Weight Management Matters

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CPEU ARTICLE

The Addition of Health and Wellness Coaching Training to the RDN Toolbox

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Nutrition and dietetics practice is the synthesis and application of nutrition and dietetics education using the nutrition care process model to help patients/clients/customers or groups/populations set up and achieve person-centered health and nutrition-related goals.[1] Registered Dietitian Nutritionists (RDNs) provide medical nutrition therapy (MNT) and are trained as experts in food and nutrition. Knowledge of the nutrients in foods, interactions and functions of nutrients in the human body, and impact of nutrition on health is the expertise of the RDN. With expertise in nutrition counseling and behavior change theories, including motivational interviewing (MI), RDNs help patients bridge the gap between knowledge and behavior.

Nutrition professionals have expanding possibilities of work environments and career choices including management, food industry, hospitality, worksite wellness, private practice, sports nutrition, clinical, public relations, research, education, school nutrition, and the list goes on. Regardless of work environment and career direction, effective communication is an integral part of day-to-day work. Additionally, many RDNs provide nutrition education and nutrition counseling for prevention and treatment of chronic disease. The addition of health and wellness coaching (HWC) training to the toolbox of a RDN can be beneficial to those who want to update or enhance knowledge of behavior change theories, skills, and processes to amplify behavior change expertise.

Nutrition education involves learning experiences to enhance nutrition-related behaviors conducive to health and well-being. It is often a component of nutrition counseling and the Nutrition Care Process (NCP). Nutrition counseling is a supportive process, characterized by a collaborative counselor-client relationship. Counseling integrates information obtained from nutrition assessment and diagnostic processes to set food, nutrition and physical activity priorities, goals, and action plans empowering individuals and groups to take responsibility for self-care, and to treat an existing disease and/or

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condition and promote health.[2] Nutrition counseling based on cognitive behavioral therapy (CBT), health belief model, Social Cognitive Theory (SCT), and the transtheoretical model (TTM) proves valuable in providing a framework for evidence-based individual and interpersonal nutrition interventions.[2]

Similarities and differences between RDN and health and wellness coach practices

Similar to RDNs, health and wellness coaches (coaches) partner with clients seeking to enhance their well-being through self-directed, lasting changes. Coaches spend additional time to fully explore client motivation aligned with their values, such as, what a client is already doing positively and what additional steps will move toward desired lasting changes. Like RDNs, coaches believe in the client's ability to change, honoring clients as experts on their own life, while ensuring interactions are respectful and non-judgmental.[3,4,5,6]

Coaches view clients and HWC as multi-dimensional and holistic, considering all aspects of physical, psychological, spiritual, and social well-being. While the RDN is a nutrition content expert who assesses, diagnoses, educates, counsels, and monitors client progress, the role of the coach is navigating behavior change. Both acknowledge client successes without taking on the role of cheerleader. The HWC process focuses on client emotions and values accompanying positive actions, and encouraging more of these. An example is "You met 80% of your goals. I hear the pride and confidence in your voice, and you stated you gained energy from spending active time with your family." This allows the client space to respond and acknowledge the connection, state continuation plans, and move toward intrinsic motivation.

An aim of HWC and MNT is for clients to be well-informed of their health status and well-being. The process begins with identifying client knowledge. Like RDNs, the coach helps the client find and use health and wellness resources, as well as evaluate and integrate sources of health information. Sources may include referral from a health care professional, health and wellness assessments, health risk assessments, and basic biometrics. When the coach is also a RDN, they are positioned to also be a key resource as nutrition experts.

Behavior change theories underpinning health and wellness coaching

Coaches extensively use positive psychology, Appreciative Inquiry (AI), MI, SCT, Acceptance and Commitment Therapy (ACT), mindfulness, therapeutic presence, TTM and other theories and processes seamlessly throughout the client sessions. RDNs use many of these theories during nutrition counseling.

Positive psychology and AI are foundations of HWC whereby the focus is on a strengths-based and positive approach. The coach guides the client in creating a vision of possibilities to build a life of meaning and purpose, moving from surviving to flourishing.[7] The process aim is for the client to cultivate what is best within themselves, recognizing the best of what is.[8] They can develop emotional agility and resilience throughout the coaching process with these foundations.[9] The vision is energizing and compelling, considering the whole person.

MI is a directive, client-centered counseling style for eliciting behavior change by helping clients explore and resolve ambivalence.[10] Most RDNs are familiar with and use MI in their counseling practice. The process helps diffuse resistance and guide clients to argue for change instead of staying the same. Utilizing MI and goal setting, clients can improve self-esteem and quality of life, essential for promoting behavior change.[11]

The unique feature of SCT is the emphasis on social influence and external and internal social reinforcement of behaviors. SCT is useful to help understand and consider the unique way in which individuals attain and maintain behavior, while considering the social environment in which individuals behave. A person's experience influences reinforcements and expectations, shaping whether a person engages in a behavior and the reasons why they engage. This process aids maintenance of behavior versus just achieving a specific behavioral goal.

ACT promotes flexibility and psychological agility through interrelated processes. Clients learn to stop avoiding, denying, and struggling with their inner emotions. Clients accept that these feelings are responses to situations and should not prevent them from moving forward. Instead of trying to modify thoughts and emotions or change thoughts, clients acknowledge and accept thoughts and feelings. They learn to diffuse and tolerate the urges while engaging in a goal directed behavior aligned with their values.[12] ACT allows clients to be deliberate in their attention to their values, cues influencing mindless actions, and creating conscious awareness.[9,12] ACT interventions have been "successfully used to enhance Health Related Quality of Life (HRQoL) and promote positive behaviors

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Continuing Professional Education Section

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RDNs are trained as experts in food and nutrition and by using the nutrition care process model help patients/clients to identify and achieve nutrition related goals. This article explores health and wellness coaching, the behavioral theories underpinning the coaching process, similarities and differences to RDN training, as well as emerging evidence on the benefits of health coaching on health outcomes. Developing expertise in nutrition counseling and behavior change theories help RDNs bridge the gap for patients/clients between knowledge and behavior. Health and wellness coaching training is one approach for those looking to update or enhance their behavior change skills.

for various health conditions including chronic pain, diabetes, epilepsy, smoking, and obesity."[13] The process has demonstrated effectiveness for increasing physical activity, increasing vegetable consumption, and decreasing fat and saturated fat intake.[12,13]

Mindfulness is to live in the present, not dwelling on the past or anticipating the future. To be mindful is to observe and label thoughts, feelings, and sensations in the body objectively. Mindfulness is a tool to avoid self-criticism and judgment while identifying and managing difficult emotions.[14,15] Presence and mindfulness are integral in the coaching process. Geller and Greenberg discuss the importance of therapeutic presence as a foundation that supports deep listening and understanding of the client. It is having one's whole self in the client encounter by being completely in the moment on many levels - physically, emotionally, cognitively, and spiritually.[16] Presence is learnable and when used in HWC includes pre-session preparation and engaging in presence during client sessions.

