Scope of Practice for the RDN in Sports Nutrition and Dietetics

The Scope of Practice for the RD⁵ describes the sports nutrition practice area of nutrition and dietetics performed by RDNs who apply evidence-based knowledge in PA and exercise/training to address the diverse nutritional needs of physically active individuals. Sports RDNs provide medical nutrition therapy (MNT) in direct care and design, implement, and manage safe and effective nutrition strategies that enhance lifelong health, fitness, and optimal physical performance. They assess, educate, and counsel what, how much, and when to consume foods and fluids to maintain health, appropriate body weight and composition, and how to properly fuel the body for PA and exercise, training and conditioning, and physical performance. Valued for their ability to positively impact behavior and promote behavior change, sports RDNs assist individuals in implementing nutrition plans that achieve their goals. In addition, sports RDNs generate and analyze data to monitor and evaluate the effectiveness of their interventions.

Sports RDNs use the SOP SOPP for RDNs in Sports Nutrition and Dietetics to assess their knowledge, skills, and

Standards of Practice are authoritative statements that describe practice demonstrated through nutrition assessment, nutrition diagnosis (problem identification), nutrition intervention (planning, implementation), and outcomes monitoring and evaluation (four separate standards) and the responsibilities for which registered dietitian nutritionists (RDNs) are accountable. The Standards of Practice for RDNs in Sports Nutrition and Dietetics presuppose that the RDN uses critical thinking skills, analytical abilities, theories, best available research findings, current accepted dietetics and medical knowledge, and the systematic holistic approach of the Nutrition Care Process as they relate to the application of the standards. Standards of Professional Performance for RDNs in Sports Nutrition and Dietetics are authoritative statements that describe behavior in the professional role, including activities related to quality in practice; competence and professional accountability; provision of services; application of research; communication and application of knowledge; and utilization and management of resources (six separate standards).

Standards of Practice and Standards of Professional Performance are evaluation resources with complementary sets of standards—both serve to describe the practice and professional performance of RDNs. All indicators may not be applicable to all RDNs' practice or to all practice settings and situations. RDNs operate within the directives of applicable federal and state laws and regulations as well as policies and procedures established by the organization in which they are employed. To determine whether an activity is within the scope of practice of the RDN, the practitioner compares his or her knowledge, skill, and competence with the criteria necessary to perform the activity safely, ethically, legally, and appropriately. The Academy's Scope of Practice Decision Tool, an online, interactive tool, is specifically designed to assist practitioners with this process.

*The term **patient/client** is used in the Standards of Practice as a universal term as these Standards relate to direct provision of nutrition care and services. Patient/client could also mean client/patient, resident, customer, participant, consumer, or any individual or group who receives sports nutrition and dietetics care. **Customer** is used in the Standards of Professional Performance as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the RDN provides services. These services are provided to individuals of all ages. These Standards of Practice and Standards of Professional Performance are not limited to the clinical setting. In addition, it is recognized that the family and caregiver(s) of patients/clients of all ages, including individuals with special health care needs, play critical roles in overall health and are important members of the team throughout the assessment and intervention process. The term **appropriate** is used in the standards to mean: Selecting from a range of best practice or evidence-based possibilities, one or more of which would give an acceptable result in the circumstances. The term **exercise** refers to physical activity that contributes to health, fitness, and chronic disease prevention. The term **training and conditioning** refers to physical activity that contributes to task-specific physical performance. The term **task-specific physical performance** encompasses physical activity related to sport, military training and military operations, and training and performance of law enforcement officers, firefighters, professional emergency responders, and others whose occupations require physical labor and/or maintenance of specified levels of physical conditioning or body weight and body composition. **Sports nutrition and dietetics practice** is performed by RDNs who apply evidence-based nutrition and dietetics knowledge in exercise and sports. They assess, educate, and counsel athletes and physically active individuals. They design, implement, and manage safe and effective nutrition strategies that enhance lifelong health, fitness, and optimal performance.*

Each standard is equal in relevance and importance and includes a definition, a rationale statement, indicators, and examples of desired outcomes. A standard is a collection of specific outcome-focused statements against which a practitioner's performance can be assessed. The rationale statement describes the intent of the standard and defines its purpose and importance in greater detail. Indicators are measurable action statements that illustrate how each specific standard can be applied in practice. Indicators serve to identify the level of performance of competent practitioners and to encourage and recognize professional growth.

Standard definitions, rationale statements, core indicators, and examples of outcomes found in the Academy of Nutrition and Dietetics Revised 2012 Standards of Practice in Nutrition Care and Standards of Professional Performance for RDNs have been adapted to reflect three levels of practice (competent, proficient and expert) for RDNs in sports nutrition and dietetics (see figure on page 635). In addition, the core indicators have been expanded to reflect the unique competence expectations for the RDN providing sports nutrition and dietetics care.

Standards described as proficient level of practice in this document are not equivalent to the Commission on Dietetic Registration certification, **Board Certification as a Specialist in Sports Dietetics (CSSD)**. Rather, the CSSD designation recognizes the skill level of an RDN who has developed and demonstrated, through successful completion of the certification examination, sports nutrition and dietetics knowledge and application beyond the competent practitioner and demonstrates, at a minimum, proficient level skills. An RDN with a CSSD designation is an example of an RDN who has demonstrated additional knowledge, skills, and experience in sports dietetics by the attainment of a specialist credential.

(continued on next page)

Figure 3. Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics.

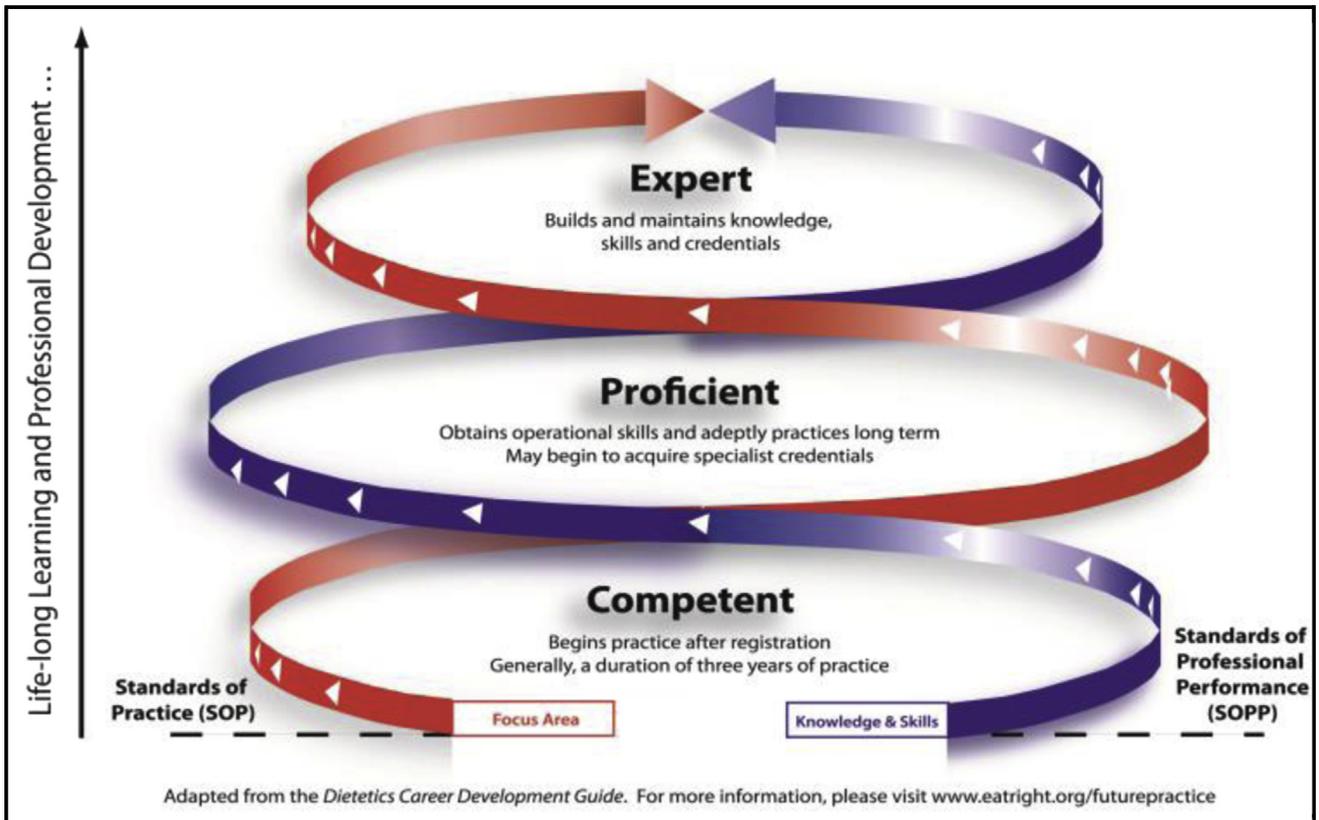


Figure 3. (continued) Standards of Practice and Standards of Professional Performance for Registered Dietitian Nutritionists (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics.

competencies to provide safe, effective, quality sports nutrition and dietetics care and services. Confidentiality is assured by compliance with the regulations and standards of the Health Insurance Portability and Accountability Act of 1996. Sports RDNs work as members of interdisciplinary and multidisciplinary teams within athletic performance/sports settings to integrate nutrition effectively into the athlete's annual training and competition plan. Additional members of interdisciplinary or multidisciplinary teams may include any of the following: physician, physical therapist, physiologist, psychologist, sport psychologist, RDN specializing in eating disorder therapy, athletic trainer, strength and conditioning coach, and other coaches.

Evidence-Based Sport Nutrition Practice

An individual's level of physical fitness and performance is determined by factors including genetic characteristics

that dictate physical abilities, appropriate exercise/training, and nutritional adequacy. A strong body of research evidence demonstrating the benefits of sound nutrition for fitness and task-specific physical performance has been compiled over the last 2 decades.²⁴⁻²⁶ This research has provided a foundation for evidenced-based government reports and position papers providing specific nutrition guidelines for individuals participating in strenuous PA. Examples are the following: the joint position paper on Nutrition and Athletic Performance by the American Dietetic Association (the Academy), the American College of Sports Medicine and the Dietitians of Canada,²⁷ and other nutrition and exercise-related positions by American College of Sports Medicine,²⁸⁻³⁰ and the National Athletic Trainers' Association.³¹

The key to optimal nutrition for physically active individuals is individualization and personalized approaches. Once an individual's nutrient needs and goals are established, the sports RDN develops a plan that includes appropriate

quantity, quality, and timing of food and fluid intake, and dietary supplements when appropriate. Daily schedule demands, environmental factors, available resources, and sport- and organization-specific cultural influences are considered. Sports RDNs must be well versed in the demands of the task-specific sport or occupational and positional requirements, environmental conditions, and other relevant issues. Because energy and nutrient needs change during the various phases of training, competition, and occupational schedule, the sports RDN periodizes the individual's nutrition plan in accordance with each phase. Sports RDNs educate individuals regarding energy, nutrient, and fluid intake before, during, and after exercise/task-specific physical training, menu planning, recipe modification, grocery shopping, and food preparation and storage. Sports RDNs facilitate behavior change and promote problem solving, adaptation, and progression toward achieving nutritional goals that promote overall health and wellness. They plan,

implement, monitor, and evaluate nutrition care for individuals and teams.

Sports RDNs have traditionally worked with recreational, competitive, and elite athletes who are members of sport teams (youth, collegiate, club, professional) and in settings such as colleges and universities, athletic performance centers, corporate wellness centers, US Olympic Training Centers, and professional sports organizations including the National Football League, Major League Baseball, and National Basketball Association. Sports nutrition guidance can enhance training capacity, improve physical performance, reduce the risk of injury, enhance the healing process, strengthen the immune system, enhance cognitive performance, and promote appropriate body weight and composition in athletes. Evidence-based nutrition strategies facilitate recovery from strenuous exercise by refueling and rehydrating the body, providing nutrients to build and repair muscles, reducing stress, and preparing athletes for the next training session or competition. This is especially important for competitive athletes who train or compete multiple times per day, and for individuals who engage in strenuous, repetitive, physical training.

Widespread public interest in purported benefits of highly promoted sports products, supplements, and services (eg, foods, drinks, dietary supplements, popular diets, and quick-fix exercise plans) provide opportunities for food and nutrition guidance applicable to goals for health, fitness, body weight and composition, and physical performance. Increasingly, sports RDNs are relied upon for food and dietary supplement product evaluation for legality, safety, effectiveness, quality, and application to sport. In addition, sports RDNs provide guidance regarding compliance with the rules and regulations of sports organizations and governing bodies, such as the National Federation of State High School Associations, National Collegiate Athletic Association, US Olympic Committee, US Anti-Doping Agency, World Anti-Doping Agency, and professional sports organizations. Effective communication among members of the multidisciplinary team regarding compliance with the rules and regulations concerning banned substances in sport is critical to assisting athletes, coaches,

and programs in making informed decisions.

Expanded practice areas for sports RDNs include providing nutrition guidance for individuals whose occupations require physical labor and/or maintenance of specified levels of physical conditioning or body weight and body composition. Examples include military training and operations, and training and performance by law enforcement officers, firefighters, professional emergency responders, and artistic performers whose activities involve physicality (eg, gymnasts, dancers, ice skaters, cheerleaders, aerial artists). Reports by the Committee on Military Nutrition Research of the Institute of Medicine emphasize the importance of nutrition for service members performing high levels of physical exertion in harsh environments.³²⁻³⁶ Sports RDNs serve as active duty and reserve commissioned officers in three services of the US Armed Forces (Army, Navy, Air Force) and as civilian consultants for all branches, including the Marine Corps and Coast Guard. Sports RDNs educate, counsel, and advise service members regarding military readiness and training, fueling for operations, recovery from training/missions and injury/illness, achieving and maintaining mission-specific body composition, optimizing mental function, and preparing for arduous environments.⁵ Sports RDNs work with conventional military personnel through initiatives such as the Soldier Fueling Program, which is designed to improve nutritional status and lifestyle habits of new Army soldiers as well as work with Special Operations Forces of all services through Human Performance Programs.²⁶ All RDNs working in Human Performance Programs are required to be credentialed as Board-Certified Sports Dietitians (CSSD), while possessing the Certified Strength and Conditioning Specialist (CSCS) certification is highly desired. Within the Army, an active-duty RDN must be credentialed as both a CSSD and a CSCS to be assigned to a combat unit.

Demand is increasing for sports RDNs to be employed in private companies specializing in sport or athletic performance and wellness programs for adults, elderly people, and children with disabilities and other special needs. Sports RDNs provide nutrition expertise in program and product development and in testing, monitoring, and evaluation of

programs in the market place. Sports RDNs in private practice increasingly use web tools and social media to interact with the public. Sports RDNs are hired by researchers to participate in various components of research investigations and programs. Sports RDNs use MNT for physically active individuals diagnosed with medical conditions (eg, diabetes, cardiovascular disorders, cancer, gluten intolerance, food allergies, Crohn's disease, eating disorders) and in situations such as various forms of paralysis, post-cancer treatment, post-bariatric surgery, and post-amputation from traumatic injuries.

Employers seeking the skills of sports RDNs use the SOP SOPP for RDNs in Sports Nutrition and Dietetics to develop job descriptions for sports nutrition positions. A job description includes the primary duties, responsibilities, and expectations of the RDN and illustrates how the position fits within the organization. Job descriptions may also be used to identify the skills and level of competency to perform required duties. A job description for sports RDNs, developed by SCAN members, is published in *Job Descriptions: Models for the Dietetics Profession*, 2nd ed, 2008.³⁷ The Scope of Practice in Nutrition and Dietetics,⁴ Scope of Practice for the RD,⁵ SOP and SOPP for RDNs in Sports Nutrition and Dietetics, the CSSD certification, and the Academy sports RDN job description are components of a comprehensive approach that assists sports RDNs in gauging their level of practice and providing a pathway for advancement. They define sports nutrition and dietetics practice, document skill levels, and establish benchmarks. Sports nutrition and dietetics is a growing and demanding practice area that requires the integration of MNT, nutrition science, exercise principles, and corresponding research into a variety of settings where physically active and athletic populations participate in PA, sport, military operations, or workers engage in physically demanding occupations, including artistic performance that requires physicality.

