

# Position of the Academy of Nutrition and Dietetics: Medical Nutrition Therapy Behavioral Interventions Provided by Dietitians for Adults with Overweight or Obesity

Hollie A. Raynor, PhD, RD; Maria Morgan-Bathke, PhD, MBA, RD, FADN; Suzanne Domel Baxter, PhD, RD, LD, FADA, FAND; Tanya Halliday, PhD, RDN; Amanda Lynch, PhD, RDN; Neal Malik, DrPH, MPH, RDN; Jessica L. Garay, PhD, RDN, FAND; Mary Rozga, PhD, RDN

## ABSTRACT

Providing interventions that facilitate improvement of dietary intake and other health behaviors can improve nutrition-related outcomes in adults with overweight or obesity. Medical nutrition therapy (MNT) behavioral interventions require expertise from registered dietitian nutritionists or international equivalents (dietitians), which no other health care provider can provide for adults with obesity. Current evidence supports the role of MNT behavioral interventions for adults with overweight or obesity as an effective treatment option, when appropriate for and desired by the client. This Academy of Nutrition and Dietetics Position Paper describes potential benefits and concerns regarding dietitian-provided MNT behavioral interventions for adults with overweight and obesity and informs dietitians about implications for practice. This Position Paper is supported by a systematic review examining effectiveness of MNT interventions provided by dietitians and by an evidence-based practice guideline. It is the position of the Academy of Nutrition and Dietetics that MNT behavioral interventions for adults (aged 18 years and older) with overweight or obesity should be a treatment option, when appropriate and desired by the client, to improve cardiometabolic, quality of life, and anthropometric outcomes. Dietitians providing MNT recognize the complex contributors to overweight and obesity, and thus individualize interventions, based on a shared decision-making process, and deliver interventions in an inclusive, compassionate, and client-centered manner. Interventions should include collaboration with an interprofessional team when needed. Dietitians strive to increase health equity and reduce health disparities by advocating and providing opportunities for increased access to effective nutrition care services.

J Acad Nutr Diet. 2023;■(■):■-■.

## POSITION STATEMENT

It is the position of the Academy of Nutrition and Dietetics that medical nutrition therapy (MNT) behavioral interventions for adults (18 years and older) with overweight or obesity should be a treatment option, when appropriate and desired by the client, to improve cardiometabolic, quality of life, and anthropometric outcomes. Registered dietitian nutritionists or international equivalents (dietitians) providing MNT recognize the complex contributors to overweight and obesity, and thus individualize interventions, based upon a shared decision-making process, and deliver interventions in an inclusive, compassionate, and client-centered manner. Interventions should include collaboration with an interprofessional team when needed. Dietitians strive to increase health equity and reduce health disparities by advocating and providing opportunities for increased access to effective nutrition care services.

**I**N 2023, 6 ORGANIZATIONS, THE Academy of Nutrition and Dietetics (Academy), American Society of Metabolic and Bariatric Surgery, Obesity Action Coalition, Obesity Medicine Association, the Strategies to Overcome and Prevent Obesity Alliance, and The Obesity Society, developed a consensus statement on obesity that describes obesity as a chronic disease characterized by excessive fat accumulation or distribution that presents a risk to health and requires lifelong care.<sup>1</sup> Currently, >70% of the adult population in the United States has overweight or obesity.<sup>2</sup> Given the prevalence of this chronic

disease, ensuring access to care for those who desire treatment, and for whom it is appropriate, can improve the health of many adults in the United States and is essential to reduce health inequity and disparity.<sup>3</sup>

One effective method of evidence-based care for adults (aged 18 years and older) with overweight and obesity is medical nutrition therapy (MNT) behavioral interventions, when this is an appropriate and desired approach for the client.<sup>4</sup> MNT behavioral interventions for overweight or obesity are delivered by a registered dietitian nutritionist or international equivalent (dietitians)

and follow the nutrition care process to improve dietary behaviors and, consequently, client outcomes.<sup>5</sup> Because overweight and obesity are complex, multi-faceted conditions, it is important for dietitians to take into consideration the nuances of these health conditions when providing MNT behavioral interventions. **Thus, the objective of this Position Paper is to describe potential benefits and concerns regarding dietitian-provided MNT behavioral interventions for adults with overweight and obesity and to inform dietitians on implications for practice.**

This Position Paper is supported by a systematic review and evidence-based practice guideline (EBPG). These resources are available both on the Evidence Analysis Library website<sup>6</sup> and in the *Journal of the Academy of Nutrition and Dietetics*,<sup>4,7</sup> and are described briefly here.