TTM is a cornerstone of HWC. Table 1 briefly reviews the TTM. At each stage, different strategies are effective at moving the client to the next stage, ideally to maintenance of a specific behavior.[17] At each stage, specific strategies work best for reducing resistance, easing progress, and preventing relapse. Creating action-oriented goals when a client is not in the action stage is a disservice. It sets up non-compliance and feelings of failure. While progression through the stages can occur linearly, a nonlinear progression is common. Often, individuals recycle through the stages or regress to earlier stages. Many people spend years in and out of the preparation stage before moving into the action and maintenance stages. Using tools like decisional balance and other theories help move a client through the stages toward self-efficacy. Guidance based on the TTM results in increased participation in the change process. It appeals to the whole population rather than the minority who are ready to act.[18,19] Whereby behavior change was traditionally seen as an event, such as quitting smoking, drinking, or overeating, TTM recognizes change as a process. It unfolds over time, progressing through a series of stages.

Table 1

Stages of Change	Pre-contemplation	Contemplation	Preparation	Action	Maintenance	Termination
Description	**People do not intend to take action in the foreseeable future.**	**People recognize that their behavior may be problematic and intend to take action.**	**People are ready to take action.**	**People have recently changed their behavior and intend to keep moving forward with that behavior change.**	**People have sustained their behavior and intend to continue this behavior going forward.**	**People have sustained their behavior change for a while.**
Length of time	**> 6 months**	**witin next 6 months**	**within next 30 days**	**within the last 6 months**	**> 6 months**	**Rarely reached**
Action words	**I can't/ I won't**	**I might**	**I will**	**I am**	**I have been**	**I will forever**
Belief/ strategy	**People under-estimate the pros of changing behavior and place too much emphasis on the cons of changing behavior.**	**People have a more thoughtful and practical consideration of the pros and cons of changing the behavior that takes place, with equal emphasis placed on both. May still be ambivalent.**	**People start to take small steps toward the behavior change and believe changing their behavior can lead to a healthier life.**	**People are modifying their problem behavior or acquiring new healthy behavior.**	**People work to prevent relapse to earlier stages.**	**No desire to return to unhealthy behavior. Belief that relapse will not happen.**

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Prochaska and DiClemente describe the process of change through eight interventions[18]:

1. **Consciousness raising:** Increasing information about self and problem.
2. **Self-reevaluation:** Assessing how one feels and thinks about oneself with respect to a problem.
3. **Emotional arousal (or dramatic relief):** Experiencing and expressing feelings about one's problems and solutions.
4. **Social liberation:** Increasing alternatives for non-problem behaviors available in society.
5. **Self-liberation:** Choosing commitment enhancing techniques.
6. **Counterconditioning:** Substituting alternatives for anxiety related behaviors.
7. **Stimulus control:** Restructuring environment to avoid or counter problem stimuli.
8. **Contingency management:** Self-rewarding or being rewarded by others for making changes.

The health and wellness coaching process

HWC is a client-driven process based on trust with emphasis on patient's self-discovery and values. Successful HWC takes place when coaches apply defined behavioral knowledge and skills so that clients mobilize internal strengths and external resources for sustainable change.[20] Some of the strategies utilized by the HWC are also utilized by the RDN.

The coaching process begins with co-creating a wellness vision, followed by a vision map or blueprint including SMART (specific, measurable, attainable or actionable, realistic, time bound) goals and contingency plans. These are revisited for relevance during ongoing sessions. Sessions begin with an energy/mood check-in and client selected focus for the meeting, and end with take-aways and discoveries. The coaching process cultivates self-efficacy and intrinsic motivation as the client better understands their needs, gains self-awareness and insight that supports behavior change, learns from setbacks, develops new resources, and finds new ways to navigate their environment.[20] Honsová and Jarošová concluded that "the key benefits of coaching might not lie only in what comes after coaching (e.g., leadership style change, stress reduction, or enhanced self-efficacy) but also in the experience lying in the coaching process itself." [21]

The HWC process has an initial time investment in clarifying the coaching agreement including coach and client roles and expectations, developing trust, encouraging self-discovery, exploring a wider range of well-being possibilities, and objective measures of completion of the HWC process. A clear and articulated intention, and sometimes surprising motivation, can often come up in this first discussion. Clients may travel many paths curving and winding through challenges and learning opportunities, always moving towards their vision. Collaborating, the coach and client design strategies to close the gap of where the client is and where they want to be. The coach and client partner throughout the evolving process of change to reach the client's desired vision. Outcomes, such as changes in metabolic markers, happen simultaneously to the client's intention of increased energy, better stamina, and regularly eating healthy. Along the journey, the client discovers their "fad" diet or lifestyle is not aligned with their vision. The self-discovery is more powerful than if this information was given to the client. In the final coaching session, the coach's focus is

on recognition of progress, learning, and closure. The client articulates successes reviewing what was learned. The coach helps the client create a plan for moving forward emphasizing support and resources.

Training and board certification

Since 2016, the National Board for Health & Wellness Coaching (NBHWC) collaborated with the National Board of Medical Examiners (NBME) to provide a national certification examination. The National Board-Certified Health & Wellness Coach (NBC-HWC) credential represents training, education, and assessment standards, allowing the profession to advance in all aspects of healthcare and wellness.[4] Qualifications for the NBC-HWC candidate include:

- having an associate's degree or higher or 4,000 hours of acceptable work experience;
- completing an approved coach training program with at least 75 contact hours (many approved training programs require the candidate have a degree in a health-related field);
- passing the HWC certifying exam (based on validated job task analysis focusing on specific behavioral theories and coaching process); and
- documenting at least 50 HWC sessions.

For NBC-HWC re-certification, individuals must complete 36 hours of continuing education every 3 years.[22] The NBHWC also establishes skills and knowledge requirements for the training program content and faculty. Faculty requirements include:

- completed specific coach training;
- earned the NBC-HWC;
- completed at least 200 hours of coaching.

Twenty-five percent of the required instructional hours must be taught by faculty with at least a master's degree in a health and wellness-related field, or a bachelor's degree plus a license in a nationally recognized health and wellness-related field. Like RDNs, NBC-HWCc have a distinct Scope of Practice (SOP) and code of ethics as guiding principles for practice.[23,24,25,26] Included within the SOP and code of ethics, NBC-HWCs do NOT:

- diagnose, treat, or prescribe,
- interpret medical results,
- write food plans,
- recommend supplements (unless they have a nationally recognized registration or licensure in that area).[23]

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Knowledge of when, why, and how clinically, legally, and ethically, to refer to a higher level of care when client needs exceed expertise, such as a referral to a RDN, exercise physiologist, physician, psychologist, or other qualified health professional, is essential for both coaches and RDNs.