ACADEMY REVISED 2014 SOP AND SOPP FOR RDNs (COMPETENT, PROFICIENT, AND EXPERT) IN SPORTS NUTRITION AND DIETETICS

An RDN can use the Academy Revised 2014 SOP and SOPP for RDNs

(Competent, Proficient, and Expert) in Sports Nutrition and Dietetics (see Figures 1 and 2 available online at www.andjrnl.org, and Figure 3) to:

- identify the competencies needed to provide sports nutrition and dietetics care and services;
- self-assess whether he or she has the appropriate knowledge base and skills to provide safe and effective sports nutrition and dietetics care and service for their level of practice;
- identify the areas in which additional knowledge and skills are needed to practice at the competent, proficient, or expert level of sports nutrition and dietetics practice;
- provide a foundation for public and professional accountability in sports nutrition and dietetics care and services;
- support efforts for strategic planning and assist management in the planning of sports nutrition and dietetics services and resources;
- enhance professional identity and communicate the nature of sports nutrition and dietetics;
- guide the development of sports nutrition and dietetics-related education and continuing education programs, job descriptions, and career pathways; and
- assist educators and preceptors in teaching students and interns the knowledge, skills, and competencies needed to work in sports nutrition and dietetics and the understanding of the full scope of this focus area of practice.

Several issues unique to nutrition intervention in sports nutrition and dietetics settings include:

- principles of exercise science and exercise physiology are integrated into the application of the sports nutrition and dietetics care and services;
- a nutrition approach matched to the individual's annual training and competition plan or professional duty requirements/cycles is an essential component of sports nutrition and dietetics care and services; and
- exercise/task-specific physical performance parameters are considered in the management of body

weight and body composition of the target population.

APPLICATION TO PRACTICE

All RDNs, even those with considerable experience in other practice areas, must begin at the competent level when practicing in a new setting or new focus area of practice. At the competent level, an RDN in sports nutrition and dietetics is learning the principles that underpin this focus area and is developing skills for safe and effective sports nutrition and dietetics practice. This RDN, who may be an experienced RDN or may be new to the profession, has a breadth of knowledge in nutrition and dietetics and may have proficient or expert knowledge/practice in another focus area. However, the RDN entering the focus area of sports nutrition and dietetics may experience a steep learning curve. Sports RDNs need to demonstrate a strong understanding of the integration of nutrition, including MNT, and exercise science necessary to address the wide range of demands posed in various situations (eg, the annual training and competition plans of specific sports, military training and military operations, varied physical performance requirements of specific activities or occupations, varied needs of artistic performers).

At the proficient level, a sports RDN has developed a deeper understanding of sports nutrition and dietetics practice and is better equipped to apply evidence-based guidelines and best practices than at the competent level. This RDN is also able to modify practice according to unique situations (eg, integrating extreme environmental factors in the evaluation of an athlete's energy, fluid, and nutrient needs). Although the RDN at the proficient level may possess the CSSD credential, the indicators described as proficient level of practice designations in this document are not equivalent to the CSSD certification. Rather, the CSSD designation refers to an RDN who has developed and demonstrated, through successful completion of the certification examination, sports nutrition and dietetics knowledge, skill, and application beyond the competent practitioner.

At the expert level, the RDN thinks critically about sports nutrition and

dietetics, demonstrates a more intuitive understanding of sports nutrition and dietetics care and services, displays a range of highly developed clinical and technical skills, and formulates judgments acquired through a combination of education, experience, and critical thinking. Essentially, practice at the expert level requires the application of composite nutrition and dietetics knowledge, with practitioners drawing not only on their clinical experience, but also on the experience of the sports RDNs in various disciplines and practice settings. Experts, with their extensive experience and ability to see the significance and meaning of nutrition within a contextual whole, are fluid, flexible, and, to some degree, autonomous in practice. They not only implement sports nutrition and dietetics services, they also manage, drive, and direct clinical care, conduct and collaborate in research, assume leadership roles in scholarly work, guide multidisciplinary teams, and lead the advancement of sports nutrition and dietetics practice.

Indicators for the SOP (Figure 1, available online at www.andjrnl.org) and SOPP (Figure 2, available online at www.andjrnl.org) for RDNs in Sports Nutrition and Dietetics are measurable action statements that illustrate how each standard can be applied in practice. Within the SOP and SOPP for RDNs in Sports Nutrition and Dietetics, an "X" in the competent column indicates that an RDN who is caring for patients/clients is expected to complete this activity and/or seek assistance to learn how to perform at the level of the standard. A competent RDN in sports nutrition and dietetics could be an RDN starting practice after registration or an experienced RDN who has recently assumed responsibility to provide sports nutrition dietetics care for physically active or athletic patients/clients or those individuals starting a fitness program. The competent RDN could also be an experienced individual who has changed the focus of his or her sports nutrition and dietetics practice to another age group (eg, children to adult) or to another specialty (eg, endurance sports to strength/power sports) (see Figure 4).

An "X" in the proficient column indicates that an RDN who performs at this level has a deeper understanding of sports nutrition and dietetics and

Role	<i>Examples of use of SOP and SOPP documents by RDNs in different practice roles</i>
Clinical practitioner	The hospital employing an RDN in general clinical practice is considering changing the RDN's coverage assignment to possibly include providing in- and outpatient services (eg, sports nutrition counseling, team presentations, workshops) to physically active individuals and sports teams. The RDN reviews available resources regarding sports nutrition and dietetics care for this population. The RDN recognizes the need for specific knowledge and/or skills in which he or she is not well versed and experienced. The RDN reviews the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to evaluate the individual skills and competencies required to provide quality care to individuals engaged in health and fitness and/or exercise/physical performance activities. The RDN sets goals to improve competency in sports nutrition and dietetics care before providing patient care independently for this population.
Manager	A manager who oversees RDNs who provide sports nutrition and dietetics care to individuals with a variety of medical conditions considers the SOP and SOPP for RDNs in Sports Nutrition and Dietetics when determining work assignments and expertise needed at the program level. The manager recognizes the SOP and SOPP for RDNs in Sports Nutrition and Dietetics as an important tool for staff to use in assessing their competencies, determining the need for additional sports nutrition and dietetics knowledge and/or skills, and for developing and evaluating personal performance plans.
Practitioner returning to employment	After several years out of clinical practice an RDN decides to re-establish active practice. The RDN plans to start a private practice with sports nutrition and dietetics as a focus area. Before seeking continuing education and skill-building opportunities and accepting referrals, the RDN uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics as an evaluation tool to determine the knowledge and skills needed to practice sports nutrition and dietetics care competently.
Community nutrition practitioner/ Corporate wellness	An RDN working in a community nutrition or wellness setting notices an increase in the number of overweight clients with type 2 diabetes for whom the physician has prescribed a physical activity program. The RDN uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to evaluate the level of competence needed to provide quality medical nutrition therapy to clients with type 2 diabetes who are initiating a physical activity program. The RDN also determines the level of practitioner the patient/client needs and to whom to refer individuals who require a level of care higher than that RDN can competently provide.
Researcher	An RDN working in a research setting is awarded a grant to demonstrate the role of the sports RDN in providing sports nutrition and dietetics care and the impact of sports nutrition and dietetics care on health and exercise/physical performance outcomes. The RDN uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to design the research protocol.
Nutrition and dietetics educator	The RDN sports nutrition and dietetics educator develops tools (eg, handouts, presentations, workshops, social networking tools) for target populations (eg, athletic clubs and teams, health and wellness fair attendees) reflecting applications of the SOP SOPP for RDNs in Sports Nutrition and Dietetics.
Nutrition and dietetics faculty	An RDN sports nutrition and dietetics faculty member uses the SOP SOPP for RDNs in Sports Nutrition and Dietetics to integrate sports nutrition and dietetics competencies and practical skills into sports nutrition course syllabi for dietetics majors or nonmajors.
Private practice	An RDN in private practice who has worked with recreational athletes is contacted by a competitive/elite team to provide sports nutrition and dietetics services. The RDN uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to determine the additional competencies required when providing sports nutrition and dietetics care to competitive/elite athletes. An RDN in private practice who provides a range of service for physically active individuals uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to develop nutrition intervention strategies for clients who are artistic performers whose profession requires physicality (eg, musicians, gymnasts, dancers, ice skaters, cheerleaders, aerial artists).

(continued on next page)

Figure 4. Case examples of Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for Registered Dietitian Nutritionists (RDNs) (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics.

Role	<i>Examples of use of SOP and SOPP documents by RDNs in different practice roles</i>
Other settings	<p>An RDN employed to provide sports nutrition and dietetics care in exercise/physical performance settings (eg, collegiate athletic department, professional sports team, private company that specializes in physical performance) uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics to implement safe, effective, quality sports nutrition and dietetics care within the context of individual annual training and competition plans.</p> <p>An RDN employed by or consulting in occupational settings (eg, police academy, military, national guard) uses the SOP and SOPP for RDNs in Sports Nutrition and Dietetics as a guide for delivering sports nutrition and dietetics care in nontraditional settings (eg, law enforcement, military training/combat, emergency response, disaster relief).</p>

Figure 4. (continued) Case examples of Standards of Practice (SOP) and Standards of Professional Performance (SOPP) for Registered Dietitian Nutritionists (RDNs) (Competent, Proficient, and Expert) in Sports Nutrition and Dietetics.

has the ability to modify therapy to meet the needs of patients/clients in various situations (eg, caring for a young athlete who is participating in preseason conditioning and is suffering from dehydration; helping an athlete with hypoglycemia choose the right foods and fluids at the right time before, during, and after exercise; or determining whether a service member's current dietary intake will support optimal physical performance during extreme temperature or altitude). An "X" in the expert column indicates that the RDN who performs at this level possesses a comprehensive understanding of sports nutrition and dietetics and exercise science and a highly developed range of skills and judgments acquired through a combination of experience and education. The expert RDN builds and maintains the highest level of knowledge, skills, and behaviors including leadership, vision, and credentials.

Standards and indicators presented in online Figure 1 and Figure 2 (available at www.andjrnl.org) in boldface type originate from the Academy's Revised 2012 SOP in Nutrition Care and SOPP for RDs² and should apply to RDNs in all three levels. Several indicators developed for this focus area not in boldface type are identified as applicable to all levels of practice. Where an "X" is placed in all three levels of practice, it is understood that all RDNs in sports nutrition and dietetics are accountable for practice within each of these indicators. However, the depth with which an RDN performs each activity will increase as the individual moves beyond the competent level. Several levels of practice are considered in this document; thus, taking a holistic view of

SOP and SOPP for RDNs in Sports Nutrition and Dietetics is warranted. It is the totality of individual practice that defines the level of practice and not any one indicator or standard.

RDNs should review the SOP and SOPP in Sports Nutrition and Dietetics at regular intervals to evaluate their individual focus area nutrition knowledge, skill, and competence. Regular self-evaluation is important because it helps identify opportunities to improve and/or enhance practice and professional performance. This self-appraisal also enables sports RDNs to better utilize these Standards in CDR's *Professional Development Portfolio* process and each of its five steps for self-assessment, planning, improvement, and commitment to lifelong learning³⁸ (see Figure 5 available at www.andjrnl.org). RDNs are encouraged to pursue additional training, regardless of practice setting, to maintain currency and expand individual scope of practice within the limitations of the legal scope of practice, as defined by state law. RDNs are expected to practice only at the level at which they are competent, and this will vary depending on education, training, and experience.³⁹ RDNs are encouraged to pursue additional knowledge and skill training and collaboration with other RDNs in sports nutrition and dietetics to promote consistency in practice and performance and continuous quality improvement. See Figure 4 for case examples of how RDNs in different roles, at different levels of practice, may use the SOP and SOPP in Sports Nutrition and Dietetics.

In some instances, components of the SOP and SOPP for RDNs in Sports Nutrition and Dietetics do not specifically differentiate between proficient-level and expert-level practice. In

these areas, it was the consensus of the content experts that the distinctions are subtle, captured in the knowledge, experience, and intuition demonstrated in the context of practice at the expert level, which combines dimensions of understanding, performance, and value as an integrated whole.⁴⁰ A wealth of knowledge is embedded in the experience, discernment, and practice of expert-level RDN practitioners. The knowledge and skills acquired through practice will continually expand and mature. The indicators will be refined with each review of these Standards as expert-level RDNs systematically record and document their experience using the concept of clinical exemplars. Clinical exemplars include a brief description of the need for action and the process used to change the outcomes. The experienced practitioner observes clinical events, analyzes them to make new connections between events and ideas, and produces a synthesized whole. Clinical exemplars provide outstanding models of the actions of individual sports RDNs in clinical settings and the professional activities that have enhanced patient/client care.⁴¹⁻⁴³

CONCLUSIONS

RDNs face complex situations every day. Addressing the unique needs of each situation and applying standards appropriately is essential to providing safe, timely, person-centered quality care and service. All RDNs are advised to conduct their practice based on the most recent edition of the Code of Ethics, the Scope of Practice in Nutrition and Dietetics, the Scope of Practice for RDs and the SOP in Nutrition Care and SOPP for RDs. The SOP and SOPP for RDNs in Sports Nutrition and

Dietetics are complementary documents and are key resources for sports RDNs at all knowledge and performance levels. These standards can and should be used by sports RDNs in daily practice to consistently improve and appropriately demonstrate competency and value as providers of safe and effective nutrition and dietetics care. These standards also serve as a professional resource for self-evaluation and professional development for RDNs specializing in sports nutrition and dietetics practice.

The SOP and SOPP for RDNs in Sports Nutrition and Dietetics are innovative and dynamic documents. Just as a professional's self-evaluation and continuing education process is an ongoing cycle, these standards are also a work in progress and will be reviewed and updated every 5 years. Current and future initiatives of the Academy and advances in sports nutrition and dietetics services will provide information to use in these updates and in further clarifying and documenting the specific roles and responsibilities of sports RDNs at each level of practice. As a quality initiative of the Academy and the SCAN DPG, these standards are an application of continuous quality improvement and represent an important collaborative endeavor.

These standards have been formulated to be used for individual self-evaluation and the development of practice guidelines, but not for institutional credentialing or for adverse or exclusionary decisions regarding privileging, employment opportunities or benefits, disciplinary actions, or determinations of negligence or misconduct. These standards do not constitute medical or other professional advice, and should not be taken as such. The information presented in these standards is not a substitute for the exercise of professional judgment by the health care professional. The use of the standards for any other purpose than that for which they were formulated must be undertaken within the sole authority and discretion of the user.

References

- Steinmuller PL, Meyer NL, Kruskall LJ, et al. American Dietetic Association Standards of Practice and Standards of Professional Performance for Registered Dietitians (Generalist, Specialty, Advanced) in Sports Dietetics. *J Am Diet Assoc.* 2009;109(3):544-552.e30.