## SYSTEMATIC REVIEW

A systematic review was conducted to examine current research on the effect of behavioral weight management interventions provided by dietitians working with adults with overweight or obesity.<sup>7</sup> Authors followed gold-standard methods<sup>8-10</sup> and searched 6 databases for articles published in peer reviewed journals from 2008 to January 2021. After screening 19,000+ titles/abstracts and 900+ full-text articles, authors identified 62 randomized controlled trials and three nonrandomized controlled trials examining the effects of weight management interventions provided by dietitians in the target population. Briefly, moderate or high-certainty evidence described that weight management interventions provided by a dietitian reduced systolic blood pressure, waist circumference, and body mass index and increased percent weight loss. These interventions also reduced diastolic blood pressure (low certainty), improved mental (moderate certainty) and physical quality of life (QoL) (low certainty), and may be cost-effective (low certainty).<sup>7</sup> Patterns in subgroup analyses demonstrated that interventions that included at least five contacts between the client and dietitian and had a duration of at least 1 year were generally more efficacious than those with fewer contacts or shorter durations. Follow-up data demonstrated that efficacy was generally reduced by 3 months after the end of the intervention with a dietitian.<sup>6</sup>

## EBPG

Results of the systematic review, along with clinical expertise and consideration of client values, were used to inform an EBPG.<sup>11</sup> The objective of the EBPG was to provide recommendations for dietitians who deliver MNT behavioral interventions for adults (aged 18 years and older) with overweight and obesity, when appropriate for and desired by the client.<sup>4,6</sup> The EBPG was

created following gold-standard methods.<sup>10,12</sup> Evidence from the systematic review was translated to recommendation statements using an Evidence to Decision framework.<sup>13,14</sup> The EBPG included 17 recommendations on MNT approach for adult overweight and obesity management, delivering MNT interventions, dietary and lifestyle interventions and approaches, and delivering interventions with special populations (Figure 1).<sup>4,6</sup> The EBPG highlights the importance of delivering flexible and inclusive client-centered care and adjusting interventions as client needs change over time.

The EBPG elucidated potential benefits and concerns regarding dietitian-provided MNT behavioral interventions for adults with overweight and obesity. A summary of these benefits and opportunities is provided in Figure 2.

## BENEFITS OF PROVIDING MNT BEHAVIORAL INTERVENTIONS FOR ADULTS WITH OVERWEIGHT OR OBESITY

### Potential Benefits for Clients

The supporting systematic review demonstrated evidence of improved anthropometric outcomes from MNT behavioral interventions for adult overweight or obesity,<sup>7</sup> but there are additional direct health benefits that may occur from this type of intervention. MNT interventions can have a positive effect on diet quality and physical activity, if physical activity is part of the behavioral intervention, both of which are critical factors in reducing risk of chronic diseases.<sup>15</sup> For example, the intensive lifestyle intervention in the Look AHEAD (Action for Health in Diabetes) trial (a multisite trial with more than 5,000 participants), which was provided by dietitians and other health professionals, demonstrated that participants receiving the intervention consumed a higher quality diet than participants who did not receive the diet intervention after 1 year.<sup>16,17</sup> The Diabetes Prevention Program (a multisite trial with more than 3,000 participants) used a similar intensive lifestyle intervention for adults with overweight and obesity, also provided by dietitians and other health professionals, and demonstrated

that physical activity was significantly greater in participants receiving the intensive lifestyle intervention compared with those who did not receive the intervention after more than 4 years of follow-up.<sup>18</sup>