Research

Wolever et al conducted a systematic review and meta-analysis on HWC to allow for compilation of data on specific features of the coaching interventions and background and training of coaches. They concluded "despite disparities in how HWC have been operationalized previously, this systematic review observes an emerging consensus in what is referred to as HWC; namely, a patient-centered process that is based upon behavior change theory and is delivered by health professionals with diverse backgrounds."[20]

Sforzo et al in two literature reviews and meta-analysis found a trend in increased evidence-based research on HWC. A clear definition of HWC emerged from the latest review for inclusion/exclusion criteria to use for creating a collection, or compendium, of relevant HWC articles. HWC intervention, as an adjunct to traditional treatment, was found beneficial for patients with cancer, diabetes, and heart disease. Improvements in primary outcomes, such as HbA1c, risk factors, or psychological profile were seen in these clinical populations. "In addition, compendium reviewers found hypertension, obesity, and cholesterol as possibly benefitting from coaching involvement making HWC a potentially valuable primary prevention intervention."[5,6]

Sherifali et al conducted a review of literature to synthesize the evidence of health coaching for individuals with diabetes to determine the effects of coaching on diabetes control, specifically on glycated hemoglobin (HbA1c) levels. A total of 8 trials met the selection criteria and included 724 adult participants: 353 were randomized to a diabetes health coaching intervention, and 371 were randomized to usual care. The researchers concluded that "diabetes health coaching has an emerging role in healthcare that facilitates self-care, behaviour change and offers frequent follow up and support. This review finds that health coaching for those with diabetes is an effective intervention for improving glycemic control, which may be of greater benefit when offered in addition to existing diabetes care."[27] Participants who completed a 12-week HWC program, with the coach being a member of the primary healthcare team, reported positive experiences with the program. These findings set the groundwork for integrating HWC into the primary care setting.[28]

Mettler et al showed the effectiveness of HWC for weight management and improving readiness for behavior change through participation in a 3-month coaching program. Weight management was the top priority of participants at the onset and they achieved success in reducing their body mass index (BMI).[29]

Muñoz et al conducted a meta-analysis to review the scientific literature on how HWC can help in weight loss and improving a patient's state of health. The conclusion from the 13 articles meeting the inclusion criteria is "coaching is an efficient, cost-effective method for combining formal education and treatment of health in the weight-loss process."[30]

Sherman et al showed a calculated cost effectiveness of $288.54 per participant for a one-year HWC intervention in a primary care setting. The HWC, using the process and underpinning theories previously discussed, was associated with a mean weight loss of 7.24% of initial weight at 12 months and 6.77% initial weight after 24 months.[31]

Dejonghe et al reported on 14 randomized control trials of health coaching published through 2015, of the impact on HbA1c, depression, BMI, weight loss, waist circumference, lipid profile, self-efficacy, general vitality, fruit intake, sedentary at work, and physical activity, with six studies finding long term health benefits of coaching. Identified keys for effectiveness include goal setting, MI, collaborative process, and possibly length of the intervention. The increase in the number of studies over the years underlines the relevance of health coaching. However, "despite the high number of studies (pulled in review), a significant lack of randomized control trials (RCT) was identified", therefore "no specific recommendations for health coaching in rehabilitation and prevention could be made."[32]

There is clearly a need for more RCTs to demonstrate the effectiveness of HWC on chronic disease indicators.[30,32] With a clear definition for HWC, robust research can more accurately assess the effectiveness of the approach in bringing about changes in health behaviors, health outcomes, and associated costs.[20]

Reimbursement

In January 2020, a new set of Category III CPT codes was implemented for Health & Well-Being Coaching. The NBHWC and the U.S. Department of Veterans Affairs (VA) applied for the creation of these new tracking codes, utilizing the NBHWC standards. The VA will track the use of the coaching codes to evaluate effectiveness of coaching as part of the VA's whole health system of care.[33] These codes are adopted as temporary 5-year codes for "emerging technology, services, and procedures" to allow for tracking of use of services. You can learn more about these codes in the November 2019 MNT Provider newsletter or on the Academy's web pages and the NBHWC web pages.[34,35] The codes are not recognized by Medicare and not eligible for reimbursement under Medicare. Since there is no national Medicare payment rate, a private payer can set whatever payment rate they choose. Health & Well-Being CPT Codes can only be billed by non-physician healthcare professionals certified as NBC-HWC or the National Commission for Health Education Credentialing (CHES credential). Even if you qualify to use the CPT codes, and a payer elects to recognize and reimburse for HWC services, there is no guarantee of payment. Payment is dependent on other factors, including, but not limited to patient benefits and coverage and inclusion of the codes in your provider agreement.

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It is possible to provide MNT and coaching for the same client, even on the same day depending on the plan. A possible scenario is seeing a client for weight management. You may have many MNT sessions with the client focusing on nutrition, physical activity, goal setting, and evaluation. These may be followed by a coaching session on how to incorporate the MNT plan, moving extrinsic motivation toward intrinsic, problem solving the challenges of the office candy bowl or family saboteur, or making time for meal preparation. Guiding patients on how to incorporate their MNT plan involves aspects of lifestyle change outside of MNT, such as time management or prioritization or tapping into strengths clients have. The CPT manual notes that if you are providing MNT services, you use MNT codes. Although you might use some of the same techniques coaches use (e.g., motivational interviewing), MNT and HWC are distinctly different.

What benefit is the addition of HWC to your toolbox?

Depending on your career goals, HWC training and/or certification may be for you. What benefits are there, if any, to enhancing your nutrition expertise with knowledge and skills of HWC? Ask yourself:

- "What is my current SOP?"[26]
- "What do I need to do to meet my career aspirations?"
- "Do I want to enhance my knowledge and skills working with clients on behavior change?"
- "Do I want enhanced communication skills?"

If you have determined adding HWC knowledge and skills will enhance your nutrition practice, you can assess if training or NBHWC certification makes sense. If looking to enhance your practice, a wide variety of training is available from certificate of training, to workshops and webinars, or a NBHWC recognized training program.[22] If you want to provide HWC services independent of MNT, then NBHWC certification is the choice for you. The Academy has case studies highlighting this analysis process for both the RDN and nutrition and dietetics technician, registered who are considering adding coaching to their skill set and scope of practice.[36] While many RDNs may not desire HWC training, for those looking to update or enhance their behavioral change skills, HWC training is one pathway.