- The Academy 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.
- American Dietetic Association/Commission on Dietetic Registration Code of Ethics for the Profession of Dietetics and process for consideration of ethics issues. *J Am Diet Assoc.* 2009;109(8):1461-1467.
- 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 Acad Nutr Diet.* 2013;113(6 suppl 2):S11-S16.
- 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 Registered Dietitian. *J Acad Nutr Diet.* 2013;113(6 suppl 2):S17-S28.
- Nutrition Care Process and Model Part I. The 2008 update. *J Am Diet Assoc.* 2008;108(7):1113-1117.
- Dreyfus HL, Dreyfus SE. *Mind Over Machine: The Power of Human Intuitive Expertise in the Era of the Computer.* New York, NY: Free Press; 1986.
- Academy of Nutrition and Dietetics. Definition of Terms. <http://www.eatright.org/HealthProfessionals/content.aspx?id=6866>. Accessed August 19, 2013.
- Improving health to take on an uncertain future. *inFocus.* August 30, 2013.
- Thompson WR. Worldwide survey of fitness trends for 2014. *ACSM Health Fitness J.* 2013;17(6):10-20.
- Physical Activity Guidelines Advisory Committee, 2008. *PA guidelines advisory committee report, 2008.* Washington, DC: US Department of Health and Human Services. <http://www.health.gov/paguidelines/guidelines/default.aspx>. Accessed August 19, 2013.
- Centers for Disease Control and Prevention. *National diabetes fact sheet: National estimates and general information on diabetes and prediabetes in the United States, 2011.* Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention; 2011. <http://www.cdc.gov/diabetes/pubs/factsheet11.htm>. Accessed August 19, 2013.
- Flegal KM, Carroll MD, Ogden CL, Curtin LR. Prevalence and trends in obesity among US adults, 1999-2008. *JAMA.* 2010;303(3):235-241.
- Fryar CD, Carroll MD, Ogden CL. *Prevalence of overweight, obesity and extreme obesity among adults: United States, Trends 1960-1962 through 2009-2010.* National Center for Health Statistics. 2012. <http://www.cdc.gov/nchs/fastats/overwt.htm>. Accessed August 19, 2013.
- Ogden CL, Carroll MD, Curtin LR, Lamb MM, Flegal KM. Prevalence of high body mass index in US children and adolescents, 2007-2008. *JAMA.* 2010;303(3):242-249.
- Ogden CL, Carroll MD, Kit BK, Flegal KM. Prevalence of obesity and trends in body mass index among US children and adolescents, 1999-2010. *JAMA.* 2012;307(5):483-490.
- Donnelly JE, Blair SN, Jakicic JM, Manore MM, Rankin JW, Smith BK. Update of the 2001 American College of Sports Medicine (ACSM) Position Stand. Appropriate intervention strategies for weight loss and prevention of weight regain for adults. *Med Sci Sports Exerc.* 2009;41(2):459-471.
- US Department of Agriculture and US Department of Health and Human Services. *Dietary Guidelines for Americans, 2010.* <http://www.health.gov/dietaryguidelines/2010.asp>. Accessed August 19, 2013.
- Healthy People 2020: 10-year agenda for improving the nation's health. US Department of Health and Human Services, 2010. www.healthypeople.gov. Accessed August 19, 2013.
- Physical Activity Guidelines Midcourse Report Subcommittee, 2012. *PA guidelines for Americans midcourse report: Strategies to increase physical activity among youth.* US Department of Health and Human Services, 2012. <http://www.health.gov/paguidelines/>. Accessed August 19, 2013.
- Institute of Medicine, Food and Nutrition Board, National Academy of Science. *Dietary Reference Intakes for Energy, Carbohydrate, Fiber, Fat, Fatty Acids, Cholesterol, Protein, and Amino Acids (Macronutrients).* Washington, DC: National Academies Press; 2005.
- Manore MM, Brown K, Houtkooper L, et al. Energy balance at a crossroads: Translating the science into action. *Med Sci Sports Exerc and J Acad Nutr Diet.* 2014. In press.
- US Olympic Committee Sport Dietitian Registry. USOC sport nutrition team. <http://www.teamusa.org/About-the-USOC/Athlete-Development/Sport-Performance/Nutrition/Sport-Dietitian-Registry>. Accessed August 18, 2013.
- Burke L, Deakin V. *Clinical Sports Nutrition.* 4th ed. Sydney, Australia: McGraw-Hill Australia; 2010.
- Manore MM, Meyer NM, Thompson TA. *Sport Nutrition for Health and Performance.* 2nd ed. Champaign, IL: Human Kinetics; 2009.
- Rosenbloom CA, Coleman EJ, eds. *Sports Nutrition: A Practice Manual for Professionals.* 5th ed. Chicago, IL: Academy of Nutrition and Dietetics; 2012.
- Rodriguez NR, DiMarco NM, Langley S. Position of the American Dietetic Association, Dietitians of Canada, and the American College of Sports Medicine: Nutrition and athletic performance. *J Am Diet Assoc.* 2009;109(3):509-527.
- Nattiv A, Loucks AB, Manore MM, Sanborn CF, Sundgot-Borgen J, Warren M. American College of Sports Medicine position stand. The female athlete triad. *Med Sci Sports Exerc.* 2007;39(10):1867-1882.

29. Armstrong LE, Casa DJ, Millard-Stafford M, Moran DS, Pyne SW, Roberts WO. American College of Sports Medicine position stand. Exertional heat illness during training and competition. *Med Sci Sports Exerc.* 2007;39(3):556-572.
30. Sawka MN, Burke LM, Eichner ER, Maughan RJ, Montain SJ. American College of Sports Medicine position stand: Exercise and fluid replacement. *Med Sci Sports Exerc.* 2007;39(2):377-390.
31. Bonci CM, Bonci LJ, Granger LR, et al. National Athletic Trainers' Association Position Statement: Preventing, detecting, and managing disordered eating in athletes. *J Athl Train.* 2008;43(1):80-108.
32. Vanderveen JE, Bistrrian BR, Caldwell JA, et al; Committee on Metabolic Monitoring for Military Field Applications. *Monitoring Metabolic Status: Predicting Decrements in Physiological and Cognitive Performance.* Standing Committee on Military Nutrition Research, Institute of Medicine. Washington, DC: National Academies Press; 2004.
33. Erdman JW, Bistrrian BR, Clarkson PM, et al; Committee on Optimization of Nutrient Composition of Military Rations for Short-Term, High-Stress Situations. *Nutrient Composition of Rations for Short-Term, High-Intensity Combat Operations.* Standing Committee on Military Nutrition Research, Food and Nutrition Board, Institute of Medicine. Washington, DC: National Academies Press; 2005.
34. Russel RM, Beard JL, Beck M, et al; Committee on Mineral Requirements for Cognitive and Physical Performance by Military Personnel. *Mineral Requirements of Military Personnel. Levels Needed for Cognitive and Physical Performance During Garrison Training.* Standing Committee on Military Nutrition Research, Food and Nutrition Board, Institute of Medicine. Washington, DC: National Academies Press; 2006.
35. Greenwood MRC, Anderson C, Bistrrian B, et al; Committee on Dietary Supplement Use by Military Personnel. *Use of Dietary Supplements by Military Personnel.* Standing Committee on Military Nutrition Research, Food and Nutrition Board, Institute of Medicine. Washington, DC: National Academies Press; 2008.
36. Erdman J, Oria M, Pillsbury I; Committee on Nutrition, Trauma, and the Brain. *Nutrition and Traumatic Brain Injury: Improving Acute and Subacute Health Outcomes in Military Personnel.* Standing Committee on Military Nutrition Research, Food and Nutrition Board, Institute of Medicine National Research Council. Washington, DC: National Academies Press; 2011.
37. *Job Descriptions: Models for the Dietetics Profession.* 2nd ed. Chicago, IL: American Dietetic Association; 2008.
38. Weddle DO, Himberg SP, Collins N, Lewis R. The Professional Development Portfolio Process: Setting goals for credentialing. *J Am Diet Assoc.* 2002;102(10):1439-1444.
39. Gates G. Ethics opinion: Dietetics professionals are ethically obligated to maintain personal competence in practice. *J Am Diet Assoc.* 2003;103(10):633-635.
40. Chambers DW, Gilmore CJ, Maillet JO, Mitchell BE. Another look at competency-based education in dietetics. *J Am Diet Assoc.* 1996;96(6):614-617.
41. Clark N, Coleman C, Figure K, Mailhot T, Zeigler J. 2003. Food for trans-Atlantic rowers: A menu planning model and case study. *Intl J Sport Nutr Exerc Metab.* 2003;13(2):227-242.
42. Stout A. Fueling and weight management strategies in sports nutrition. *J Am Diet Assoc.* 2007;107(9):1475-1479.
43. Quatromoni PA. Clinical observations from nutrition services in college athletics. *J Am Diet Assoc.* 2008;108(4):689-694.

AUTHOR INFORMATION

P. L. Steinmuller is a nutrition educator and the project leader, Gallatin Gateway, MT. L. J. Kruskall is director, Nutrition Sciences, Department of Kinesiology & Nutrition Sciences, University of Nevada, Las Vegas. C. Karpinski is an assistant professor, Department of Nutrition, College of Health Sciences, West Chester University, West Chester, PA. M. M. Manore is a professor of nutrition, School of Biological and Population Health Sciences, Oregon State University, Corvallis. M. A. Macedonio is a nutrition consultant, Loveland, OH. N. L. Meyer is an associate professor, Beth-El College of Nursing and Health Sciences, University of Colorado, Colorado Springs.

ACKNOWLEDGEMENTS

Special acknowledgement to Roberta Anding, MS, RDN, CSSD, CDE; Karen Daigle, MS, RD, CSSD, CSCS, CPT; Reva Rogers, MHA, RDN, CSSD, CSCS; Nancy Rodriguez, PhD, RDN, CSSD; and Ingrid Skoog, MS, RDN, CSSD, who reviewed these standards, and to SCAN's Executive Committee.

Standard 1: Nutrition Assessment

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics uses accurate and relevant data and information to identify nutrition-related problems that affect health, fitness and exercise, and physical performance.

Rationale:

Nutrition assessment is the first of four steps of the Nutrition Care Process. Nutrition assessment is a systematic process of obtaining, verifying, and interpreting data in order to make decisions about the nature and cause of nutrition-related problems. It is initiated by referral and screening of individuals or groups for nutrition risk factors.

Nutrition assessment is conducted using validated tools, the five domains of nutrition assessment, and comparative standards as documented in the *International Dietetics & Nutrition Terminology Reference Manual: Standardized Language for the Nutrition Care Process* (IDNT). Nutrition assessment is an ongoing, dynamic process that involves not only initial data collection, but also reassessment and analysis of patient/client or community needs. It provides the foundation for nutrition diagnosis, the second step of the Nutrition Care Process.

Refer to the IDNT reference manual.

Indicators for Standard 1: Nutrition Assessment						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
1.1	Anthropometric assessment: Assesses anthropometric measures that may include: height, weight, BMI, ^a waste circumference, growth pattern indices/percentile ranks, and weight history: Assesses the following:			X	X	X
	1.1A	Body composition/growth/weight history: Assessment measures may include: height, weight, weight change, frame size, BMI ^a , waist circumference, growth pattern indices/percentile ranks, body compartment estimates		X	X	X
		1.1A1	Anthropometric measures, such as skinfold thickness, that require specialized training		X	X
		1.2A2	Body compartment estimates/advanced techniques (eg, densitometry [water or air displacement], BIA ^b , DXA ^c)		X	X
	1.1B	Interpretation of body composition for optimal health, fitness, and exercise/task-specific physical performance			X	X
1.2	Biochemical data, medical tests, and procedure assessment: Assesses laboratory profiles, medical tests, and procedures, which may include: acid–base balance, electrolyte, renal, essential fatty acid, gastrointestinal, glucose/endocrine, inflammatory, lipid, metabolic rate, mineral, nutritional anemia, protein, urine, and vitamin/mineral profiles Assesses the following:			X	X	X
	1.2A	Assessment of routine diagnostic tests and therapeutic procedures		X	X	X
	1.2B	Appropriateness and recommendation for more complex diagnostic tests and therapeutic procedures (eg, complete blood count, comprehensive metabolic panel, endocrine markers, urinary analysis)			X	X
	1.2C	Appropriateness and recommendation for additional specific diagnostic tests (eg, gluten intolerance, endocrine workup, malabsorption studies, sickle cell trait or disease, bone mineral density)			X	X

(continued on next page)

Figure 1. Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
	1.2D	Appropriateness of tests: (a) for specific populations (eg, age, sex, periodized training plan, environmental conditions); (b) for selection of best-fit equations in producing measurement results; and (c) to manage complications (eg, pre-exercise and post-exercise glycemic control in athletes with diabetes)			X
1.3	Nutrition-focused physical findings: Assesses findings from evaluation of body systems, muscle and subcutaneous fat wasting, oral health, suck/swallow/breathing ability, appetite, and affect: Assesses the following:		X	X	X
	1.3A	Clinical signs of fluid imbalance (eg, skin turgor with dehydration, fatigue, muscle cramps, dark urine, rapid weight change with fluid overload or loss, constipation)	X	X	X
	1.3B	Clinical signs of nutrition-related chronic disease (eg, acanthosis nigricans, waist circumference, BMI)	X	X	X
	1.3C	Clinical signs of malnutrition and under-nutrition (eg, lanugo, muscle wasting, dry, brittle, or thinning hair and nails)	X	X	X
	1.3D	Clinical signs of malnutrition, which includes disordered eating and eating disorders (eg, hypothermia, bradycardia, lanugo, muscle wasting, tooth erosion, bony protrusions, parotid gland enlargement, gastrointestinal distress, dry, brittle, or thinning hair and nails)		X	X
1.4	Food and nutrition-related history assessment (often referred to as dietary assessment): Assesses the following:		X	X	X
	1.4A	Food and nutrient intake including the composition and adequacy of food and nutrient intake, meal and snack patterns, and food allergies and intolerances	X	X	X
	1.4A1	Adequacy of nutrition intake to maintain energy balance under various conditions (eg, rest, physical activity, exercise/task-specific physical performance)	X	X	X
	1.4A2	Total food and beverage intake (type, amount, and pattern of intake of foods and food groups, indices of diet quality, intake of fluids), including intakes before, during, and after exercise and special dietary and beverage patterns associated with exercise/task-specific physical performance, including sport competitions and tasks/missions	X	X	X
	1.4A3	Patient/client history of food allergies/intolerances (eg, gluten sensitivity or intolerance, lactose intolerance)	X	X	X
	1.4A4	Current and past patient use of nicotine, alcohol, specialized diets, sport foods/drinks, energy drinks, functional foods, liquid meal replacements, sport/dietary supplements and/or ergogenic aids	X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				Competent	Proficient	Expert
<i>Each RDN:</i>						
	1.4A5	Energy balance assessment using measures of energy intake/expenditure (eg, intake via calorie counts), including changes in body weight or composition, menstrual function, medication use, health status, or attempts at weight gain or loss. Measures of energy availability for adequacy of energy intake			X	X
	1.4A6	Special energy and nutrient needs (eg, energy shakes, vitamin/mineral supplements) for health, weight management, exercise/task-specific physical performance			X	X
	1.4A7	Daily fluid needs for health, fitness, exercise/task-specific physical performance based on sweat rate, environmental conditions, fluid balance assessments (eg, urine-specific gravity), and patterns of fluid replacement (eg, during and after exercise/task-specific physical performance, including competitions)			X	X
	1.4A8	Changes in appetite or usual intake (eg, as a result of weight control, alteration in body composition/physique, change in training volume/intensity, travel/jet lag, unfamiliar environments, phase of sport/competition or task-specific physical training/duty cycles, medical conditions, illnesses and injuries, treatment and rehabilitation), and psychological issues (eg, stress, trauma, depression)			X	X
	1.4A9	Changes in usual intake as a result of dietary manipulation to optimize exercise/task-specific physical performance (eg, tapers, carbohydrate loading, glycogen restoration, rehydration, recovery nutrition following precompetition weigh-in)			X	X
	1.4B	Food and nutrient administration including current and previous diets and diet modifications, eating environment, and enteral and parenteral nutrition administration		X	X	X
	1.4B1	Diet experience (eg, previously prescribed diets, previous diet/nutrition education/counseling, self-selected diets followed, dieting attempts, food allergies, food intolerances)		X	X	X
	1.4B2	Eating environment (eg, location, atmosphere, caregiver/companion, eats alone)		X	X	X
	1.4B3	More complex nutrition issues (eg, controlled type 1 diabetes, managed gastrointestinal diseases and conditions) related to food intake and clinical complications in individuals exposed to variable exercise/task-specific physical performance situations			X	X