Additional direct benefits of these nutrition-related behavioral interventions, delivered by dietitians and other health professionals, may include enhancements in physical health beyond anthropometric outcomes,<sup>7</sup> including improvements in blood pressure<sup>7</sup>; glycemic outcomes, particularly for those with prediabetes or type 2 diabetes mellitus<sup>7,18,19</sup>; and mobility in older adults.<sup>20</sup> Behavioral interventions for weight management may also improve mental health, including reductions in symptoms of depression and anxiety,<sup>21-23</sup> and improvements in self-esteem and body image.<sup>22</sup> These types of MNT behavioral interventions do not appear harmful for mental health. Although concerns regarding increases in eating pathology or eating disorder risk are often raised with MNT behavioral interventions, evidence shows decreases in eating pathology and eating disorder risk.<sup>24,25</sup> Finally, these MNT behavioral interventions also appear to enhance QoL, which is a client-centered outcome.<sup>7,22</sup>

Adult clients receiving MNT behavioral interventions for overweight or obesity may also indirectly benefit from components of the Nutrition Care Process provided by dietitians. The assessment that initiates the Nutrition Care Process is comprehensive and can identify other health areas that may need to be addressed,<sup>4</sup> including mental health, physical impairment or limitations, and social determinants of health (eg, food and nutrition insecurity), among others. When these other health areas are identified, appropriate referrals can enhance the health care that clients have access to and receive. These referrals may include other nutrition and dietetics practitioners, such as nutrition and dietetics technicians, registered, other allied health professionals who provide care outside the scope of practice of dietitians (ie, psychologist, social worker, exercise physiologist, and physical therapist), or to supplemental food programs or other social services (ie, Supplemental Nutrition Assistance Program and

| Recommendation statement   | Rating <sup>a</sup> |
|--|---------------------|
| <b>1.0 MNT<sup>b</sup> approach for adult overweight and obesity management</b>  |                     |
| 1.1 It is reasonable for RDNs or international equivalents to utilize the NCP <sup>c</sup> to provide effective, client-centered interventions based on shared decision making and clinical judgment and individualized to each client's needs, circumstances, and goals.  | Consensus           |
| 1.2 MNT provided by RDNs or international equivalents is recommended for adults with overweight or obesity to improve cardiometabolic outcomes, QoL <sup>d</sup> , and weight outcomes, as appropriate for and desired by each client.   | 1B                  |
| 1.3 RDNs or international equivalents should collaborate with an interprofessional health care team to provide comprehensive, multicomponent care for adults with overweight or obesity, as appropriate for and desired by each client.  | 1C                  |
| 1.4 It is reasonable for RDNs or international equivalents to monitor and evaluate client outcomes and adapt goals and interventions, including those for weight maintenance, and provide resources as needed for each client.   | Consensus           |
| 1.5 It is reasonable for RDNs or international equivalents to minimize the effects of weight bias and weight stigma and its consequences by targeting client-centered goals, individualizing interventions according to complex contributors of overweight and obesity, communicating using client-preferred terms, and providing an inclusive physical environment. | Consensus           |
| <b>2.0 Delivering MNT interventions</b>  |                     |
| 2.1 RDNs or international equivalents may provide at least five interactive sessions, when feasible and desired by each adult client with overweight or obesity, to achieve the greatest potential improvement in outcomes. Frequency of contacts should be tailored to each client's preferences and needs.   | 2C                  |
| 2.2 RDNs or international equivalents should provide overweight and obesity management interventions for a duration of at least one year to improve and optimize cardiometabolic and weight outcomes, as appropriate for and desired by each client.   | 1C                  |
| 2.3 Following completion of overweight and obesity management interventions, RDNs or international equivalents should provide follow-up contacts at least every 3 months, for as long as desired by each client, to facilitate maintenance of weight loss and improved cardiometabolic outcomes.   | 1C                  |
| 2.4 RDNs or international equivalents may use telehealth, in-person contacts, or a blend of these delivery methods when providing MNT interventions to adults with overweight or obesity. Outcomes may be optimized by including in-person contacts.   | 2C                  |
| 2.5 RDNs or international equivalents may use both individual and group delivery methods when providing MNT interventions to adults with overweight or obesity, as feasible and appropriate for each client.   | 2C                  |
| 2.6 RDNs or international equivalents providing MNT interventions for adults with overweight and obesity should coordinate care in a variety of settings, including primary care/outpatient, community, and workplace settings, to access and support each client with resources in the environment that best suits individualized needs.                            | 1B                  |
| 2.7 It is reasonable and necessary for RDNs or international equivalents to be aware of and utilize existing channels of payment for services for adults with overweight or obesity to improve client access to care.  | Consensus           |
| <b>3.0 Dietary and lifestyle intervention approaches</b>   |                     |
| 3.1 RDNs or international equivalents should advise adult clients with overweight or obesity that many different dietary patterns can be individualized to support client-centered goals. Prescribed dietary approaches should   | 1C                  |
| <i>(continued on next page)</i>  |                     |