CPEU Process

Log in to www.wmdpg.org and then link to the CPEU quiz here.

Take the quiz. Quiz results are reviewed at the end of each month. If you score 80% or higher, your CPEU documentation will be emailed to you.

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Transgender and Gender Nonconforming Youth: Considerations for Registered Dietitian Nutritionists

By: Whitney Linsenmeyer, PhD, RD, LD
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An estimated 0.7% of youth ages 13-17, or 150,000 individuals, identify as transgender in the United States.[1] Gender-affirming medical care for transgender and gender nonconforming (TGNC) youth is a rapidly expanding field with both clinical and psychosocial nutrition-related considerations. Though minimal research exists on effective medical nutrition therapy for this population, Registered Dietitian Nutritionists (RDNs) can play a critical role in the advancement of clinical practice and research.[2]

The TGNC youth population is faced with a number of health disparities that RDNs should be attuned to, including an increased risk for mental health conditions such as attention deficit disorders, major depressive disorder, generalized anxiety disorder, suicidality, post-traumatic stress disorder, and substance dependence.[3,4] Weight-related disparities, eating disorders, and weight-based victimization have also disproportionately impacted TGNC youth.[5-7] Existing estimates of eating disorder diagnoses among TGNC youth range from 2-18%.[5]

RDNs can play a critical role in the care of a transgender patient by applying a gender-affirming approach to the nutrition care process. While nascent evidence exists to inform what this may look like for the dietetics profession, at present more questions than answers persist: How should growth charts be used for a transgender patient? How should protein or energy needs be calculated given the gender-specific nature of many predictive energy equations? What weight management strategies are most appropriate given the interplay between body size, shape and gender expression? In this article, we introduce key terms, cover broad nutrition-related considerations when working with a transgender patient, and conclude with recommendations and additional resources on cultivating a clinical environment that is safe and inclusive.

Key Terms

Familiarity with key terms is oftentimes the first step in working with a transgender patient. The most appropriate vocabulary does evolve, and therefore RDNs are encouraged to continually familiarize themselves with the most current terms published by leading transgender health and advocacy organizations. The following key terms were published by the American Psychological Association in 2018.[7]

Transgender: An umbrella term encompassing those whose gender identities or gender roles differ from those typically associated with the sex they were assigned at birth.

Pediatric Weight Management

Patricia Novak, MPH, RD, CLE, LD is the Pediatric Section Editor

Transgender youth are an exceptionally vulnerable population; with greater risk for lifelong physical and mental health problems. Our success in providing nutrition intervention is dependent not only on us seeking out additional knowledge of the social, emotional and biological challenges experienced by transgender youth but also how we can effectively and respectfully collaborate with our clients to achieve positive health outcomes. This article provides an overview of not only nutrition concerns, but also strategies and resources for successful treatment.

Cisgender: Used to describe an individual whose gender identity and gender expression align with the sex assigned at birth.

Transition: The process of shifting toward a gender role different from that assigned at birth, which can include social transition, such as new names, pronouns and clothing, and medical transition, such as hormone therapy or surgery.

Gender binary: The classification of gender into two discrete categories of male and female.

Gender dysphoria: Discomfort or distress related to an incongruence between an individual's gender identity and the gender assigned at birth.

Gender expression: Clothing, physical appearance and other external presentations and behaviors that express aspects of gender identity or role.

Gender identity: An internal sense of being male, female or something else, which may or may not correspond to an individual's sex assigned at birth or sex characteristics.

Gender nonconforming: Describes an individual whose gender identity or gender expression differs from the gender norms associated with the sex they were assigned at birth.

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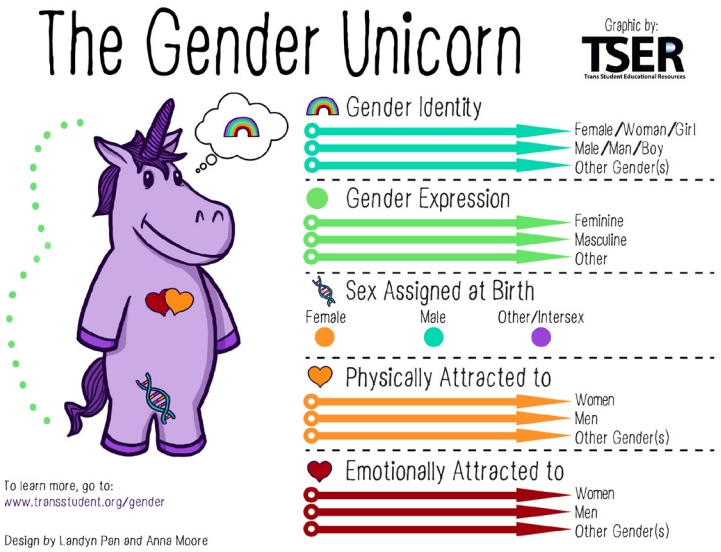
Genderqueer: Describes an individual whose gender identity doesn't align with a binary understanding of gender, including those who think of themselves as both male and female, neither, moving between genders, a third gender or outside of gender altogether.

Trans-affirmative: Being aware of, respectful and supportive of the needs of transgender and gender-nonconforming individuals.



Standards of Care for TGNC Populations

Standards of care for RDNs when working with TGNC populations do not yet exist.However, two leading organizations have published guidelines that RDNs can draw relevant guidance from. The Center of Excellence for Transgender Health through the University of California San Francisco has published its Transgender Care and Treatment Guidelines, with a subsection specific to Health Considerations for Gender Non-conforming Children and Transgender Adolescents.[9] These include guidelines specific to peri-pubertal or early pubertal stages of development (Tanner 2-3) and those more advanced in pubertal development (Tanner 4-5).

In addition, the World Professional Association for Transgender Health has published its seventh version of the Standards of Care for the Health of Transsexual, Transgender, and Gender Nonconforming People with a chapter specific to Assessment and Treatment of Children and Adolescents with Gender Dysphoria.[10] Both guidelines provide information relevant to RDNs, such as expected changes in lipid levels with hormone therapy, changes in body weight and composition, and risk level for chronic conditions such as cardiovascular disease, diabetes mellitus, and osteoporosis.