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
		1.4B4	Most complex issues (eg, newly diagnosed type 1 diabetes, uncontrolled diabetes, recovery from injury/illness) related to food intake and clinical complications in one or more individuals or teams and their management within the interdisciplinary or multidisciplinary treatment or performance enhancement team			X
	1.4C	Medication and dietary and herbal supplement use, including prescription and over-the-counter medications, herbal preparations, and complementary medicine products		X	X	X
		1.4C1	Appropriateness of dietary and supplement intake (eg, macro- and micronutrients, fiber, bioactive substances, alcohol, caffeine, herbs) and supplements for health and exercise/task-specific physical performance.	X	X	X
			1.4C1i Assesses sport/dietary supplements for the risk of adverse events associated with sport/dietary supplement intake. Reports adverse events to MedWatch, the US Food and Drug Administration Safety Information and Adverse Event Reporting Program	X	X	X
		1.4C2	Identifies actual or potential drug/nutrient interactions	X	X	X
		1.4C3	Evaluates sport/dietary supplements for safety	X	X	X
		1.4C4	Evaluates sport/dietary supplements (safety, legality, efficacy, quality, application to sport)		X	X
			1.4C4i Considers evidence-based reviews by government agencies (eg, National Institutes of Health: Office of Dietary Supplements, National Center for Complementary and Alternative Medicine) and reviews and/or testing by reputable third-party programs (eg, ConsumerLab.com , Natural Medicines Comprehensive Database, Natural Standard, US Pharmacopeial Convention)		X	X
			1.4C4ii Considers evaluations by reputable third-party independent organizations (eg, NSF International, Informed Choice, Informed Sport) that certify sports supplements and test for banned substances		X	X
		1.4C5	Considers anti-doping rules, regulations, and procedures of sports organizations and governing bodies (eg, NCAA ^d , NFHS ^e , WADA ^f , USADA ^g , professional sports, and DoD ^h service-specific drug-abuse programs)		X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
	1.4C6	Considers recommendations that may include adding, maintaining, changing, or discontinuing sport/dietary supplements			X	X
	1.4C7	Considers dose and timing of medication/supplements relative to health and issues such as meals, training, competition, travel schedules, and time-zone changes			X	X
	1.4C8	Identifies actual or potential drug/sport/dietary supplement/food interactions				X
	1.4D	Knowledge, beliefs, and attitudes including understanding of nutrition-related concepts and conviction of the truth and feelings/emotions toward some nutrition-related statement or phenomenon, body image and preoccupation with food and weight, and readiness to change nutrition-related behaviors:		X	X	X
	1.4D1	General food and nutrition knowledge/skills/strategies		X	X	X
	1.4D2	Sport-specific food and nutrition knowledge, skills, and/or strategies			X	X
	1.4D3	Beliefs and attitudes (eg, behavioral mediators or antecedents related to sports nutrition, intentions, readiness and willingness to change, appropriateness of goals and coping strategies)			X	X
	1.4D4	Knowledge/beliefs/attitudes that are not evidence-based (eg, misinformation regarding health and nutrition for exercise/physical performance, weight management, and culture of sport or organization)			X	X
	1.4D5	Risk/history of disordered eating/eating disorders and related factors (eg, limited food choices, distorted body image, preoccupation with food/nutrients and/or weight, sport-specific culture of weight management methods)			X	X
	1.4E	Behavior: including patient/client activities and actions which influence achievement of nutrition-related goals		X	X	X
	1.4E1	Adherence to goals (eg, self-reported adherence, visit attendance, recall of nutrition goals, self-monitoring and self-management as agreed upon)		X	X	X
	1.4E2	Behaviors associated with eating disorders/disordered eating such as the following: <ul style="list-style-type: none"> - Bingeing and purging behavior and antecedents (eg, goes into bathroom immediately after eating) - Abnormal mealtime behaviors (eg, drinking in place of eating, spitting out food, unwillingness to try new foods) - Avoidance behavior (eg, eats alone, avoids social situations) 		X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
		1.4E3	Various influences (eg, language, sport/organizational culture, ethnicity, religion) that relate to the potential for behavior change	X	X	X
		1.4E4	Social network, social pressures, perceived social support (eg, ability to utilize social network, and life, school, work influences, and obligations)	X	X	X
	1.4F	Factors affecting access to food that influence intake and availability of a sufficient quantity of safe, healthful food and water as well as food/nutrition-related supplies.		X	X	X
		1.4F1	Safe, healthful food/meal availability (eg, financial resources, access to farms, markets, and/or groceries; access to performance-based menus in institutional food service, procurement of fresh, healthful and safe food; access to appropriate kitchen, pantry, and equipment for cooking, serving, and safe food storage)	X	X	X
		1.4F2	Access to food and nutrition related to living situation (eg, dorm, apartment, hotel, military barracks, austere deployment settings, firehouse)	X	X	X
		1.4F3	Safe water availability (eg, international travel, military operations, emergency situations, disaster events) for daily needs including before, during, and after exercise/ task-specific physical performance		X	X
	1.4G	Physical activity and function, including physical activity, history of physical activity and exercise/task-specific physical performance, cognitive and physical ability to engage in specific tasks		X	X	X
		1.4G1	Physical activity/exercise: history, consistency, frequency, duration, intensity, type (eg, leisure and recreational activities, exercise training, competitive sport, military training), involuntary physical movement (eg, NEAT ¹)	X	X	X
		1.4G2	Physical inactivity: television/screen time and other sedentary activity time	X	X	X
		1.4G3	Environmental conditions (eg, cold, heat, humidity, altitude, latitude) and nutrition-related complications (eg, hydration status, nutrient deficiencies)	X	X	X
		1.4G4	Factors affecting access to physical activity: environmental safety (eg, physical and climatic), walkability of neighborhood, proximity to parks/green space, access to physical activity facilities/programs	X	X	X
		1.4G5	History of exercise, training, task-specific physical performance, sports participation	X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
	1.4G6	Annual and monthly exercise/physical performance training and competition plans		X	X	X
	1.4G7	Training state/fitness level, competitive status, performance goals and results		X	X	X
	1.4G8	Additional exercise performed outside of scheduled exercise/task-specific physical performance training			X	X
	1.4G9	Physical performance measures (eg, VO ₂ max, lactate threshold, anaerobic performance, strength and power, sport/occupational-specific performance measures, training journals)			X	X
	1.4G10	Specialty training (eg, altitude training camps, sleep high and train low strategies, military training, fire training, disaster situations and emergency training) and nutrition-related complications (eg, hydration status, weight loss, iron status, lack of adaptation, reduced ability to train, sleep disturbances, stress, diminished performance)			X	X
	1.4G11	Effect of current and past dietary interventions on exercise/physical performance in training and competition			X	X
	1.4G12	Exercise, training, or competition issues that alter appetite, ingestion, digestion, absorption, metabolism, utilization of nutrients, and/or eating behaviors and patterns			X	X
	1.4H	Nutrition-related patient/client-centered measures including nutrition quality of life and patient/client's perception of his or her nutrition intervention, cultural, ethnic, religious, and lifestyle factors and their impact on life		X	X	X
1.5	Patient/Client History: Assesses current and past information related to personal, medical, family, and social history: Assesses the following:			X	X	X
	1.5A	Personal history relative to age, sex, race/ethnicity, language, education, role in the family or organization, physical disabilities, injury, rehabilitation		X	X	X
	1.5B	Patient/client or family disease states, conditions, and illnesses that may have nutritional impact		X	X	X
	1.5B1	Family history of and risk factors for medical conditions and chronic diseases (eg, diabetes, cardiovascular disease, hypertension, osteoporosis, dyslipidemia, obesity, disordered eating, behavioral/mental health issues)		X	X	X
	1.5B2	Patient/client history of metabolic and hormonal conditions (eg, diabetes, metabolic syndrome, polycystic ovary syndrome, thyroid abnormalities, exercise-induced asthma) or chronic diseases		X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
	1.5B3	Patient/client history of clinical factors (eg, mechanical, physiological, or psychological) that may interfere with the ingestion, digestion, absorption, metabolism, and utilization of nutrients		X	X	X
	1.5B4	Patient/client history of muscular/skeletal injuries (eg, sprains, stress fractures, traumatic injuries)		X	X	X
	1.5B5	Patient/client history of past and recurrent sleep disturbances, insomnia		X	X	X
	1.5B6	Patient/client history of past and current impact of stress on dietary intake and body composition		X	X	X
	1.5B7	Patient/client menstrual history and status		X	X	X
	1.5B8	Effect of patient/client condition on ingestion, digestion, absorption and metabolism of nutrients, including food allergies/intolerances (eg, gluten sensitivity or intolerance, lactose intolerance)			X	X
	1.5B9	Patient/client history of fluid/electrolyte abnormalities (eg, hyponatremia, hypernatremia)			X	X
	1.5C	Social History		X	X	X
1.6	Comparative standards: Identifies and uses comparative standards to estimate energy, fat, protein, carbohydrate, fiber, fluid, vitamin, and mineral needs as well as recommended body weight, body mass index, and desired growth patterns: Assesses the following:			X	X	X
	1.6A	Identifies the most appropriate reference standards (ie, national, state, institutional, and regulatory) based on practice setting, patient/client age, and disease/injury state and compares nutrition assessment data to appropriate criteria, relevant norms, population-based surveys and standards (eg, Academy, Dietitians of Canada, ACSM,^k NATA,^l IOM,^m IOCⁿ) positions, and other evidenced-based information and guidance		X	X	X
	1.6A1	Energy needs, energy balance		X	X	X
	1.6A2	Macronutrient and micronutrient needs		X	X	X
	1.6A3	Fluid needs, hydration guidance, fluid balance, and electrolyte balance		X	X	X
	1.6A4	Weight and growth recommendation, body weight management and guidance in body weight, anthropometrics, and body composition		X	X	X
	1.6A5	Signs/symptoms of the female athlete triad		X	X	X
	1.6A6	Dietary/sports supplements/ergogenic aids		X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 1: Nutrition Assessment			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			Competent	Proficient	Expert
<i>Each RDN:</i>			Competent	Proficient	Expert
1.7	Reviews collected data for factors that affect nutrition and health status		X	X	X
	1.7A	Utilizes nutrition assessment data documented by the dietetic technician, registered or other health practitioner	X	X	X
1.8	Organizes and clusters nutrition risk factors, complications, and assessment data to identify possible problem areas for determining nutrition diagnoses		X	X	X
1.9	Documents and communicates:		X	X	X
	1.9A	Date and time of assessment	X	X	X
	1.9B	Pertinent data (eg, medical, social, behavioral)	X	X	X
	1.9C	Comparison to appropriate standards	X	X	X
	1.9D	Patient/client perceptions, values, and motivation related to presenting problems	X	X	X
	1.9E	Changes in patient/client perceptions, values, and motivation related to presenting problems	X	X	X
	1.9F	Reason for discharge/discontinuation or referral if appropriate	X	X	X

Examples of Outcomes for Standard 1: Nutrition Assessment	
<ul style="list-style-type: none"> • Appropriate assessment tools and procedures (matching assessment method to situation) are implemented • Assessment tools are applied in valid and reliable ways • Appropriate and pertinent data are collected • Effective interviewing methods are utilized • Data are organized and categorized in a meaningful framework that relates to nutrition problems • Data are validated • Use of assessment data leads to the determination that a nutrition diagnosis/problem does or does not exist • Problems that require consultation with or referral to another provider are recognized • Documentation and communication of assessment are complete, relevant, accurate, and timely 	

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Standard 2: Nutrition Diagnosis

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics identifies and labels specific nutrition problem(s)/diagnosis(es) that affect health, fitness, exercise, and physical performance that the RDN is responsible for treating.

Rationale:

Nutrition diagnosis is the second of four steps of the Nutrition Care Process. At the end of the nutrition assessment step, data are clustered, analyzed and synthesized. This will reveal a nutrition diagnosis category from which to formulate a specific nutrition diagnosis statement.

The nutrition diagnosis demonstrates a link to determining goals for outcomes, selecting appropriate interventions, and tracking progress in attaining expected outcomes. Diagnosing nutrition problems is the responsibility of the RDN.

Refer to the IDNT reference manual.

Indicators for Standard 2: Nutrition Diagnosis					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
<i>Each RDN:</i>			Competent	Proficient	Expert
2.1	Derives the nutrition diagnosis(es) from the assessment data		X	X	X
	2.1A	Identifies and labels the problem	X	X	X
	2.1B	Determines etiology (cause/contributing risk factors)	X	X	X
	2.1C	Clusters signs and symptoms (defining characteristics)	X	X	X
	2.1D	Organizes and groups data consisting of intake, clinical, physical function, behavioral-environmental, and other assessments	X	X	X
	2.1E	Integrates medical diagnoses (eg, hyperlipidemia, hypertension, eating disorders) when deriving the nutrition diagnosis(es)	X	X	X
	2.1F	Uses complex information and data (eg, biochemical, body composition, DXA ^c , fitness assessment, diagnostic, and therapeutic procedures) obtained from assessment when deriving the nutrition diagnosis(es)		X	X
	2.1G	Systematically compares and contrasts findings in formulating a differential nutrition diagnosis (eg, unintended weight loss associated with increased training volume vs purposeful weight loss via energy restriction)		X	X
2.2	Prioritizes and classifies the nutrition diagnosis(es)		X	X	X
	2.2A	Uses clinical judgment (eg, selects from a range of possibilities with consideration to health, fitness, exercise, task-specific physical performance, fitness, and health) when ranking nutrition diagnoses in order of importance and urgency for the patient/client	X	X	X
	2.2B	Uses clinical judgment (eg, selects from a range of possibilities with additional consideration for health, fitness, exercise, task-specific physical performance) in complex situations (eg, controlled type 1 diabetes, managed gastrointestinal conditions and diseases) when ranking nutrition diagnoses in order of importance and urgency for the patient/client		X	X

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 2: Nutrition Diagnosis			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			Competent	Proficient	Expert
Each RDN:			Competent	Proficient	Expert
	2.2C	Uses clinical judgment and experience that reflects the significant differences between active individuals and various levels of athletes (eg, beginner, competitive, or elite), others (eg, law enforcement officers, firefighters, professional emergency personnel, military service members), and/or clinical conditions (eg, newly diagnosed type 1 diabetes, uncontrolled type 1 diabetes, extreme environmental conditions, clinical complications) when ranking nutrition diagnoses in order of importance and urgency for the patient/client			X
2.3		Confirms the nutrition diagnosis(es) with clients/community, family members or other health care professionals (eg, multidisciplinary team) when possible and appropriate; provides evidence to substantiate the nutrition diagnosis	X	X	X
2.4		Documents the nutrition diagnosis(es) using standardized language and written statement(s) that include problem (P), etiology (E), and signs and symptoms (S) (PES statement[s])	X	X	X
2.5		Re-evaluates and revises nutrition diagnosis(es) when additional assessment data become available	X	X	X

Examples of Outcomes for Standard 2: Nutrition Diagnosis	
<ul style="list-style-type: none"> • Nutrition diagnostic statements that are: <ul style="list-style-type: none"> o Clear and concise o Specific—patient/client or community centered o Accurate o Based on reliable and accurate assessment data o Includes date and time • Documentation of nutrition diagnosis(es) is relevant, accurate, and timely • Documentation of nutrition diagnosis(es) is revised and updated as additional assessment data become available 	

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Standard 3: Nutrition Intervention

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics identifies and implements appropriate, purposefully planned interventions designed with the intent of changing a nutrition-related behavior, risk factor, environmental condition, or aspect of health status for an individual, target group, or the community at large with the goals to promote health and increase the capacity to exercise, train, improve recovery, promote training adaptation, and enhance exercise, and physical performance. The sports dietitian nutritionist shall work in collaboration with other members of the interdisciplinary or multidisciplinary team and other healthcare professionals as appropriate to treat the patient/client.

Rationale:

Nutrition Intervention is the third of four steps of the Nutrition Care Process. It consists of two inter-related components—planning and implementation. Planning involves prioritizing the nutrition diagnoses, conferring with the patient/client and others, reviewing practice guidelines and policies, and setting goals and defining the specific nutrition intervention strategy.