**Figure 1.** Executive summary of recommendations for registered dietitian nutritionists (RDNs) or international equivalents providing overweight and obesity interventions for adults with overweight and obesity.<sup>3,6</sup> <sup>a</sup>Recommendations are rated according to the GRADE method. Recommendations are rated as Strong (1), Weak (2), or Consensus. Letters indicate certainty of supporting evidence and ranges from High (A) to Very Low (D). <sup>b</sup>MNT = medical nutrition therapy. <sup>c</sup>NCP = nutrition care process. <sup>d</sup>QoL = quality of life. <sup>e</sup>T2DM = type 2 diabetes mellitus. <sup>f</sup>CVD = cardiovascular disease.

| Recommendation statement   | Rating <sup>a</sup> |
|--|---------------------|
| achieve and maintain nutrient adequacy and be realistic for client adherence. Prescribed calorie levels should be tailored based on estimated or measured needs and should be adjusted to improve weight outcomes, as appropriate for and desired by each client.  |                     |
| 3.2 RDNs or international equivalents should advise the following components as part of a comprehensive adult overweight and obesity management intervention to improve cardiometabolic outcomes, QoL, and weight outcomes, as appropriate for and desired by each client: <ul style="list-style-type: none"> <li>• Nutritionally adequate diet with adjusted calories to improve weight outcomes or a nutritionally adequate, energy-balanced diet for weight maintenance;</li> <li>• Behavioral strategies, including self-monitoring (diet, physical activity, weight);</li> <li>• Appropriate physical activity to meet client goals (within an RDN's scope of practice or referral to an exercise practitioner).</li> </ul> | 1C                  |
| <b>4.0 Special populations</b>   |                     |
| 4.1 RDNs or international equivalents should collaborate with clients and healthcare teams to manage comorbidities such as T2DM <sup>e</sup> , CVD <sup>f</sup> , dyslipidemia and other potential complications associated with overweight or obesity by tailoring MNT to each client's specific health care needs, including medications, while supporting weight loss.  | 1B                  |
| 4.2 Adults with obesity who receive pharmacotherapy or metabolic and bariatric surgery should collaborate with RDNs or international equivalents, as part of an interprofessional health care team, to improve and maintain a healthy diet that meets nutrition needs and advances weight loss efforts to improve cardiometabolic outcomes.  | 1B                  |
| 4.3 For adults who are members of groups disproportionately affected by overweight or obesity, or underresourced communities (eg, adults with low socioeconomic status, adults from racial or ethnic minority groups, older adults, and adults with disabilities), RDNs or international equivalents should provide culturally appropriate interventions that are tailored to each client's values, beliefs, and barriers regarding excess weight, and food and physical activity behaviors.   | 1C                  |

**Figure 1.** (continued) Executive summary of recommendations for registered dietitian nutritionists (RDNs) or international equivalents providing overweight and obesity interventions for adults with overweight and obesity.<sup>3,6</sup> <sup>a</sup>Recommendations are rated according to the GRADE method. Recommendations are rated as Strong (1), Weak (2), or Consensus. Letters indicate certainty of supporting evidence and ranges from High (A) to Very Low (D). <sup>b</sup>MNT = medical nutrition therapy. <sup>c</sup>NCP = nutrition care process. <sup>d</sup>QoL = quality of life. <sup>e</sup>T2DM = type 2 diabetes mellitus. <sup>f</sup>CVD = cardiovascular disease.