Nutrition Considerations for TGNC Youth

Nutrition considerations for TGNC youth include broader issues of eating disorders, body weight, and food insecurity, as well as metabolic effects of hormone therapy. Based on the findings of a recent scoping review, although nascent observational research exists in these areas, more research is needed to inform a gender-affirming approach to the nutrition care process.[11]

Eating Disorders

Perhaps the greatest body of research at the intersection of nutrition and transgender health centers on eating disorders. Existing estimates of eating disorder diagnoses among TGNC youth range from 2-18%.[5] Among high school students in Massachusetts, transgender adolescents were over twice as likely to report fasting for longer than 24 hours, over eight times more likely to report use of diet pills, and over seven times more likely to report laxative use compared to cisgender males.[12] In an online sample of Canadian youth, 42% of transgender youth reported binge eating at least once in the past year, 48% reported fasting, 7% used diet pills, 5% used laxatives, and 18% vomited to lose weight.[13]

Given these estimates, existing research has consistently underpinned the need to screen TGNC youth for disordered eating patterns.[5] Though no screeners have been specifically validated for use among TGNC populations, existing studies have used measures including the Eating Disorder Examination Questionnaire (EDE-Q), the Sick, Control, One Stone, Fat, Food (SCOFF), the Adolescent Binge Eating Disorder Questionnaire (ADO-BED), and the Nine-Item Avoidant/Restrictive Food Intake Disorder Screen (NIAS).[14,15]

TGNC youth may exhibit disordered eating behaviors for a variety of reasons, such as the desire to suppress puberty, to attain a body size or shape consistent with one's gender identity, or as a coping mechanism for gender-related stigma and distress.[4-6,12-14] Given these complexities, TGNC patients that screen positive on a disordered eating measure should be referred to an interdisciplinary team trained in gender-affirming care.[16]

Body Weight Disparities

Relatedly, RDNs should be attuned to reported disparities in body weight among TGNC youth. Among high school students in Minnesota, TGNC students were more likely to be overweight or obese compared with cisgender students, especially those assigned female at birth.TGNC students also experienced higher rates of harassment and bullying due to weight or size.[17]Among college students in Minnesota, transgender participants were more likely to be either underweight or obese compared to non-transgender participants.[18] Assessment of body weight is further complicated by the gender-specific nature of growth charts for boys and girls. Though minimal data exists to inform best practices in body weight assessment of TGNC youth, we discuss considerations for RDNs in the section *Nutrition Assessment of TGNC Youth*.

Food Insecurity

Food insecurity is of heightened concern among TGNC youth given the intersection with family rejection, homelessness and poverty.[19] Among an outpatient clinical sample of TGNC youth at a Midwestern transgender center, 20% of TGNC youth and young adults screened positive for food insecurity.[15] Among TGNC college students at a public Midwestern university, 54% of participants ate less, 42% were hungry but didn't eat, and 46% reduced meal size or skipped meals within the past 12 months due to lack of funds to purchase food.[20]

RDNs working with TGNC adolescents may consider using a simple screener such as the two-question Hunger Vital Sign to identify those at risk for food insecurity.[21] Health care teams should then be prepared to refer patients to food assistance resources that have been vetted as safe and that do not discriminate against individuals based on gender identity.

(Continued on page 10)

Effects of Gender-Affirming Hormone Therapy

TGNC youth may pursue medical interventions to support a physical transition towards a masculine or feminine gender expression. These may include hormone blockers to suppress development of secondary pubertal characteristics, as well as gender-affirming hormones to assist in the development of masculine or feminine features. While adults may undergo surgical interventions, these are typically not recommended for TGNC youth. It is notable that not all patients who identify as transgender or non-binary will undergo medical interventions.[9,10] However, for TGNC youth who opt for gender-affirming hormone therapy, emerging evidence suggests relevant considerations for RDNs related to bone and cardiovascular health.

Bone Health

Adolescence is typified by an increase in sex steroids allowing for the accrual of peak bone mass density. Existing research has demonstrated that TGNC youth may be at risk for suboptimal bone mineral density. In a prospective study of transgender youth in the Netherlands, bone mineral density scores decreased during pubertal suppression therapy and increased during gender-affirming hormone therapy; while transgender boys had normal z-scores at baseline at the end of the study, transgender females had relatively low z-scores at both baseline and after three years of hormone therapy.[22] Among early pubertal transgender youth at four different academic pediatric centers in the United States, bone mineral density was lower than reference standards, which was appeared to be partially attributed to poor calcium intake and physical activity levels.[23] Thus, RDNs working with TGNC may include a bone health screen that evaluates risk factors for suboptimal bone mineral density such as low calcium intake, low vitamin D intake, and low levels of physical activity.[9]

Cardiovascular Health

Transgender adults are at an increased risk for cardiovascular morbidity and events primarily due to the effects of gender-affirming hormone therapy on metabolic parameters. Specifically, testosterone therapy has been associated with increased systolic blood pressure, triglyceride levels, low-density lipoprotein cholesterol (LDL-C), and decreased high-density lipoprotein cholesterol (HDL-C), while estrogen administration has been shown to increase triglyceride levels.[9,10] Less is known about the cardiometabolic effects of pubertal suppression therapy and gender-affirming hormone therapy in TGNC youth. However, current guidelines recommend routine blood pressure screening for transgender males every three to six.[24,25]

Nutrition Assessment of TGNC Youth

Nutrition assessment of TGNC youth welcomes a host of questions given the gender-specific nature of various measures. In this section, we discuss considerations regarding anthropometric measurements and comparative standards in the context of the nutrition care process.[27]

Anthropometric Assessment

Anthropometric measurements are important parameters of nutrition assessment throughout the lifespan, but are particularly useful in the pediatric population to evaluate aberrations in growth patterns that could be indicative of medical, nutritional, or developmental problems. When evaluated using growth charts, serial measurements of weight and

height/length allow for tracking a patient's growth over time as well as comparing their anthropometrics to other children of the same age and sex assigned at birth.[28]

After the age of two years, body weight in the pediatric population is assessed using gender-specific body mass index (BMI) percentile charts. Providers may approach growth assessment in TGNC youth by carefully considering patient history, pubertal stage, and use of pubertal suppression or gender-affirming hormone therapies. Multiple approaches have been suggested, such as the use of reference data consistent with a patient's sex assigned at birth *prior* to the initiation of gender-affirming hormone therapy and moving to the use of growth charts aligned with a patient's gender identity once pharmacologic interventions have been initiated. Others have proposed the use of both male and female growth charts, especially for those that are underweight, overweight or obese.[29]

Nascent data exists regarding height, weight, expected BMI-for-age patterns, and changes in body composition in transgender youth.[29] Current evidence suggests that growth velocity may decrease, body fat percentage and BMI may increase, and lean body mass percentage may decrease among TGNC youth on pubertal suppression therapy.[24] In a retrospective study of transgender adolescents who received pubertal suppression and gender-affirming hormones therapies, total body fat increased and lean body mass decreased in transgender females, while total body fat decreased and lean body mass increased among transgender males.[30] In a cross-sectional study of transgender adolescents receiving masculinizing or feminizing hormone therapy for at least three months, participants had a body composition that ranged between BMI-matched cisgender males and females.[31]

Comparative Standards

Next, many of the comparative standards of nutrition assessment are also gender-specific, such as the dietary reference intakes (DRI) and predictive energy equations for boys versus girls. For example, the recommended dietary allowances (RDAs) differ for boys and girls ages 14-18 for the following micronutrients: thiamin, riboflavin, niacin, vitamin B6, choline, vitamin C, vitamin A, magnesium, iron, zinc, manganese, and chromium.[32] RDNs may approach these standards in a variety of ways, including: 1) Use of the standards consistent with assigned sex at birth for patients on pubertal suppression therapy; 2) Use of the standards consistent with gender identity for patients on masculinizing or feminizing hormone therapy; 3) Use of a range of values to express needs, especially regarding calories; 4) Use of biochemical values to assess nutritional adequacy when possible.[33]

(Continued on page 11)

Table 1. Barriers to health care access and utilization by TGNC individuals.