Implementation of the nutrition intervention/plan of care is the action phase that includes carrying out and communicating the intervention/plan of care, continuing data collection, and revising the nutrition intervention/plan of care strategy, as warranted, based on the patient/client response. An RDN implements the interventions or assigns components of nutrition intervention/plan of care to support staff in accordance with applicable laws and regulations. Nutrition intervention/plan of care is ultimately the responsibility of the RDN.

Refer to the IDNT reference manual.

Indicators for Standard 3: Nutrition Intervention					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
<i>Plans the Nutrition Intervention/Plan of Care:</i>					
3.1	Prioritizes the nutrition diagnosis(es) based on problem severity, safety, patient/client needs, likelihood that nutrition intervention/plan of care will influence problem, and patient/client perception of importance		X	X	X
	Prioritization consideration may include:				
	3.1A	Immediacy of the problem	X	X	X
	3.1B	Patient/client's available resources and support	X	X	X
	3.1C	Readiness of patient/client to receive selected nutrition interventions	X	X	X
	3.1D	Presence of medical conditions (eg, diabetes, dyslipidemia, depression, eating disorders, low bone mass, anemia, gastrointestinal conditions and disease, autoimmune disease, musculoskeletal injury)		X	X
	3.1E	Timing of the problem relative to annual training, competition plan, or duty schedule		X	X
	3.1F	Prediction of emerging effects (eg, gastrointestinal problems, dehydration, glycogen depletion, diminished mental/physical performance, nutrient/dietary supplement–drug interactions, late effects of treatments such as weight loss/gain, compromised immune system, suboptimal training adaptation)		X	X
<i>(continued on next page)</i>					

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 3: Nutrition Intervention			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			Competent	Proficient	Expert
<i>Each RDN:</i>					
3.2	Bases intervention/plan of care on best available research/evidence, evidence-based guidelines (eg, Academy, EAL,^o Dietitians of Canada), and best practices (eg, position papers, Academy, ACSM, IOC, NATA)		X	X	X
3.3	Refers to policies, regulations, and program standards		X	X	X
	3.3A	Assesses for adverse events associated with sport/dietary supplement intake. Reports adverse events to MedWatch, the US Food and Drug Administration Safety Information and Adverse Event Reporting Program	X	X	X
	3.3B	Complies with food and nutrition rules and regulations of the NCAA for collegiate athletes		X	X
	3.3C	Complies with organizational guidance and regulations (eg, NFHS, NCAA, professional sports, DoD) regarding dietary supplements		X	X
	3.3D	Educates athletes and others regarding banned substances in sport (eg, NCAA, IOC, professional sports, DoD)		X	X
3.4	Confers with patient/client, caregivers, interdisciplinary or multidisciplinary team, and other health care professionals		X	X	X
3.5	Determines patient/client-centered plan, goals, and expected outcomes		X	X	X
	Considerations for the intervention plan may expand and are not limited to include:				
	3.5A	Plans intervention to address current issues (eg, fatigue; dehydration; muscle cramping; inadequate recovery, exercise, task-specific physical performance improvement and training adaptation; diarrhea and other gastrointestinal issues; illness; injury; disordered eating; female athlete triad; dietary and sports/dietary supplement use; or other clinical issues)	X	X	X
	3.5B	Identifies barriers to successful implementation (eg, patient/client compliance, food availability and preparation issues, financial issues, regulations of sport governing bodies and associations, organization policies, situations in occupational settings, influence of team-athlete-coach-family dynamics)	X	X	X
	3.5C	Addresses issues related to off-season/transition weight change, detraining, and scheduled and unscheduled breaks in training, such as holidays, post-deployment military block leave, and extended travel)		X	X
	3.5D	Develops and implements strategies to minimize barriers and other issues (eg, timing of intervention relative to annual training/competition and travel plans, prevent treatment delays, reduce relapse, and reduce the need for more advanced/involved treatment options)		X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 3: Nutrition Intervention						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
3.6	Develops the nutrition prescription			X	X	X
	3.6A	Considers the educational needs of the patient/client, including cultural competency		X	X	X
	3.6B	Selects intervention strategies that are based on scientific evidence, best practices, and professional experience		X	X	X
		3.6B1	Consider constraints such as time (eg, exercise training, competition, recovery, traveling), finances, ability to store and prepare food, and organizational culture when developing intervention strategies	X	X	X
	3.6C	Offers general physical activity recommendations for health and fitness based on published, evidence-based population-specific positions and guidelines (eg, Physical Activity Guidelines for Americans, ACSM)		X	X	X
3.7	Defines time and frequency of care including intensity, duration, and follow-up			X	X	X
3.8	Utilizes standardized language for describing interventions			X	X	X
3.9	Identifies resources and referrals needed			X	X	X
<i>Implements the Nutrition Intervention/Plan of Care:</i>						
3.10	Collaborates with colleagues, interdisciplinary team, and other health care professionals			X	X	X
	3.10A	Participates in communications within the interdisciplinary or multidisciplinary team and/or performance enhancement team		X	X	X
	3.10B	Collaborates with the interdisciplinary or multidisciplinary team and/or performance enhancement team		X	X	X
	3.10C	Directs the nutrition component of the interdisciplinary or multidisciplinary team and/or performance enhancement team			X	X
3.11	Communicates and coordinates the nutrition intervention/plan of care			X	X	X
	3.11A	Coordinates nutrition intervention/plan of care with exercise/training schedule and with rehabilitation during recovery from illness/injury		X	X	X
	3.11B	Communicates nutrition intervention/plan of care with patient/client		X	X	X
	3.11C	Communicates and coordinates nutrition intervention/plan of care with appropriate members of the interdisciplinary or multidisciplinary team and/or performance enhancement team		X	X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 3: Nutrition Intervention					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
3.12	Initiates and individualizes the nutrition intervention/plan of care		X	X	X
	3.12A	Utilizes physician/referring practitioner driven protocols to implement, initiate or modify orders for diet, nutrition supplements, dietary supplements, food texture modifications for dentition or individual preferences, nutrition-related laboratory tests and medications, and nutrition education and counseling consistent with competence and approved clinical privileges and organizational policy	X	X	X
	3.12B	Utilizes physician/referring practitioner-driven protocols to manage the use of dietary supplements, sports and functional foods (eg, portion or dosage adjustments based on energy needs or laboratory results, addition of new dietary supplements, sports foods functional foods or modifications for fluid intake) consistent with organization policy	X	X	X
	3.12C	Uses appropriate goal setting and behavior change strategies and techniques to facilitate self-management and self-care	X	X	X
	3.12D	Uses critical thinking and synthesis skills to guide decision making in routine situations integrating nutrition with exercise/task-specific physical performance and training	X	X	X
	3.12E	Uses critical thinking and synthesis skills to guide decision making in complex situations (eg, controlled type 1 diabetes, managed gastrointestinal conditions and diseases)		X	X
	3.12F	Uses critical thinking and synthesis skills to guide decision making in complicated, unpredictable, and dynamic situations (eg, newly diagnosed type 1 diabetes, uncontrolled diabetes, extreme environmental conditions, clinical complications)			X
3.13	Assigns activities to dietetic technician, registered and other administrative support and technical personnel in accordance with qualifications, organization policies, and applicable laws and regulations		X	X	X
	3.13A	Supervises support personnel	X	X	X
3.14	Continues data collection		X	X	X
3.15	Follows up and verifies that nutrition intervention/plan of care is occurring		X	X	X
	3.15A	Communicates with the interdisciplinary or multidisciplinary team and/or performance enhancement team to verify progress	X	X	X
	3.15B	Collaborates with the interdisciplinary or multidisciplinary team and/or performance enhancement team to verify progress and adjust strategies	X	X	X
	3.15C	Directs the integration of the athlete's nutritional progress within the interdisciplinary or multidisciplinary team and/or performance enhancement team		X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 3: Nutrition Intervention					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
<i>Each RDN:</i>			Competent	Proficient	Expert
3.16	Adjusts nutrition intervention/plan of care strategies, if needed, as response occurs		X	X	X
	3.16A	Uses a variety of educational approaches, tools, and materials as appropriate	X	X	X
	3.16B	Adapts nutrition educational tools to individualized learning styles and method of communication and to the culture of the sport/organization	X	X	X
	3.16C	Adjusts nutrition intervention (eg, energy balance, macro- and micronutrient needs, hydrations guidelines) according to annual training/competition plan		X	X
	3.16D	Uses critical thinking and synthesis skills in decision making in complex situations and in combining multiple intervention approaches		X	X
	3.16E	Draws on experiential knowledge, clinical judgment, and research about the patient/client population to tailor the strategy in complicated, unpredictable, and dynamic situations			X
3.17	Documents:				
	3.17A	Date and time of consultation	X	X	X
	3.17B	Specific treatment goals and expected outcomes	X	X	X
	3.17C	Recommended interventions	X	X	X
	3.17D	Adjustments to the plan and justification	X	X	X
	3.17E	Patient/client/community receptivity	X	X	X
	3.17F	Referrals made and resources used	X	X	X
	3.17G	Patient/client comprehension	X	X	X
	3.17H	Barriers to change	X	X	X
	3.17I	Other information relevant to providing care and monitoring progress over time	X	X	X
	3.17J	Plans for follow-up and frequency of care	X	X	X
	3.17K	Rationale for discharge or referral if applicable	X	X	X

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Examples of Outcomes for Standard 3: Nutrition Intervention

- Appropriate prioritizing and setting of goals/expected outcomes
- Involves patient/client, care givers and interdisciplinary or multidisciplinary team, as appropriate, in developing nutrition intervention/plan of care
- Appropriate individualized patient/client-centered nutrition intervention/plan of care, including nutrition prescription, is developed
- Interdisciplinary collaborations are utilized
- Nutrition interventions/plan of care are delivered and actions are carried out
- Documentation of nutrition intervention/plan of care is:
 - o Comprehensive
 - o Specific
 - o Accurate
 - o Relevant
 - o Timely
 - o Dated and Timed
- Documentation of nutrition intervention/plan of care is revised and updated

Standard 4: Nutrition Monitoring and Evaluation

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics monitors and evaluates indicators and outcomes data directly related to the nutrition diagnosis, goals, and intervention strategies to determine the progress made in achieving desired outcomes of nutrition care and whether planned interventions should be continued or revised.

Rationale:

Nutrition monitoring and evaluation is the fourth step in the Nutrition Care Process. Through monitoring and evaluation, the RDN identifies important measures of change or patient/client outcomes relevant to the nutrition diagnosis and nutrition intervention and describes how best to measure these outcomes.

Nutrition monitoring and evaluation are essential components of an outcomes management system. The aim is to promote uniformity within the profession in evaluating the efficacy of nutrition interventions.

Refer to the IDNT reference manual.

Indicators for Standard 4: Nutrition Monitoring and Evaluation

Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
			Competent	Proficient	Expert
<i>Each RDN:</i>					
4.1	Monitors progress:		X	X	X
	4.1A	Assesses patient/client understanding and compliance with nutrition intervention/plan of care	X	X	X
	4.1A1	Assesses compliance with recommended energy and fluid intake and amounts and timing of nutrient intake	X	X	X
	4.1B	Determines whether the nutrition intervention/plan of care is being implemented as prescribed	X	X	X

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 4: Nutrition Monitoring and Evaluation						
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
		4.1B1	Evaluates implementation of nutrition intervention plan in recreational and competitive athletes relative to routine exercise and task-specific physical performance issues	X	X	X
		4.1B2	Evaluates implementation of nutrition intervention plan in patients/clients (eg, recreational and competitive athletes, artistic performers, law enforcement officers, firefighters, professional emergency personnel, military service members) in complex clinical situations (eg, controlled diabetes, managed gastrointestinal conditions, and disease)		X	X
		4.1B3	Evaluates implementation of nutrition intervention plan in patients/clients (eg, competitive athletes, artistic performers, law enforcement officers, firefighters, professional emergency personnel, service members) balancing multiple situations (eg, environmental extremes, rapid weight changes, travel, sporting events, disaster or emergency situations, military operations, and/or clinical complications)			X
	4.1C	Evaluates progress or reasons for lack of progress related to problems and interventions		X	X	X
		4.1C1	<p>Uses multiple data sources to evaluate progress. Examples may include:</p> <ul style="list-style-type: none"> • nutrition-focused physical examination, including but not limited to signs of fluid, energy, and/or nutrition depletion or excess • adequacy of energy and nutrient intake from all sources • fluid and electrolyte balance • gastrointestinal tolerance • changes in body weight, anthropometric measures, body composition • signs/symptoms of disordered eating, eating disorders, the female athlete triad 	X	X	X
		4.1C2	<p>Uses multiple data sources to evaluate progress in more complex situations. Examples may include:</p> <ul style="list-style-type: none"> • pertinent medications and sport/dietary supplements in development and implementation of nutrition intervention • effects of intervention on physical activity, exercise training, task-specific physical performance, and recovery post exercise • effects of intervention on progress in rehabilitation and recovery from injury 		X	X

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 4: Nutrition Monitoring and Evaluation				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators				Competent	Proficient	Expert
<i>Each RDN:</i>						
	4.1D	Evaluates evidence that the nutrition intervention/plan of care is influencing a desirable change in the patient/client behavior or status		X	X	X
		4.1D1	Monitors and interprets laboratory and other data that may reflect a change in the patient/client behavior or status	X	X	X
		4.1D2	Monitors factors (eg, physical, social, cognitive, environmental) that may reflect a change affected by the nutrition intervention	X	X	X
	4.1E	Identifies positive or negative outcomes		X	X	X
		4.1E1	Documents progress in meeting desired goals (eg, energy balance, fluid, nutrient intake, body weight, anthropometric measures, body composition, overall health)	X	X	X
		4.1E2	Determine whether outcomes meet expectations	X	X	X
		4.1E3	Identify unintended consequences (eg, not meeting set weight class goal for competition) or the use of inappropriate methods of achieving goals		X	X
	4.1F	Supports conclusions with evidence		X	X	X
		4.1F1	Clearly document processes and outcomes	X	X	X
4.2	Measures outcomes:			X	X	X
	4.2A	Selects the nutrition care outcome indicator(s) to measure		X	X	X
		4.2A1	Physical measures I (eg, weight maintenance, body weight, anthropometric measures, body composition changes, laboratory values)	X	X	X
		4.2A2	Physical measures II (eg, fluid and electrolyte balance, bone density) relative to exercise and task-specific physical performance indicators		X	X
		4.2A3	Behavioral and treatment outcomes (eg, minimize barriers, prevent treatment delays, reduce relapse and the need for more advanced/involved treatment options)		X	X
		4.2A4	Quality of life and exercise and task-specific physical performance indicators (eg, full participation in sport or work assignment, improved mood and cognitive function, progress in rehabilitation, minimization of fatigue, absence of muscle cramping, avoidance of gastrointestinal problems)		X	X

(continued on next page)

Figure 1. *(continued)* Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Indicators for Standard 4: Nutrition Monitoring and Evaluation					
Bold Font Indicators are Academy Core RDN Standards of Practice Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
	4.2B	Uses standardized nutrition care outcome indicator(s)	X	X	X
4.3	Evaluates outcomes:		X	X	X
	4.3A	Compares monitoring data with nutrition prescription/goals or reference standard	X	X	X
	4.3B	Evaluates impact of the sum of all interventions on overall patient/client health outcomes and on exercise/task-specific physical performance	X	X	X
	4.3C	Modifies nutrition intervention based on patient/client tolerance, response, environmental limitations, and outcome measures with regard to documented goals and objectives		X	X
4.4	Documents		X	X	X
	4.4A	Date and time of consultation	X	X	X
	4.4B	Indicators measured, results, and the method for obtaining measurement	X	X	X
	4.4C	Criteria to which the indicator is compared (eg, nutrition prescription/goal or a reference standard or national and international guidelines, ie, Academy, Dietitians of Canada, ACSM, IOM, IOC)	X	X	X
	4.4D	Factors facilitating or hampering progress	X	X	X
	4.4E	Other positive or negative outcomes	X	X	X
	4.4F	Future plans for nutrition care, nutrition monitoring and evaluation, follow-up, referral, or discharge	X	X	X

Examples of Outcomes for Standard 4: Nutrition Monitoring and Evaluation	
<ul style="list-style-type: none"> • The patient/client/community outcome(s) directly relate to the nutrition diagnosis and the goals established in the nutrition intervention/plan of care. Examples include, but are not limited to: <ul style="list-style-type: none"> o Nutrition outcomes (eg, change in knowledge, behavior, food, or nutrient intake) o Clinical and health status outcomes (eg, change in laboratory values, body weight, blood pressure, risk factors, signs and symptoms, clinical status, infections, complications, morbidity, and mortality) o Patient/client-centered outcomes (eg, quality of life, satisfaction, self-efficacy, self-management, functional ability) o Physical activity, exercise, and exercise training, conditioning, and task-specific physical performance outcomes o Health care utilization and cost effectiveness outcomes (eg, change in medication, special procedures, planned/unplanned clinic visits, preventable hospital admissions, length of hospitalizations, morbidity, and mortality) • Documentation of nutrition monitoring and evaluation is: <ul style="list-style-type: none"> o Comprehensive o Specific o Accurate o Relevant o Timely o Dated and timed 	

(continued on next page)

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Definitions

Exercise refers to physical activity that contributes to health, fitness, and chronic disease prevention. *Physical Activity Guidelines Advisory Committee, 2008. PA Guidelines Advisory Committee Report, 2008. Washington, DC: US Department of Health and Human Services, 2008.*

Training and conditioning refers to physical activity that contributes to task-specific physical performance.