Special Supplemental Nutrition Program for Women, Infants, and Children).

**Practice Implication:** Dietitians can accurately inform adult clients about the potential benefits and components of MNT behavioral interventions so that clients can make informed decisions about their health care and ascertain if they want to participate in the intervention. For clients who do desire this treatment, MNT behavioral interventions may provide benefits and identify needs beyond weight management to improve overall health.

### Potential Benefits to the Profession

Given the complexity of overweight and obesity, it is not uncommon for an interprofessional health care team to be involved in providing obesity care.<sup>7</sup>

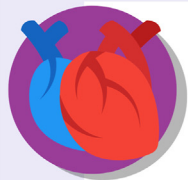
As the experts in MNT, dietitians can provide effective dietary-focused care to adults with overweight or obesity that supports attainment of their specific nutrition-related goals. Other health care providers (ie, physicians, nurse practitioners, physical therapists, and psychologists) may work directly with dietitians and can observe the influence of client-centered nutrition care on improvement in health outcomes. Being part of this team helps increase the visibility of dietitians as valuable members of interprofessional health care teams. Moreover, dietitians can cultivate relationships with other health care providers and create a referral pipeline for individuals who would benefit from working with nutrition and dietetics professionals.<sup>4</sup> Depending on the setting (and the complexity of the client's medical status), a role also exists for nutrition and

dietetics technicians, registered, to provide nutrition care, under the guidance of a dietitian.

Being engaged in MNT behavioral interventions for the treatment of adult overweight and obesity also provides an opportunity for dietitians to collect data to address the gaps in knowledge regarding best methods for delivering interventions.<sup>4,7</sup> Evidence is lacking on how to tailor interventions, both at the individual and systems levels, to meet the needs of those who experience disparities in overweight or obesity, such as adults of lower socioeconomic position, adults from underrepresented groups (groups that have limited representation in the evidence base), or adults with disabilities, among others.<sup>4</sup>

To help the dietetics field achieve health equity, where all individuals have a fair and just opportunity to attain their highest level of health,<sup>26</sup>

## Benefits and Opportunities for MNT Behavioral Interventions for Adult Weight Management



### Potential Benefits for Clients

- Improve cardiometabolic, anthropometric, quality of life and mental health outcomes
- Improve lifestyle behaviors
- Comprehensive assessment and referrals to needed services

### Potential Benefits for the Profession

- Increase visibility of and referrals to dietitians as a result of interprofessional collaboration
- Enable data collection to improve evidence base and to support insurance reimbursement efforts

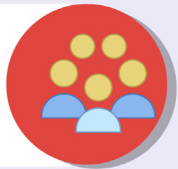


### Potential Opportunities for Clients

- Minimize weight bias and weight stigma
- Participate in inclusive, compassionate, client-centered care
- Focus on overall health, including weight loss if desired by the client
- Improve access to evidence-based services

### Potential Opportunities for the Profession

- Increase availability of credentialed practitioners
- Expand workforce to reflect diversity of the general population
- Promote policy change for client insurance coverage



**Figure 2.** Benefits and opportunities for medical nutrition therapy (MNT) behavioral interventions for adult weight management.