Barriers to Health Care Access and Utilization
Discrimination
Denial of Services
Absence of cultural competence among health care providers
Lack of provider knowledge of transgender health and identity issues
Communication
Financial constraints and insurance limitations
Inappropriate/incorrect electronic records or forms
Incorrect reference points for biochemical measures
Physical Facilities
Transportation
Mental Health
Housing

Promoting Inclusivity and Gender-affirming Care

RDNs can also play an active role in improving the overall health care experience of TGNC youth. Despite meaningful progress in societal understanding and acceptance of TGNC individuals, significant barriers to health care access and utilization persist (Table 1).[34-36] RDNs can play a critical role in the advancement of gender-affirming care by bringing awareness to these barriers and advocating for an inclusive healthcare environment.[37,38] The Joint Commission has outlined strategies and practical applications that RDNs can utilize to promote inclusivity and gender-affirming care; these span all areas that a patient may interact with, including staff at all levels, the physical environment, and communication practices (Table 2).[39]

Creating an inclusive health care environment can feel like a complex task. RDNs new to working with TGNC youth and their families may feel overwhelmed with unfamiliar terminology and the lack of clear best practice guidelines. In addition to the strategies delineated in Table 2, the following are simple steps all providers can take towards creating a more inclusive health care environment.

- Revise patient intake forms to utilize the two-step method for querying assigned sex at birth and gender identity (Table 3).[9]
- Include personal pronouns when introducing oneself to patients and on name tags, email signatures, or business cards. When practitioners take this step, it reduces the stigma associated with gender non-conformity, signals that they are an ally, and may make patients feel more comfortable with sharing their preferred pronouns.
- Seek opportunities for professional development and further education for yourself and colleagues through LGBTQ inclusive training or workshops.

Conclusions

In summary, TGNC youth may be affected by a number of factors with body weight implications, including an elevated risk for eating disorders and food insecurity, weight changes second to pubertal suppression and gender-affirming hormone therapy, and harassment due to body weight and stigma. Individualized assessment of body weight of TGNC youth is warranted given the gender-specific nature of growth charts, and should take into account the use and timing of pubertal suppression therapy and/or gender-affirming hormone therapy. RDNs can support TGNC clients in achieving and maintaining a healthy body weight, and can advocate for inclusivity in the healthcare environment.

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Table 2. Strategies to promote inclusivity and gender-affirming care.

Strategies to Promote Inclusivity and Gender-Affirming Care	
Strategy	**Application**
Create a safe, inclusive and culturally-cued physical environment	• Ensure that the waiting room and other patient areas include clues of acceptance such as transgender-pertinent posters, brochures, magazines, and display LGBT-friendly flags • Display the facility's non-discrimination policy or patient bill of rights where it can be easily viewed • Have staff wear LGBT-friendly flag pins • Have staff display their preferred pronouns on their name badges, email signatures and business cards • Designate a gender-neutral restroom with clear signage and easy access while communicating that patients may choose a gendered restroom based on their preference
Ensure that all staff are trained in the provision of culturally-competent, gender-affirming care	• Provide training to all staff involved in patient care that focuses on the provision of gender-affirming care • Encourage staff to seek webinars specifically aimed at increasing transgender cultural competence
Foster an environment in which gender identity data can be collected in a safe, supportive and gender-affirming manner	• Evaluate all health forms and electronic health records to ensure that the use of gender-neutral, inclusive language • Ask about patient's chosen name and pronouns
Promote effective communication	• Ensure that all staff are familiar with basic terminology that is used by the transgender community • Use gender neutral and inclusive language when interacting with all patients • In the event that staff is unsure of a person's gender identity, ask gender-neutral questions such as "what is your preferred name?" • Ensure confidentiality and use discretion, not all patients will be ready to disclose their gender identity to family members
Become an advocate	• Ensure that the facility has a non-discrimination policy that specifically references sexual orientation and gender identity. If this does not exist, work with leadership to develop and distribute this policy. • Work with facility leadership to ensure transgender friendly physical spaces • Become familiar with available resources for the transgender community and ensure that all staff are aware of these resources • Provide patients with appropriate referrals and assist them in finding clinicians who are comfortable with working with transgender individuals

(Continued on page 13)

Table 3. Two-step method for the collection of gender identity data.

1. What is your gender identity?

- o Male
- o Female
- o Transgender man / Transman
- o Transgender woman / Transwoman
- o Genderqueer / Gender nonconforming
- o Additional identity (fill in) _____
- o Decline to state

2. What sex were you assigned at birth?

- o Male
- o Female
- o Decline to State

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ELECTION RESULTS

Please join us in welcoming our newly elected WM DPG Executive Committee members who will begin their term June 1, 2021

Chair Elect: Laura Andromalos, MS, RD, CSOWM, CDCES

Secretary: Mikel Bryant, MS, RDN, CSOWM, LD

Nominating Committee Chair-Elect: Jillian Reece, RD, CSOWM

Sleep Hygiene and Weight Loss Efficacy

By: Rob Siabanis and Dr. Cary Kreutzer, EdD, MPH, RDN, FAND

Rob Siabanis EdD, MPH, RDN, FAND

Dr. Cary Kreutzer, EdD, MPH, RDN,

Sleep is one of the four biological requirements for human life, in addition to food, water, and air. It is estimated that someone will spend one-third of their lifetime sleeping.[1] Even though sleep plays a vital and prominent role in our lives, it has long been a great mystery to scientists.[2]

Recent advances in science have helped demystify sleep, revealing that it plays a crucial role in the regulation of intracellular insulin signaling,[3] inflammation,[4] emotional brain function,[5] memory consolidation[6], and clears toxic metabolic waste substances, such as beta-amyloid, one of the main risk factors for developing Alzheimer's disease.[7]

These findings partly explain why multiple epidemiological studies have reported an optimal sleep duration of seven to eight hours is associated with the lowest risk of chronic disease and all-cause mortality.[8] However, in 2016, the Centers for Disease Control (CDC) reported a prevalence of short sleep duration in the United States, with more than a third of adults sleeping fewer than seven hours per night.[9]

The most common causes of poor sleep are intake of alcohol, caffeine, or nicotine in the evening, an inconsistent sleep schedule, nocturnal artificial light exposure, and nighttime eating.[10] Compromised sleep is strongly associated with an increased food intake and a greater likelihood of obesity.[11]

The aim of this article is to review the relationship between sleep and eating behaviors and assess whether addressing sleep health with clients improves weight loss efficacy. Research findings will also inform Registered Dietitian Nutritionists (RDNs) how to incorporate strategies for improved sleep as an adjunct intervention for weight management.