Task-specific physical performance encompasses physical activity related to sport, military training and military operations, and training and performance of law enforcement officers, firefighters, professional emergency responders, and others whose occupations require physical labor and/or maintenance of specified levels of physical conditioning or body weight and body composition.

Evidence-based guidelines are determined by scientific evidence. Practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care. Reference: QI 9: Clinical Practice Guidelines, Element A. *2009 Standards and Guidelines for the Accreditation of Health Plans. Washington, DC: National Center for Quality Assurance.*

The **female athlete triad** refers to the inter-relationships among energy availability, menstrual function, and bone mineral density, which may have clinical manifestations, including eating disorders, functional hypothalamic amenorrhea, and osteoporosis. Reference: Manore MM, Thompson TA. *Sport Nutrition for Health and Performance. 2nd ed. Champaign, IL: Human Kinetics; 2009.*

A **multidisciplinary or interdisciplinary team** within sports/performance settings may include any or all of the following: physician, RDN, physical therapist, physiologist, psychologist, sport psychologist, athletic trainer, strength and conditioning coach, massage therapist, other coaches.

A **multidisciplinary or interdisciplinary research team** within athletic performance/sports settings may include any or all of the following: principal investigator, co-principal investigators, project consultants, laboratory technicians, statisticians.

Acronyms

^aBMI=body mass index.

^bBIA= bioelectrical impedance analysis.

^cDXA= dual-energy X-ray absorptiometry.

^dNCAA=National Collegiate Athletic Association (www.ncaa.org).

^eNFHS=National Federation of High School Associations (www.nfhs.org).

^fWADA=World Anti-Doping Agency (www.wada-ama.org).

^gUSADA=US Anti-Doping Agency (www.usantidoping.org).

^hDoD=US Department of Defense (<http://www.defense.gov/>).

ⁱNEAT=nonexercise activity thermogenesis.

^jVO₂max=maximal aerobic capacity, maximal rate of oxygen consumption, or maximal oxygen uptake.

^kACSM=American College of Sport Medicine (<http://www.acsm.org>).

^lNATA=National Athletic Trainers' Association (<http://www.nata.org>).

^mIOM=Institute of Medicine (www.iom.edu).

ⁿIOC=International Olympic Committee (www.olympic.org).

^oEAL=Evidence Analysis Library (www.eatright.org).

Figure 1. (continued) Standards of Practice for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.

Standard 1: Quality in Practice
 The registered dietitian nutritionist (RDN) in sports nutrition and dietetics provides quality services using a systematic process with identified leadership, accountability, and dedicated resources.
Rationale:
 Quality practice in nutrition and dietetics is built on a solid foundation of education, credentialing, evidence-based practice, demonstrated competence, and adherence to established professional standards. Quality practice requires systematic measurement of outcomes, regular performance evaluations, and continuous improvement.

Indicators for Standard 1: Quality in Practice				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
1.1	Complies with applicable laws and regulations as related to his/her area(s) of sports nutrition and dietetics practice			X	X	X
	1.1A	Complies with HIPAA ^a regulations and standards		X	X	X
1.2	Performs within individual and statutory scope of practice			X	X	X
	1.2A	Discusses with patients/clients the Physical Activity (PA) Guidelines for Americans and the relationships between exercise, health, and disease prevention		X	X	X
	1.2B	Provides general physical activity guidance to clients/patients based on the PA Guidelines for Americans		X	X	X
	1.2B1	Assists medically cleared patients/clients with establishing PA goals and devising plans for execution		X	X	X
	1.2B2	Assists medically cleared patients/clients with more complex health issues (eg, controlled type 1 diabetes, gastrointestinal diseases and conditions, recovery from injury/illness) for attaining or modifying PA goals and plans			X	X
	1.2B3	Assists medically cleared patients/clients with the most complex clinical issues (eg, newly diagnosed type 1 diabetes, uncontrolled diabetes, clinical eating disorders, post-bariatric surgery) for attaining or modifying PA goals and plans				X
	1.2C	Refers individual patients/clients to a qualified fitness professional (eg, certification by ACSM, ^b ACE, ^c NSCA ^d) for a formal fitness assessment and exercise prescription unless the RDN holds the appropriate exercise certification and demonstrates competence to conduct exercise testing and prescribe exercise regimens		X	X	X
	1.2D	RDNs holding the appropriate exercise certification and demonstrating competence discuss with patients/clients more advanced principles from the PA Guidelines for Americans (eg, intensity, frequency, duration, overload, progression, specificity, METs, ^e and MET-minutes ^f)			X	X
<i>(continued on next page)</i>						

Figure 2. Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics.
 Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 1: Quality in Practice				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
<i>Each RDN:</i>				Competent	Proficient	Expert
1.3	Adheres to sound business and ethical billing practices applicable to the setting			X	X	X
1.4	Utilizes national quality and safety data (eg, ACSM, IOM,^g IHI,^h NCQA,ⁱ NQF^j) to improve the quality of services provided and to enhance customer-centered service			X	X	X
1.5	Utilizes a systematic performance improvement model that is based on practice knowledge, evidence, research, and science for delivery of the highest quality services			X	X	X
1.5A	Identifies performance improvement criteria to monitor effectiveness of services			X	X	X
1.6	Participates in or designs an outcomes-based management system to evaluate safety, effectiveness, and efficiency of practice			X	X	X
1.6A	Involves colleagues and others, as applicable, in systematic outcomes management			X	X	X
1.6A1	Participates in and/or uses collected data as part of a quality-improvement process relative to outcomes, quality of care, and services rendered			X	X	X
1.6B	Utilizes indicators that are specific, measurable, attainable, realistic, and timely (S.M.A.R.T.)			X	X	X
1.6C	Defines expected outcomes			X	X	X
1.6D	Measures quality of services in terms of process and outcome			X	X	X
1.6E	Documents outcomes			X	X	X
1.6F	Advocates for and participates in developing clinical, operational, and financial data collection and analysis upon which outcomes can be derived, reported, and used for improvement				X	X
1.6G	Directs the development, monitoring, and evaluation of practice-specific benchmarks (eg, appropriate hydration practices, body weight and body composition management strategies) relevant to national initiatives (eg, Academy, Dietitians of Canada, ACSM, Healthy People 2010, sports organizations and governing bodies, and occupational organizations) to improve outcomes				X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 1: Quality in Practice					
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			The "X" signifies the indicators for the level of practice		
<i>Each RDN:</i>			Competent	Proficient	Expert
1.7	Identifies and addresses potential and actual errors and hazards in provision of services		X	X	X
	1.7A	Recognizes potential drug–nutrient interactions, drug–sport/dietary supplement safety and interactions, and potential interactions between interventions and other therapies as potential hazards; provides education and counseling as appropriate	X	X	X
	1.7B	Addresses problematic sports/dietary supplement products and manufacturing practices, quality control, error prevention recommendations (eg, as provided by ISMP, ^k US Food and Drug Administration, USP ^l), and anti-doping rules and regulations of sports organizations and governing bodies (eg, NCAA, ^m NFHS, ⁿ IOC, ^o USADA, ^p WADA, ^q DoD ^r service-specific drug abuse programs, occupational organizations' policies and guidelines) and provides education and counseling as appropriate		X	X
	1.7C	Develops protocols to identify, address, and prevent errors and hazards in the delivery of sports nutrition and dietetics services			X
1.8	Compares actual performance to performance goals (eg, Gap Analysis, SWOT Analysis [Strengths, Weaknesses, Opportunities, and Threats], PDCA Cycle [Plan-Do-Check-Act])		X	X	X
	1.8A	Reports and documents action plan to address identified gaps in performance	X	X	X
1.9	Evaluates interventions to improve processes and services		X	X	X
	1.9A	Designs and tests interventions to improve processes and services	X	X	X
1.10	Improves or enhances services based on measured outcomes		X	X	X
	1.10A	Evaluates and improves professional performance in relation to established outcomes of quality sports nutrition and dietetics care and services	X	X	X
	1.10B	Assesses outcomes to identify areas that need improvement in sports nutrition and dietetics care and services	X	X	X
	1.10C	Directs the development and management of systems, processes, and programs that advance best practices and the core values and objectives of sports nutrition and dietetics care and services		X	X

Examples of Outcomes for Standard 1: Quality in Practice

- Actions are within scope of practice and applicable laws and regulations
- Use of national quality standards and best practices are evident in customer-centered services
- Performance indicators are specific, measurable, attainable, realistic, and timely (S.M.A.R.T.)
- Aggregate outcomes results meet pre-established criteria
- Results of quality improvement activities direct refinement and advancement of practice

(continued on next page)

Figure 2. *(continued)* Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Standard 2: Competence and Accountability

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics demonstrates competence in and accepts accountability and responsibility for ensuring safety and quality in the services provided.

Rationale:

Competence and accountability in practice includes continuous acquisition of knowledge, skills, and experience in the provision of safe, quality customer-centered service.

Indicators for Standard 2: Competence and Accountability				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
<i>Each RDN:</i>						
2.1	Adheres to the Code of Ethics			X	X	X
2.2	Integrates the Standards of Practice (SOP) and Standards of Professional Performance (SOPP) into practice, self-assessment, and professional development			X	X	X
	2.2A	Utilizes the Standards to assess performance at the appropriate level of practice		X	X	X
	2.2B	Utilizes the Standards to develop and implement a professional development plan to enhance practice and performance		X	X	X
	2.2C	Utilizes the Standards to develop and implement a professional development plan to advance practice and performance to a higher level		X	X	X
2.3	Demonstrates and documents competence in practice and delivery of customer-centered service			X	X	X
2.4	Assumes accountability and responsibility for actions and behaviors			X	X	X
	2.4A	Acknowledges and corrects errors		X	X	X
2.5	Conducts self-assessment at regular intervals			X	X	X
	2.5A	Identifies needs for professional development		X	X	X
	2.5B	Engages in self-assessment to ascertain progress in meeting desired performance outcomes		X	X	X
	2.5C	Evaluates professional practice consistent with evidence-based guidelines, best practices, and current research findings		X	X	X
2.6	Designs and implements plans for professional development			X	X	X
	2.6A	Documents professional development activities in career portfolio		X	X	X
		2.6A1	Documents, in professional development plan, activities that demonstrate professional responsibilities at the appropriate level of practice	X	X	X
	2.6B	Documents professional development activities as per organization guidelines		X	X	X
		2.6B1	Develops and implements a professional development plan at the appropriate level of practice specific to the employment/workplace setting	X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 2: Competence and Accountability						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
	2.6C	Engages in continuing education opportunities in sports nutrition and dietetics and related areas according to his/her professional development plan		X	X	X
2.7	Engages in evidence-based practice and utilizes best practices			X	X	X
	2.7A	Uses evidence-based guidelines (eg, Academy, EAL, ⁵ Dietitians of Canada), position papers (eg, Academy, IOM, ACSM, IOC, NATA ⁴) and best practices to provide quality care		X	X	X
2.8	Participates in peer review of self and others			X	X	X
	2.8A	Participates in peer evaluation, including but not limited to peer supervision, clinical chart review, professional practice, and performance evaluations, as applicable		X	X	X
	2.8B	Serves as an editorial board member or reviewer for professional organizations, journals, books, etc			X	X
	2.8C	Serves as an editor of a journal or other scholarly work including but not limited to professional articles, chapters, books				X
2.9	Mentors others			X	X	X
	2.9A	Participates in mentoring nutrition and dietetics students and professionals in sports nutrition and dietetics practice		X	X	X
	2.9B	Develops mentoring or internship opportunities for nutrition and dietetics students and professionals, and other sports- and health care professionals as appropriate			X	X
	2.9C	Directs and implements internships and mentoring programs for nutrition and dietetics students and professionals, and other sports- and health care professionals as appropriate			X	X
	2.9D	Mentors RDNs interested in pursuing Board Certification as a Specialist in Sports Dietetics (CSSD)			X	X
2.10	Pursues opportunities (education, training, credentials) to advance practice in accordance with laws and regulations and requirements of practice setting			X	X	X
	2.10A	Attains and maintains certifications accredited by the NCCA ⁴ (eg, ACSM, ACE, NSCA) as appropriate to the practice setting		X	X	X
	2.10B	Attains and maintains Board Certification as a Specialist in Sports Dietetics (CSSD), as appropriate to the practice setting			X	X
	2.10C	Attains and maintain appropriate body composition certifications (eg, ISAK ^V) and competence, as appropriate to the practice setting			X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Examples of Outcomes for Standard 2: Competence and Accountability

- Practice reflects the Code of Ethics
- Practice reflects the Standards of Practice and Standards of Professional Performance
- Competence is demonstrated and documented
- Safe, quality customer-centered service is provided
- Self-assessments are conducted regularly
- Professional development needs are identified
- Directed learning is demonstrated
- Practice reflects evidence-based practice and best practices
- Relevant opportunities (education, training, credentials, certifications) are pursued to advance practice
- Commission on Dietetic Registration recertification requirements are met

Standard 3: Provision of Services

The registered dietitian nutritionist (RDN) in sports nutrition and dietetics provides safe, quality service based on customer (eg, patient/client) expectations and needs, and the mission and vision of the organization/business.

Rationale:

Quality programs and services are designed, executed, and promoted based on the RDN's knowledge, experience, and competence in addressing the needs and expectations of the organization/business and its customers.