collecting data on social risk factors, experience of care, comprehensive patient demographic data (ie, race, ethnicity, language, gender identity, sex, sexual orientation, and disability status), as well as outcomes, is needed.<sup>27</sup> Given their training in assessment, and monitoring and evaluation, dietitians can play key roles in data collection of these important factors, which is currently recommended by Centers for Medicare & Medicaid Services.<sup>27</sup> Ideally, dietitians can lead health care organizations in meeting these recommendations from the Centers for Medicare & Medicaid Services. There is also an opportunity to leverage the combined data collection from dietitians across the country. Practicing

dietitians can add their data to the Academy Health Informatics Infrastructure portal,<sup>28</sup> or they can seek collaboration with nutrition researchers at local universities. Participation in data collection and research can be used to enhance the evidence base, enabling the field to better address health disparities in overweight or obesity prevalence seen in adults in the United States.

**Practice Implication:** *Dietitians should utilize opportunities to collaborate with other health care providers to enhance the visibility of dietitians as leaders in health care. MNT requires a dietitian's expertise, which no other health care provider can provide for adults with obesity. Supporting data*

collection that will help enhance health equity is key in addressing health disparities and reimbursement for and access to MNT, and dietitians have opportunities and skills to collect nutrition-related data. This visibility can help dietitians move into leadership roles and enhance the overall standing of dietetics in health care.

## CONCERNS OF PROVIDING MNT BEHAVIORAL INTERVENTIONS FOR ADULTS WITH OVERWEIGHT OR OBESITY

### Potential Concerns for Clients

Concerns have been raised that, due to weight bias, health care provided to adults with overweight or obesity will increase stigmatization, be shame-based, and/or solely focus on reducing weight.<sup>29,30</sup> To address these issues, it is recommended that when MNT behavioral interventions for overweight or obesity are provided, the intervention should be inclusive, compassionate, and client-centered.<sup>4</sup> For example, during the assessment process, information regarding all presenting problems should be obtained, rather than just focusing the assessment solely on overweight- or obesity-related information.<sup>30</sup> MNT should be client-centered, which may mean a client with overweight or obesity may not wish to discuss weight status or pursue treatments for overweight or obesity, and this decision should be respected without judgment.<sup>24</sup> Dietitians can support improvements in health through dietary changes that are not focused on achieving weight loss. When a client does choose to engage in MNT behavioral interventions for overweight or obesity, dietitians should support dietary changes that take into account a client's unique individual circumstances, which includes a client's culture, other medical history, current health status, disabilities, and social determinants of health.<sup>4</sup>

Furthermore, it is crucial that dietitians create an inclusive and welcoming environment for patients.<sup>4</sup> This includes utilizing client-preferred and/or person-first terminology when discussing weight.<sup>4</sup> For instance, while referring to someone "having obesity" may be appropriate person-first language, some clients find this term stigmatizing and would prefer to refer

to “their weight.” Others may prefer to use the term *fat*. The physical environment should be accommodating for clients with disabilities and larger body sizes (ie, including a range of larger-size blood pressure cuffs, and scales with higher weight capacities and that accommodate wheelchairs).<sup>4</sup> Furthermore, recommendations and resources for clients should address each client’s specific needs, such as providing tools to eat healthfully on a budget for adults who have low incomes, or tailoring educational resources so that they are accessible to those with disabilities.

Obesity care may also be costly. Public and private insurance coverage remains a primary barrier to the treatment of overweight or obesity.<sup>4,24</sup> However, interventions provided by dietitians may be less expensive than interventions provided by other health care providers.<sup>4</sup> At the federal level, efforts are ongoing to pass the Treat and Reduce Obesity Act, which calls for Medicare coverage of intensive behavioral therapy for obesity, and dietitians are listed as one of the eligible providers to deliver this therapy.<sup>31</sup> States can also make decisions related to inclusion of services that are covered by state Medicaid programs, and private insurance companies can do the same. To stay updated on the various legislative and regulatory efforts, Academy members can visit the Advocacy page on the [eatrightpro.org](http://eatrightpro.org) website,<sup>32</sup> participate in affinity groups, and work with their state affiliate or dietetic practice group/member interest groups’ policy and advocacy teams.