Sleep and Food Intake

Clinical trials have assessed energy intake after periods of sleep restriction relative to habitual sleep periods. While individual responses to sleep restriction vary, in general, sleep deprivation increases 24-hour energy intake significantly, leading to overeating by 180-559 kcal per day.[12]

Numerous mechanisms have been proposed to explain this sleep-related increase in energy intake. First, added wakefulness resulting from reduced sleep may promote food intake episodes and energy imbalance. Second, sleep restriction may disrupt appetite-regulating hormones (ghrelin, leptin), and other signaling molecules such as glucagon-like peptide 1 (GLP-1)[12] and the endocannabinoid 2-Arachidonoylglycerol (2-AG).[13] These factors are often altered during weight-loss due to homeostatic pressure to regain lost weight and restore equilibrium.[14] Thus, lack of sleep may increase hunger and reduce satiety by compounding changes on the appetite-regulating endocrine systems.

Students' Article

Heather Krawsek

Thank you, Rob, for your contribution to this month's issue of the WM DPG newsletter by writing an informative article about the relationship between sleep health and weight loss efficacy. It is important for RDNs to be knowledgeable about sleep considering the role it plays in eating behaviors and weight management.

Appetite-regulating hormones are not the only factor that affects food intake. Neuroimaging studies have examined the relationship between sleep, brain activity, and food appeal. Sleep restriction appears to up-regulate neuronal centers associated with pleasure, reward, and salience, which respond significantly more to highly palatable foods rich in fat and added sugars.[15]

Sleep and Weight Loss Efficacy

Studies have demonstrated that including a sleep component with a weight-loss intervention results in a significantly faster weight loss. In a primary care-based clinical trial, 49 overweight and obese individuals were randomized to a weight-loss intervention with or without a sleep component. In both groups, the emphasis was placed on the importance of diet and exercise, but the sleep component group also received education on sleep-related topics, such as the relationship between sleep and weight management and the rules of sleep hygiene. After 12 weeks, the sleep-improvement group lost two times more weight, five percent vs. two percent of baseline body weight, and reported significantly higher weight-loss self-efficacy.[16]

Not all studies have reported such a significant effect of sleep on weight-loss. In a randomized crossover study, ten overweight adults were randomized to either eight and a half hours of sleep or five and a half hours of sleep per night for two weeks. While sleep appeared to have no significant effect on total body weight, restricting sleep decreased the proportion of weight lost as fat by 55% and increased the loss of fat-free mass by 60 percent.[17] These findings were corroborated by a similarly designed study that lasted eight weeks. In this study, 36 overweight or obese adults were randomized in a caloric-restriction group or a caloric

(Continued on page 16)

and sleep restriction group. The sleep restriction group was instructed to reduce their time in bed by 90 minutes for five days each week, and for the two other days they could sleep ad libitum. Both groups lost a similar amount of weight, but in the sleep-impaired group, 84% of the weight loss came from fat-free mass compared to the regular sleep group, where 80% of the weight loss came from fat mass.[18]

Therefore, while sleep restriction may not significantly affect short-term weight loss, the disproportionate loss of fat-free mass may contribute to a future weight rebound due to reduced total energy expenditure.

Recommendations for Practice

The Academy's 2017 Scope of Practice for the Registered Dietitian Nutritionist includes reference to the role of RDNs in counseling clients by implementing lifestyle and behavior adjustments.[19] While there is no direct reference to sleep, providing evidence-based

recommendations to mitigate mild sleep impairments would fall within the lifestyle and behavior practice area.

The RDN can assess a client's sleep hygiene by asking a few sleep-related questions during consultation.[20] Questions which may quickly indicate if a more thorough sleep assessment is warranted can include:

- On average, how many hours do you sleep each night?
- Do you have trouble falling asleep?
- Do you have trouble staying asleep?
- Do you feel well-rested when you wake up?
- Do you use sleep aids or sleep medication?

If compromised sleep is suspected, a sleep assessment questionnaire can identify sleep barriers. The National Sleep Foundation's Sleep Health Index (SHI) is a 12-item survey and measures three sleep elements: duration, quality, and disorders.[20] If the assessment reveals a potential sleep disorder, referral to the client's Physician or a Sleep Medicine Specialist is recommended.

Mild forms of sleep impairment can often be addressed with behavioral interventions. Cognitive Behavioral Therapy (CBT) is the first-line treatment to improve sleep-health.[21] Its two main components are sleep hygiene and sleep conditioning.

Recommendations to improve sleep hygiene[22]:

- Make the bedroom quiet, cool, and dark.
- Establish a relaxing nighttime routine, such as taking a warm bath or shower.
- Engage in daily exercise.
- Avoid caffeine, alcohol, or nicotine before bedtime.

Recommendations to improve sleep conditioning[23]:

- Go to bed only when you are sleepy, and intend to sleep.
- Use your bed only for sleeping and intimate activity, do not use screens, read, or eat in bed.
- If you cannot sleep within 15–20 minutes, get up and leave the bedroom. Don't go back until you are sleepy. If you still cannot sleep, repeat as necessary.
- Have a set sleep schedule, follow that schedule daily.

There is promising evidence suggesting that sleep may play a role in food intake, food preferences, and body composition, all of which are pertinent to weight management. Assessing sleep health and recommending sleep hygiene and conditioning strategies is a practical and cost-effective method to improve weight-loss efficacy. Awareness of sleep as a potential obstacle to weight management may prove beneficial to RDNs working with individuals striving to manage weight.