Indicators for Standard 3: Provision of Services						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
3.1	Contributes to or leads in development and maintenance of programs/ services that address needs of the customer or target population(s)			X	X	X
	3.1A	Aligns program/service development with the mission, vision, and service expectations and outputs of the organization/business		X	X	X
	3.1B	Utilizes the needs, expectations, and desired outcomes of the customer (eg, patient/client, administrator, client organization[s]) in program/service development		X	X	X
	3.1C	Makes decisions and recommendations that reflect stewardship of time, talent, finances, and environment		X	X	X
	3.1D	Proposes programs and services that are customer-centered, culturally appropriate, and minimize health disparities		X	X	X
		3.1D1	Utilizes evidence-based guidelines, best practices, and national and international guidelines (eg, Academy, Dietitians of Canada, ACSM, NATA, IOM, IOC) in the delivery of nutrition services and physical activity recommendations	X	X	X
		3.1D2	Develops nutrition programs, protocols, and policies based on evidence-based guidelines, best practices, and national and international guidelines (eg, Academy, Dietitians of Canada, ACSM, NATA, IOM, IOC)		X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
		3.1D3	Directs the development of nutrition programs, protocols, and policies based on evidence-based guidelines, best practices, and national and international guidelines (eg, Academy, Dietitians of Canada, ACSM, NATA, IOM, IOC)			X
3.2	Promotes public access and referral to credentialed dietetics practitioners for quality food and nutrition programs and services			X	X	X
	3.2A	Contributes to or designs referral systems that promote access to qualified, credentialed dietetics practitioners		X	X	X
	3.2B	Refers customers to appropriate providers when requested services or identified needs exceed the RDN's individual scope of practice		X	X	X
		3.2B1	Receives referrals from and refers customers to sports medicine and other sports staff (eg, physician, sports psychologist, physical therapist, exercise physiologist, athletic trainer, strength coach, other coaches) as appropriate	X	X	X
	3.2C	Monitors effectiveness of referral systems and modifies as needed to achieve desirable outcomes		X	X	X
		3.2C1	Provides leadership in documenting, evaluating, and updating referral processes		X	X
		3.2C2	Directs and manages referral processes and systems			X
	3.2D	Evaluates the effectiveness of sports nutrition and dietetics referral tools (eg, "Find a SCAN Dietitian" feature on Sports, Cardiovascular, and Wellness Nutrition (SCAN) website, USOC ^W Sport Dietitian Registry, and state, local affiliate, and other referral mechanisms)			X	X
3.3	Contributes to or designs customer-centered services			X	X	X
	3.3A	Assesses needs, beliefs/values, goals, and resources of the customer		X	X	X
		3.3A1	Applies goal setting and behavior change strategies and techniques (eg, stages of change, motivational interviewing techniques) in practice	X	X	X
	3.3B	Utilizes knowledge of the customer's/target population's health conditions, cultural beliefs, and business objectives/services to guide design and delivery of customer-centered services		X	X	X
		3.3B1	Applies principles of sports nutrition and dietetics in relation to health promotion, exercise, task-specific physical performance, and behavior change appropriate for diverse populations	X	X	X
		3.3B2	Recognizes how the athletic or occupational environment, culture, health literacy, and socioeconomic status may influence health/wellness, exercise, task-specific physical performance, and patient/client use of health care services	X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
	3.3B3	Adapts practice to meet the needs of ethnically and culturally diverse populations (eg, uses interpreters, selects appropriate levels of interventions, adapts sports nutrition education/ counseling approaches and materials)		X	X	X
	3.3B4	Applies knowledge and skills at the proficient level (eg, functional working knowledge of sports nutrition and dietetics, evidence-based guidelines, best practices, and clinical judgment and experience) to determine the most appropriate action plan in combining multiple intervention approaches			X	X
	3.3B5	Applies knowledge and skills at the expert level (eg, advanced and comprehensive knowledge of sports nutrition and dietetics, target sport/organization, evidence-based guidelines, best practices, and clinical judgment and experience) to determine the most appropriate action plan in complicated, unpredictable, and dynamic situations				X
	3.3C	Communicates principles of disease prevention and behavioral change appropriate to the customer or target population		X	X	X
	3.3C1	Recognizes patient/client concepts of illness, injury, and rehabilitation and their cultural beliefs		X	X	X
	3.3D	Collaborates with the customers to set priorities, establish goals, and create customer-centered action plans to achieve desirable outcomes		X	X	X
	3.3E	Involves customers in decision making		X	X	X
3.4		Executes programs/services in an organized, collaborative, and customer-centered manner		X	X	X
	3.4A	Collaborates and coordinates with peers, colleagues, and within interdisciplinary teams		X	X	X
	3.4A1	Works in partnership with exercise/athletic performance professionals, other health care providers, and ancillary referral sources		X	X	X
	3.4A2	Serves as a consultant for medical nutrition therapy in the management of nutrition-related illnesses and conditions		X	X	X
	3.4B	Participates in or leads in the design, execution, and evaluation of programs and services (eg, nutrition screening system, medical and retail foodservice, electronic health records, interdisciplinary programs, community education) for customers		X	X	X
	3.4B1	Develops and delivers nutrition education programs and services that integrate nutrition with exercise, task-specific physical performance, health promotion, and wellness		X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
		3.4B2	Develops and manages sports nutrition programs and educational materials based on patient/client needs, cultural beliefs, evidence-based guidelines (eg, Academy, Dietitians of Canada, ACSM, NATA, IOM, IOC), and available resources		X	X
		3.4B3	Plans, develops, and implements systems of sports nutrition and dietetics care and services using evidence-based guidelines and best practices		X	X
		3.4B4	Directs systems of sports nutrition and dietetics care and services			X
	3.4C	Develops or contributes to design and maintenance of policies, procedures, protocols, standards of care, technology resources, and training materials that reflect evidence-based practice in accordance with applicable laws and regulations		X	X	X
		3.4C1	Participates in developing and updating policies and procedures and evidence-based sports nutrition and dietetics practice tools	X	X	X
		3.4C2	Develops strategies for quality improvement (eg, identifies/adapts evidence-based practice guidelines/protocols/tools, skill training/reinforcement, and organizational incentives and supports) tailored to the needs of the organization and patient/client populations		X	X
		3.4C3	Leads the process of developing, monitoring, evaluating, and improving protocols, guidelines, and practice tools (eg, Academy, Dietitians of Canada); implements changes as appropriate			X
	3.4D	Participates in or develops process for clinical privileges required for expanded roles and enhanced activities (eg, implement physician driven protocols to initiate or modify orders for diet, nutrition supplements, dietary supplements, enteral and parenteral nutrition, nutrition-related laboratory tests and medications) consistent with state practice acts, regulations, organization policies, and medical staff bylaws, if applicable		X	X	X
	3.4E	Complies with established billing regulations and adheres to ethical billing practices		X	X	X
	3.4F	Communicates with the interdisciplinary team and referring party consistent with HIPAA rules for use and disclosure of customer's personal health information		X	X	X
<i>(continued on next page)</i>						

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
3.5	Utilizes support personnel appropriately in the delivery of customer-centered care in accordance with laws, regulations, and organization policies			X	X	X
	3.5A	Assigns activities, including direct care to patients/clients, consistent with the qualifications, experience, and competence of support personnel		X	X	X
	3.5B	Supervises support personnel		X	X	X
3.6	Designs and implements food delivery systems to meet the needs of customers			X	X	X
	3.6A	Collaborates on or designs food delivery systems to address nutrition status, health care needs and outcomes, and to satisfy the cultural preferences and desires of target populations (eg, physically active individuals, athletes, law enforcement officers, firefighters, professional emergency responders, military service members, health care patients/clients, employee groups)		X	X	X
		3.6A1	Participates in foodservice planning and delivery in various situations (eg, community sporting events, training tables, eating out or eating on the road while traveling for competition, military dining programs, humanitarian operations, wildfire emergency response plan)	X	X	X
	3.6B	Participates in, consults with others, or leads in developing menus to address health and nutritional needs of target population(s)		X	X	X
	3.6C	Participates in, consults, or leads interdisciplinary process for determining nutritional supplements, dietary supplements, enteral and parenteral nutrition formularies and delivery systems for target population(s)		X	X	X
		3.6C1	Participates as a member of an interdisciplinary or multidisciplinary team to provide guidance to local and regional active and athletic communities regarding sport/ dietary supplements and food products and pertinent regulatory issues	X	X	X
		3.6C2	Consults within an interdisciplinary or multidisciplinary team to provide guidance regarding sport/dietary supplements and food products that are in compliance and those that do not comply with anti-doping rules, regulations, and procedures of sports organizations and governing bodies (eg, NCAA, NFHS, IOC, USADA, WADA, professional sports) and organizational policies (eg, DoD service-specific drug-abuse policies)		X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
		3.6C3	Assumes a leadership role within an interdisciplinary or multidisciplinary team to interact with national and international sports governing bodies (eg, NCAA, NFHS, IOC, USADA, WADA, professional sports, occupational organizations) regarding anti-doping rules, regulations, and procedures (eg, facilitates communication between USADA and elite athletes and DoD/military services and service members, contributes to anti-doping policy review and evaluation)			X
3.7	Maintains records of services provided			X	X	X
	3.7A	Documents according to organization policy, standards, and system including electronic health records		X	X	X
		3.7A1	Collects data and documents outcomes relative to evidence-based guidelines and best practices	X	X	X
		3.7A2	Maintains documentation as mandated by applicable regulatory agencies, accrediting/credentialing bodies, local, state, and federal regulations and/or laws, organizational policies and consistent with the Nutrition Care Process, where appropriate	X	X	X
	3.7B	Implements data management systems to support data collection, maintenance, and utilization		X	X	X
	3.7C	Uses data to document outcomes of services (eg, staff productivity, cost/benefit, budget compliance, quality of services) and provide justification for maintenance or expansion of services		X	X	X
		3.7C1	Provides leadership in documenting and evaluating outcomes of using various intervention models and techniques (eg, stages of change, motivational interviewing, health belief model, social cognitive theory/social learning theory)		X	X
		3.7C2	Directs and manages systematic processes to identify, track, and update patient/client resources; documents patient/client use of sports nutrition services and health care services			X
	3.7D	Uses data to demonstrate compliance with accreditation standards, laws, and regulations		X	X	X
3.8	Advocates for provision of quality food and nutrition services as part of health promotion, exercise/task-specific physical performance, and public policy			X	X	X
	3.8A	Communicates with policy makers regarding the benefit/cost of quality food and nutrition services		X	X	X
	3.8B	Advocates in support of food and nutrition programs and services for populations with special needs		X	X	X
<i>(continued on next page)</i>						

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 3: Provision of Services			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			Competent	Proficient	Expert
<i>Each RDN:</i>					
	3.8C	Participates in legislative and policy-making activities that influence sports nutrition and dietetics services and practices	X	X	X
	3.8D	Provides leadership in advocacy activities/issues; authors scholarly work and delivers presentations on topic; networks with other advocacy-oriented parties and organizations			X

Examples of Outcomes for Standard 3: Provision of Services	
<ul style="list-style-type: none"> • Program/service design and systems reflect organization/business and customer needs and expectations • Customers participate in establishing goals and customer-focused action plans • Customers needs are met • Customers are satisfied with services and products • Evaluations reflect expected outcomes • Effective screening and referral services are established • Customers have access to food assistance • Customers have access to food and nutrition services • Support personnel are supervised when providing nutrition care to customers • Ethical billing practices are utilized 	

Standard 4: Application of Research
The registered dietitian nutritionist (RDN) in sports nutrition and dietetics applies, participates in, or generates research to enhance practice. Evidence-based practice incorporates the best available research/evidence in the delivery of nutrition and dietetics services.
Rationale:
Application, participation, and generation of research promote improved safety and quality of sports nutrition and dietetics practice and services.

Indicators for Standard 4: Application of Research			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			Competent	Proficient	Expert
<i>Each RDN:</i>					
4.1	Accesses and reviews best available research/evidence for application to practice		X	X	X
	4.1A	Reads major peer-reviewed publications in sports nutrition and dietetics and related areas; uses evidence-based guidelines, practice guidelines, and related resources	X	X	X
	4.1B	Demonstrates understanding of research design and methodology, data collection, interpretation of results, application, and use of the EAL	X	X	X
<i>(continued on next page)</i>					

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 4: Application of Research						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
	4.1C	Demonstrates understanding of current research, trends, and epidemiological surveys in sports nutrition and dietetics, sports nutrition and dietetics education, and related areas of exercise science		X	X	X
	4.1D	Interprets current research in sports nutrition and dietetics and related areas and applies to professional practice as appropriate			X	X
	4.1E	Identifies key health and performance questions and uses systematic methods to apply evidence-based guidelines to answer questions			X	X
	4.1F	Utilizes the EAL as a resource in writing or reviewing research papers			X	X
	4.1G	Demonstrates the experience and critical thinking skills required to review original research and evidence-based guidelines relevant to sports nutrition and dietetics practice				X
	4.1H	Functions as a primary or senior author or reviewer of research and organization position papers, and other scholarly work				X
4.2	Utilizes best available research/evidence as the foundation for evidence-based practice			X	X	X
	4.2A	Follows evidence-based practice guidelines (eg, EAL, Academy, Dietitians of Canada, ACSM, IOM, IOC) to provide quality care for physically active individuals		X	X	X
	4.2B	Follows evidence-based practice guidelines at the proficient level (eg, patient/clients with controlled diabetes, managed gastrointestinal conditions) to provide safe, effective, sports nutrition and dietetics care specific to activity and/or position, health status, age, sex, and skill/fitness level of the target population, and environment			X	X
	4.2C	Follows evidence-based practice guidelines at the expert level (eg, considering the complexity of care for competitive athletes, military service members, and others in physically demanding occupations who are balancing multiple situations and complications and/or medical conditions)				X
4.3	Integrates best available research/evidence with best practices, clinical and managerial expertise, and customer values			X	X	X
	4.3A	Identifies and utilizes evidence-based policies and procedures for sports nutrition and dietetics practice		X	X	X
	4.3B	Develops and implements evidence-based policies and procedures for sports nutrition and dietetics practice			X	X
	4.3C	Directs the integration of evidence-based policies and procedures into sports nutrition and dietetics practice				X
4.4	Contributes to the development of new knowledge and research in sports nutrition and dietetics			X	X	X
	4.4A	Participates in scholarly writing including but not limited to professional articles, chapters, books		X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 4: Application of Research			The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			Competent	Proficient	Expert
Each RDN:			Competent	Proficient	Expert
4.4B	Participates in practice-based research under the direction of a collaborative research team		X	X	X
4.4C	Participates in practice-based research networks (eg, Academy's Dietetics Practice Research Network)			X	X
4.4D	Initiates research related to sports nutrition and dietetics as the primary investigator or co-investigator with other members of the multidisciplinary research team				X
4.4E	Uses evidence-based guidelines, best practices, and clinical experience to generate new knowledge and develop guidelines, programs, and policies in sports nutrition and dietetics				X
4.5	Promotes research through alliances and collaboration with food and nutrition and other professionals and organizations		X	X	X
4.5A	Participates as a member/consultant to collaborative research teams that examine relationships among nutrition, exercise/physical performance, and health		X	X	X
4.5B	Builds relationships among researchers and decision makers to influence policy development and to translate evidence-based guidelines into sports nutrition and dietetics practice			X	X
4.5C	Serves as an investigator in collaborative research teams that examine relationships among nutrition, exercise, task-specific physical performance, and health			X	X
4.5D	Serves as a primary or senior investigator in collaborative research teams that examines relationships among nutrition, exercise, task-specific physical performance, and health				X

Examples of Outcomes for Standard 4: Application of Research
<ul style="list-style-type: none"> • Customers receive appropriate services based on the effective application of best available research/evidence • Best available research/evidence is used as the foundation of evidence-based practice • Evidence-based practice, best practices, clinical and managerial expertise, and customer values are integrated in the delivery of nutrition and dietetics services

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Standard 5: Communication and Application of Knowledge
 The registered dietitian nutritionist (RDN) in sports nutrition and dietetics effectively applies knowledge and expertise in communications.
Rationale:
 The RDN in sports nutrition and dietetics works with and through others to achieve common goals by effective sharing and application of their unique knowledge, skills, and expertise in food, nutrition, dietetics, and management services.