Finally, weight regain can occur following MNT behavioral interventions; thus it has been suggested that these interventions do not enhance long-term health.<sup>33</sup> However, even with weight regain following a behavioral intervention, reductions in cardiometabolic risk factors are found 5 years after interventions end, suggesting that these interventions do enhance long-term health.<sup>33</sup>

**Practice Implication:** *Potential concerns about providing overweight and obesity interventions highlight the importance of overcoming obesity bias when delivering health care and actively fighting weight stigma. Practitioners can take an active role in addressing their own potential weight biases by engaging in self-reflection, using supportive communication and language with*

*clients, and focusing care on overall health.*<sup>24,30</sup> *To address costs of obesity care, dietitians should work collaboratively with appropriate government agencies, medical and scientific organizations, employer organizations, unions, educational authorities, and the media to promote improvement in obesity care coverage.*

### Potential Concerns to the Profession

Dietitians providing obesity care need to attain proficiency in a wide range of competencies to appropriately meet the needs of their clients. Competencies crucial to effective obesity care include understanding of key drivers of obesity and obesity as a medical condition, recognizing the disparate burden of obesity in underrepresented populations, providing evidence-based care, collaborating interprofessionally to comprehensively address client needs, and mitigating weight bias.<sup>34</sup> Dietitians achieving these competencies increase the likelihood that the previously described benefits of treatment will occur, while also decreasing the likelihood that the concerns around obesity care will transpire, particularly in regard to weight bias and stigmatization.<sup>34</sup> The dietetics field should consider the importance of educational and professional development initiatives designed to provide these competencies so that the field is ready to effectively meet the needs of the US population. The interdisciplinary Certified Specialist in Obesity and Weight Management credential conferred by Commission on Dietetic Registration (the credentialing agency for the Academy) is one example of addressing this need.<sup>35</sup>

Health disparities in overweight and obesity and related conditions are found in several underrepresented groups, and culturally appropriate dietary interventions and nutrition care are needed to reduce these disparities.<sup>2,36</sup> Many trainings have been developed to help achieve cultural competence. However, concerns have been raised that this type of training presents the risk of stereotyping, and may foster implicit bias.<sup>37</sup> To address these risks, practicing cultural competency and cultural humility with clients is needed, including care based on self-reflexivity, openness to shared power

with clients, and the ability to learn from clients.<sup>37</sup>

A workforce that can provide obesity care but lacks diversity in representation may reduce patient satisfaction with and access to care.<sup>38</sup> For example, a recent survey described that among nutrition and dietetics practitioners, just 6% indicated Hispanic or Latino heritage, just 10% indicated a race other than White, and <4% indicated they had one or more disabilities.<sup>39</sup> Given that the demographic characteristics of the nutrition and dietetics profession is fairly homogenous concerning race/ethnicity, gender, ability, and socioeconomic position,<sup>39</sup> changes in the workforce may be important to reduce this disparity and improve health equity by improving access to practitioners who can directly relate to their clients’ circumstances and needs. The Academy and other organizations have developed resources to support diversity and equity, such as the Academy’s Inclusion, Diversity, Equity and Access Action Plan to help address this issue<sup>40,41</sup> and there are others.<sup>41</sup> The goals and strategies outlined in this plan were developed from member feedback, as well as from benchmarking with other health care organizations. Goal 2 of this plan specifically highlights the need for recruitment, retention, and education and leadership training in the field of dietetics for underrepresented groups.<sup>40</sup> Diversification of the nutrition and dietetics workforce was also emphasized in 2021 Academy Strategic Plan.<sup>42</sup>

**Practice Implication:** *Potential concerns about ability to meet the demand for overweight and obesity management interventions highlight the need for increased capacity of higher education institutions with dietetics programs and professional development opportunities for the dietetics field to include these competencies within their curriculum/training. In addition, to address health disparities, trainings in cultural competency and emphasizing cultural humility should be considered.<sup>37</sup> All nutrition and dietetics practitioners should identify strategies to implement the Inclusion, Diversity, Equity and Access action plan and support evaluation of progress toward these goals by encouraging nutrition and dietetics practitioners to self-report race,*

ethnicity, and gender to the Academy and/or the Commission on Dietetic Registration.<sup>43</sup>