Student Author bio:

Rob Siabanis *is pursuing a master's degree in Nutrition, Healthspan, & Longevity Coordinated Program at the University of Southern California. Born and raised in Greece, he is passionate about fusing the latest science with the wisdom and traditions of Mediterranean cultures to promote health and wellbeing.*

Supervising Professor bio:

Dr. Cary Kreutzer, EdD, MPH, RDN, FAND, *Clinical Associate Professor, USC Leonard Davis School of Gerontology & Keck School of Medicine, has been a practicing RDN since 1982, primarily serving at-risk and underserved populations. She continues to provide limited services at Children's Hospital Los Angeles in the Alta Med Pediatric Clinic FQHC running a healthy eating group for parents and children who are overweight or obese. She directs the ACEND-Accredited Master of Science Degree Coordinated Program in Nutrition, Healthspan and Longevity. Her areas of expertise include health promotion and disease prevention through nutrition, obesity prevention and intervention, developmental disabilities and chronic illness, health systems and health care access and nutrigenomics.*

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Member Services Update

By: Mary Gray Hixson, MPH, RD, CSOWM, LDNMPH, RDN, FAND

Mary Gray Hixson, MPH, RD, CSOWM, LDNMPH, RDN, FAND

Get Active

Would you like to be involved in the Weight Management DPG? We want YOU! Your help and enthusiasm for our profession are needed. People like yourself are what make this practice group the best that it can be. We strive to meet our member needs throughout the year and we cannot do it without you. Please send me an email if you have interest in and we will work to find the perfect position within the Weight Management DPG for you. Simply email mghutchison@gmail.com.

Call For Student Contributors

Are you a student member that would like to contribute to the *Weight Management Matters* Newsletter? We are looking to feature students in each of our newsletters. If you are interested, please email Heather Krawsek, our student services coordinator, at hkrawsek@yahoo.com. If you know of a student that is doing innovative work related to weight management? Maybe they are running virtual camps for school age children or completing a fascinating research project on obesity in diverse populations or using a unique platform to reach the underweight adolescent population. We want to know! If you know of anyone, please contact Heather Krawsek at hkrawsek@yahoo.com.

Member Highlights

Share Your Accomplishments and Information! Are you a member on the move?! WM DPG is highlighting members on social media and via member communications. Do you have a new book? Have you developed a new program? Have you been working to create a new product? Do you want to share your info? Go to wmdpg.org and look under What's New. There is a link there to a simple form to share your information and accomplishments. It's that simple!

Member Surveys

This year, we have planned to issue 2 member surveys. One survey was completed mid-fall 2020 and we will be sending out another one in April. Please be on the lookout for one in your inbox in the coming weeks. We look to you, as members, to give us feedback and tell us what we can do as a DPG to meet your needs within the profession of weight management, including additional member resources.

As always, thank you for your membership. Please encourage your friends and colleagues to join so that they can take advantage of our wonderful networks of weight management experts and valuable resources.

Letter from the Chair

By: Becky Reeves, DrPH, RDN, FAND

As we all watch Spring providing color and warm temperatures to the grey, cold winter climate, we also look forward to finding a path back to normal living. Securing a vaccination is increasing daily across the country so my hope is that you and your loved ones will experience this protective shot very soon.

Within your DPG leadership team, we are striving to continue to provide you the member with various educational opportunities and options for recognition. Let's begin with the Weight Management Virtual Symposium scheduled for two days, April 1 and 8. Six recognized speakers will present on a wide variety of topics including:

- Healthcare Disparities in Obesity Treatment
- A Healthier Relationship with Food: Bariatric Patients and Intuitive Eating
- Establishing a Weight Loss Clinic for CKD/DM Patients
- Barrier Methods: Assessing the Obstacles to Weight Management Services
- Research Updates in Plant-based Diets and Weight Management
- Create Content That People Want

Registration for the symposium is closed but you can purchase a recording of the sessions in May, 2021. I would like to recognize the team that has organized this symposium and thank them for sharing their expertise and time in developing this event:

Tracy Oliver, PhD, RDN -Chair
Eileen Ford, MS, RD, FAND
Kristen Smith, MS, RDN
Melissa Page, MS, RDN, CSOWM
Melissa Majumdar, MS, RD, CSOWM
Sarah Henes, PhD, RD

The opportunity to nominate a colleague for one of the four Weight Management awards is now open. These awards are:

- Emerging Practice Award: an RDN in practice for <10 years.
- Practice Award recipient: an RDN in practice for ≥ 10 years.
- Emerging Outcomes Research Award: an RDN in research <10 years from last post-baccalaureate degree.
- Outcomes Research Award: and RDN in research ≥ 10 years from last post-baccalaureate degree.

In submitting an application for a friend or colleague, you are saying to others that this person deserves recognition for the work that he/she has accomplished in his/her career.

WM DPG Awards applications are now live on the WM website. Please consider nominating yourself or a colleague for one of the awards. Deadline for award submission is April 1, 2021.

Bec McDorman, Communications Director, and Mary Gray Hixson, Member Services Director, are jointly sponsoring a new program to highlight you, the member, for your professional accomplishments and unique contributions to the profession. WM members are a creative and talented group of persons who are working in many different and distinct areas. In sharing these contributions of what you have developed or achieved in your practice, you are providing members with an opportunity to network with you and enhance their counseling or organizational skills. Please submit your information through a link on the current eBlasts or on the WM website home page. We look forward to learning more about all of our members and that means you!!

Until next time, get vaccinated when appropriate, still wear your mask, and stay healthy.

Letter from the Editor

By: Lisa Paige, MBA, RDN, CSOWM, NBC-HWC

Happy Spring to all! This month we have two great articles for you. Julie Schwartz describes the benefits of adding health and wellness coaching to your skill set. I can attest to this; I became a certified health and wellness coach before credentialing as a RDN. I was among the first dietitians to have both the CSOWM and NBC-HWC credentials, and now it's great to see many others join this group. Please be sure to check out the extensive list of resources which Julie has shared in her article, and don't forget to get your CPEUs!

Our second article is so timely, and our thanks goes to Patricia Novak, the Pediatrics Section Editor, for securing this content. A few months ago, I conducted a nutrition assessment on a transgender MTF resident, and the key point was to document her intentional weight loss. I had no reference to use. We can now begin to understand how dietitians can be a primary resource for individuals who identify as not-cis.

Many of our colleagues and clients have suffered during the intense winter storms of January and February. Here in Colorado, we are having a big snowstorm this month. I want to share a small bit of humor created by the Chaffee County Search & Rescue. Here 'tis. Please enjoy!

The Twelve Seasons of Colorado

- Winter
- Fools Spring
- 2nd Winter
- Spring of Deception
- 3rd Winter
- Road Construction
- Actual Spring
- Summer
- Fire
- False Fall
- 2nd Summer
- Actual Fall

Live in Healthful Happiness!

Lisa Paige, MBA, RDN, CSOWM, NBC-HWC