Indicators for Standard 5: Communication and Application of Knowledge						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
5.1	Communicates current, evidence-based knowledge related to nutrition, exercise, sports, and related areas of the profession of nutrition and dietetics			X	X	X
	5.1A	Translates evidence-based research to practical application in communications		X	X	X
	5.1B	Serves on planning committees/task forces to develop continuing education, activities and programs in nutrition and/or sports nutrition and dietetics for students and practitioners			X	X
	5.1C	Serves as a consultant to organizations (eg, business, industry, government, health, fitness, exercise, task-specific physical performance, sports nutrition, and dietetics) to address the needs of consumers, sports care and training professionals, and health providers for sports nutrition education			X	X
5.2	Communicates and applies best available research/evidence			X	X	X
	5.2A	Demonstrates critical thinking and problem-solving skills when communicating with others		X	X	X
	5.2B	Demonstrates critical thinking, reflection, and problem-solving skills (eg, uses evidence-based guidelines and selects best format for presentation) in all forms of communications		X	X	X
	5.2C	Uses clinical judgment and experience to integrate current research and evidence-based guidelines in communications with special populations (eg, disabled athletes and military service members) and in dealing with complex medical issues			X	X
5.3	Selects appropriate information and most effective method or format when communicating information and conducting nutrition education and counseling			X	X	X
	5.3A	Utilizes communication methods (eg, oral, print, one-on-one, group, visual, electronic, social media) targeted to the audience		X	X	X
	5.3B	Uses information technology to communicate, manage knowledge, and support decision making		X	X	X
		5.3B1	Uses electronic health records within the worksite as appropriate	X	X	X
		5.3B2	Uses the Nutrition Care Process, EAL, and the Academy's electronic Sports Nutrition Care Manual (SNCM) when making decisions about patient/client care	X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 5: Communication and Application of Knowledge				The "X" signifies the indicators for the level of practice		
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				Competent	Proficient	Expert
Each RDN:				Competent	Proficient	Expert
		5.3B3	Participates in updating the EAL and the Academy's SNCM in sports nutrition and dietetics and related areas		X	X
		5.3B4	Develops and updates sports nutrition and dietetics educational materials (eg, e-books, e-manuals, webinars, web-based tools)		X	X
		5.3B5	Leads in the advancement of technology/informatics (eg, informatics research, software program design) in sports nutrition and dietetics			X
5.4	Integrates knowledge of food and nutrition with knowledge of health, exercise/physical performance, social sciences, communication, and management in new and varied contexts			X	X	X
	5.4A	Integrates new scientific knowledge and collective knowledge from experience in sports nutrition and dietetics care into practice in new and varied contexts			X	X
	5.4B	Leads the integration of new scientific knowledge and collective knowledge from experience in sports nutrition and dietetics care into practice for the most complex and exceptional problems or in new research methodologies				X
5.5	Shares current, evidence-based knowledge, information with patients/clients, colleagues, organizations and the public			X	X	X
	5.5A	Guides patients/clients, students, and interns in the application of knowledge and skills		X	X	X
		5.5A1	Participates as a mentor or preceptor to dietetics students/interns	X	X	X
		5.5A2	Develops actions plans for clients that includes specific actions/changes and timelines	X	X	X
		5.5A3	Contributes to the education and professional development of dietitians, students, and sports and health care professionals through formal and informal teaching and mentoring		X	X
		5.5A4	Mentors RDNs interested in pursuing Board Certification as a Specialist in Sports Dietetics		X	X
		5.5A5	Develops mentor and preceptor programs in sports nutrition and dietetics		X	X
	5.5B	Assists individuals and groups to identify and secure appropriate and available resources and services		X	X	X
		5.5B1	Recommends current, credible sports nutrition educational resources (eg, "Find a SCAN RD," SCAN sports nutrition fact sheets and resources, USOC sports nutrition resources and fact sheets, USADA anti-doping education and resources, DoD Human Performance Resource Center) to individuals and groups	X	X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 5: Communication and Application of Knowledge						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators				The "X" signifies the indicators for the level of practice		
Each RDN:				Competent	Proficient	Expert
	5.5C	Utilizes professional writing and verbal skills in communications		X	X	X
	5.5C1	Uses professional writing and verbal skills to provide credible information and quotes for the general public (eg, local media, social media, interviews) in various situations (eg, health fairs, wellness programs, recreational and sports/athletic teams and sports events)		X	X	X
	5.5C2	Authors texts, scholarly work, and authoritative articles for consumers and for sports and health care professionals			X	X
	5.5C3	Serves as invited reviewer, author, and/or presenter at local, regional, national, and/or international meetings and to the media			X	X
	5.5C4	Serves as local, regional, national, and international sports nutrition and dietetics media spokesperson			X	X
	5.5C5	Serves as an opinion leader in sports nutrition and dietetics				X
	5.5C6	Directs and manages professional meetings, workshops, and conferences				X
5.6	Establishes credibility and contributes as the nutrition resource within the interdisciplinary health-care and management team and performance enhancement team promoting food and nutrition strategies that enhance health, exercise/physical performance, and quality of life outcomes of target populations			X	X	X
	5.6A	Communicates with the multidisciplinary or interdisciplinary team to promote the use of evidence-based guidelines that integrate food and nutrition with exercise/physical performance and health		X	X	X
	5.6B	Consults with physicians and other health and sports/performance professionals (eg, physical therapists, physiologists, psychologists, athletic trainers, coaches) on clinical and other health-related issues		X	X	X
	5.6C	Participates in multidisciplinary or interdisciplinary collaborations at a systems level (eg, incorporating sports nutrition and dietetics with programs aimed at optimizing exercise, task-specific physical performance)			X	X
	5.6D	Contributes nutrition-related expertise to national projects and professional organizations (eg, ACE, ACSM, NATA, NCAA, NFHS, IOC, DoD, USADA, WADA) as appropriate			X	X
	5.6E	Promotes the specialized knowledge and skills of the sports dietitian nutritionist and the Board Certified Specialist in Sports Dietetics to the multidisciplinary or interdisciplinary team			X	X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 5: Communication and Application of Knowledge					
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
5.7	Communicates performance improvement and research results through publications and presentations		X	X	X
	5.7A	Presents evidence-based sports nutrition research and information to community groups and colleagues	X	X	X
	5.7B	Presents evidence-based sports nutrition research and information at professional meetings and conferences (eg, local, regional, national, international)		X	X
	5.7C	Authors authoritative articles in sports nutrition and related areas		X	X
	5.7D	Serves in a leadership role for sports nutrition-related scholarly work (eg, reviewer, editor, editorial advisory board) and in program planning for conferences (eg, local, regional, national, international)		X	X
	5.7E	Translates research findings for incorporation into development of policies, procedures, and guidelines for sports nutrition and dietetics practice at national and international levels			X
	5.7F	Directs collation of research data (eg, position papers, practice papers, meta-analyses, review articles) into publications and presentations			X
5.8	Seeks opportunities to participate in and assume leadership roles in local, state, and national professional and community-based organizations		X	X	X
	5.8A	Functions as a sports nutrition and dietetics resource as an active member of local/state/national organizations	X	X	X
	5.8B	Serves on sports nutrition or related committees/task forces (local, regional) for sports/performance and health care professionals	X	X	X
	5.8C	Serves on sports nutrition or related committees/task forces (national, international) for sports/performance and health care professionals		X	X
	5.8D	Seeks and generates opportunities (local, regional, state, national, international levels) to integrate sports nutrition and dietetics practices and programs within larger systems (eg, USOC, ACSM, DoD, IOC, NCAA, USADA)		X	X
	5.8E	Manages and directs the integration of sports nutrition and dietetics principles within larger systems (eg, USOC, ACSM, DoD, IOC, NCAA, USADA)			X

Examples of Outcomes for Standard 5: Communication and Application of Knowledge

- Expertise in food, nutrition and management is demonstrated and shared
- Information technology is used to support practice
- Individuals and groups:
 - o Receive current and appropriate information and customer-centered service
 - o Demonstrate understanding of information received
 - o Know how to obtain additional guidance from the RDN
- Leadership is demonstrated through active professional and community involvement

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Standard 6: Utilization and Management of Resources
 The registered dietitian nutritionist (RDN) in sports nutrition and dietetics uses resources effectively and efficiently.
Rationale:
 The RDN in sports nutrition and dietetics demonstrates leadership through strategic management of time, finances, facilities, supplies, technology, and human resources.

Indicators for Standard 6: Utilization and Management of Resources					
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			The "X" signifies the indicators for the level of practice		
Each RDN:			Competent	Proficient	Expert
6.1	Uses a systematic approach to manage resources and improve operational outcomes		X	X	X
	6.1A	Implements administratively sound programs (eg, Nutrition Care Process protocols, food quality and food safety, sports/performance, and wellness counseling and education)	X	X	X
	6.1B	Collaborates with medical, sports, administrative, military, and foodservice staffs in achieving desired outcomes, securing resources, and services		X	X
	6.1C	Directs medical, sports, administrative, military, and foodservice staffs in achieving desired outcomes, securing resources, and services			X
6.2	Quantifies management of resources in the provision of nutrition and dietetics services with the use of standardized performance measures and benchmarking as applicable		X	X	X
	6.2A	Participates in operational planning of food and nutrition programs and services (eg, meals and menu planning, foodservice consultation, Nutrition Care Process, nutrition education, program planning, and development)	X	X	X
	6.2B	Manages effective delivery of nutrition programs and services (eg, business and marketing planning, program administration, Nutrition Care Process, delivery of education programs, materials development) related to exercise/physical performance programs		X	X
	6.2C	Directs or manages business and strategic planning for the design and delivery of nutrition services in exercise, task-specific physical performance-related programs in various settings (eg, clinic, cafeteria, corporate, military, research, artistic performance)			X
6.3	Evaluates safety, effectiveness, productivity, and value while planning and delivering services and products		X	X	X
	6.3A	Participates in evaluations of services and products (eg, surveys, data collection)	X	X	X
	6.3B	Manages the evaluation of services and products (eg, food quality, food safety, team meals, military dining, sport/dietary supplements, sports nutrition products)		X	X
	6.3C	Evaluates the following at the systems level: safety, effectiveness, and budgeting in planning and delivering nutrition products and services			X

(continued on next page)

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

Indicators for Standard 6: Utilization and Management of Resources						
Bold Font Indicators are Academy Core RDN Standards of Professional Performance Indicators			The "X" signifies the indicators for the level of practice			
Each RDN:			Competent	Proficient	Expert	
6.4	Participates in quality assurance and performance improvement and documents outcomes and best practices relative to resource management			X	X	X
	6.4A	Utilizes business skills relating to budget management, inventory tracking, ordering and distribution, negotiations for compensation and additional resources			X	X
	6.4B	Anticipates needs, identifies goals and objectives, and engages in long-term strategic planning			X	X
	6.4C	Anticipates outcomes and consequences of different approaches and makes necessary modifications to achieve desired outcomes			X	X
	6.4D	Directs the development and management of continuous quality improvement systems				X
6.5	Measures and tracks trends regarding patient/customer, employee, and stakeholder satisfaction in the delivery of products and services			X	X	X
	6.5A	Communicates the need for change based on collected data			X	X
	6.5B	Implements, monitors, and evaluates changes based on collected data				X

Examples of Outcomes for Standard 6: Utilization and Management of Resources	
<ul style="list-style-type: none"> • Documentation of resource use is consistent with operation • Data are used to promote, improve, and validate services • Desired outcomes are achieved and documented • Resources are effectively and efficiently managed 	

Definitions

Exercise refers to physical activity that contributes to health, fitness, and chronic disease prevention. *Physical Activity Guidelines Advisory Committee, 2008. PA Guidelines Advisory Committee Report, 2008. Washington, DC: US Department of Health and Human Services; 2008.*

Training and conditioning refers to physical activity that contributes to task-specific physical performance.

Task-specific physical performance encompasses physical activity related to sport, military training and military operations, and training and performance of law enforcement officers, firefighters, professional emergency responders, and others whose occupations require physical labor and/or maintenance of specified levels of physical conditioning or body weight and body composition.

Evidence-based guidelines are determined by scientific evidence. Practice guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care. Reference: QI 9: Clinical Practice Guidelines, Element A. *2009 Standards and Guidelines for the Accreditation of Health Plans. Washington, DC: NCQA.*

The **female athlete triad** refers to the inter-relationships among energy availability, menstrual function and bone mineral density, which may have clinical manifestations including eating disorders, functional hypothalamic amenorrhea and osteoporosis. Reference: Manore MM, Thompson TA, *Sport Nutrition for Health and Performance, 2nd ed.* Champaign IL: Human Kinetics; 2009.

A **multidisciplinary or interdisciplinary team** within sports/performance settings may include any or all of the following: physician, RDN, physical therapist, physiologist, psychologist, sport psychologist, athletic trainer, strength and conditioning coach, massage therapist, other coaches.

(continued on next page)

Figure 2. *(continued)* Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

A **multidisciplinary or interdisciplinary research team** within athletic performance/sports settings may include any or all of the following: principal investigator, co-principal investigators, project consultants, lab technicians, statisticians.

Acronyms:

^aHIPAA=Health Insurance Portability and Accountability Act of 1996 (<http://www.hhs.gov/ocr/hipaa>).

^bACSM=American College of Sport Medicine (<http://www.acsm.org>).

^cACE=American Council on Exercise (<http://www.acefitness.org>).

^dNSCA=National Strength and Conditioning Association (<http://www.nscs-lift.org>).

^eMETs=amount of oxygen consumed while sitting at rest and is equal to 3.5 mL O₂ per kg body weight×min.

^fMET-minutes=time engaged in an activity with consideration to the number of METs.

^gIOM=Institute of Medicine (www.iom.edu).

^hIHI=Institute for Healthcare Improvement (www.ihl.org).

ⁱNCQA=National Center for Quality Assurance (www.ncqa.org).

^jNQF=National Quality Forum (<http://www.qualityforum.org>).

^kISMP=The Institute for Safe Medication Practices (www.ismp.org).

^lUSP=US Pharmacopeial Convention (www.usp.org).

^mNCAA=National Collegiate Athletic Association (www.ncaa.org).

ⁿNFHS=National Federation of High School Associations (www.nfhs.org).

^oIOC=International Olympic Committee (www.olympic.org).

^pUSADA=US Anti-Doping Agency (www.usantidoping.org).

^qWADA=World Anti-Doping Agency (www.wada-ama.org).

^rDoD=US Department of Defense (<http://www.defense.gov>).

^sEAL=Evidence Analysis Library (www.eatright.org).

^tNATA=National Athletic Trainers' Association (<http://www.nata.org>).

^uNCCA=National Commission for Certifying Agencies (<http://www.credentialingexcellence.org/ncca>).

^vISAK=International Society for the Advancement of Kinanthropometry (<http://www.isakonline.com>).

^wUSOC=US Olympic Committee (<http://www.teamusa.org>).

Figure 2. (continued) Standards of Professional Performance for Registered Dietitian Nutritionists (RDNs) in Sports Nutrition and Dietetics. Note: The term customer is used in this evaluation resource as a universal term. Customer could also mean client/patient, client/patient/customer, participant, consumer, or any individual, group, or organization the registered dietitian nutritionist provides service.

How to Use the <i>Standards of Practice (SOP)</i> and <i>Standards of Professional Performance (SOPP)</i> for Registered Dietitian Nutritionists (RDNs) (<i>Competent, Proficient, Expert</i>) in Sports Nutrition and Dietetics as part of the <i>Professional Development Portfolio Process</i>^a	
1. Reflect	Assess your current level of practice and whether your goals are to expand your practice or maintain your current level of practice. Review the SOP and SOPP for RDNs in Sports Nutrition and Dietetics document to determine what you want your future practice to be, and assess your strengths and areas for improvement. These documents can help you set short- and long-term professional goals.
2. Conduct learning needs assessment	Once you have identified your future practice goals, you can review the SOP and SOPP for RDNs in Sports Nutrition and Dietetics document to assess your current knowledge, skills, behaviors, and define what continuing professional education is required to achieve the desired level of practice.
3. Develop learning plan	Based on your review of the SOP and SOPP for RDNs in Sports Nutrition and Dietetics, you can develop a plan to address your learning needs as they relate to your desired level of practice.
4. Implement learning plan	As you implement your learning plan, keep reviewing the SOP and SOPP for RDNs in Sports Nutrition and Dietetics document to re-assess knowledge, skills, and behaviors and your desired level of practice.
5. Evaluate learning plan process	Once you achieve your goals and reach or maintain your desired level of practice, it is important to continue to review the SOP and SOPP for RDNs in Sports Nutrition and Dietetics document to re-assess knowledge, skills, and behaviors and your desired level of practice.
^a The Commission on Dietetic Registration <i>Professional Development Portfolio</i> process is divided into five interdependent steps that build sequentially upon the previous step during each 5-year recertification cycle and succeeding cycles.	

Figure 5. Application of the Commission on Dietetic Registration *Professional Development Portfolio* Process.