## CONCLUSIONS

Current evidence supports the role of MNT behavioral interventions for adults with overweight or obesity as an effective treatment option, when appropriate and desired by the client, to improve cardiometabolic, QoL, and anthropometric outcomes. Dietitians need to accurately identify the benefits of these interventions so that clients can make informed decisions about their health care. Dietitians should highlight their ability to be leaders in delivery of this care to other health care professionals. To reduce weight bias and stigmatization, dietitians should use a client-centered approach, and utilize person-first, compassionate, and nonstigmatizing language when providing obesity care. Finally, ensuring access to MNT behavioral interventions is key in increasing health equity and reducing health disparities in overweight and obesity, and this requires an inclusive dietetics workforce that is trained in the competencies needed to deliver effective obesity care.

## References

- Obesity care organizations develop consensus statement [press release]. Accessed November 29, 2023. <https://www.eatrightpro.org/about-us/for-media/press-releases/countrys-leading-obesity-care-organizations-develop-consensus-statement-on-obesity>
- Fryar CD, Carroll MD, Afful J. Prevalence of overweight, obesity, and severe obesity among adults aged 20 and over: United States, 1960–1962 through 2017–2018. Accessed November 29, 2023. <https://www.cdc.gov/nchs/data/hestat/obesity-adult-17-18/obesity-adult.htm#Citation>
- Byrd AS, Toth AT, Stanford FC. Racial disparities in obesity treatment. *Curr Obes Rep.* 2018;7(2):130–138.
- Morgan-Bathke M, Raynor HA, Baxter SD, et al. Medical nutrition therapy interventions provided by dietitians for adult overweight and obesity management: an academy of nutrition and dietetics evidence-based practice guideline. *J Acad Nutr Diet.* 2023;123(3):520–545. e510.
- Andersen D, Baird S, Bates T, et al. Revised 2017 Scope of Practice for the Registered Dietitian Nutritionist. *J Acad Nutr Diet.* 2018;118(1):141–165.
- Academy of Nutrition and Dietetics' Evidence Analysis Center. Adult weight management systematic review & guideline. Published 2021. Updated July 2021. Accessed July 27, 2023. <https://andeal.org/awm>
- Morgan-Bathke M, Halliday TM, Lynch A, Malik N, Raynor HA, Garay JL, Rozga M. Weight management interventions provided by a dietitian for adults with overweight or obesity: an evidence analysis center systematic review and meta-analysis. *J Acad Nutr Diet.* 2023;123(11):1621–1661.
- Page MJ, McKenzie JE, Bossuyt PM, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ.* 2021;372:n71.
- Handu D, Moloney L, Wolfram T, Ziegler P, Acosta A, Steiber A. Academy of Nutrition and Dietetics methodology for conducting systematic reviews for the Evidence Analysis Library. *J Acad Nutr Diet.* 2016;116(2):311–318.
- Higgins JPT, Green S, eds. *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0 [updated March 2011]*. The Cochrane Collaboration; 2011.
- Graham R, Mancher M, Miller Wolman D, Greenfield S, Steinberg E, eds. *Clinical Practice Guidelines We Can Trust*. National Academies Press; 2011.
- Papoutsakis C, Moloney L, Sinley RC, Acosta A, Handu D, Steiber AL. Academy of Nutrition and Dietetics methodology for developing evidence-based nutrition practice guidelines. *J Acad Nutr Diet.* 2017;117:794–804.
- Alonso-Coello P, Schünemann HJ, Moberg J, et al. GRADE Evidence to Decision (EtD) frameworks: a systematic and transparent approach to making well informed healthcare choices. 1: Introduction. *BMJ.* 2016;353:i2016.
- Moberg J, Oxman AD, Rosenbaum S, et al. The GRADE Evidence to Decision (EtD) framework for health system and public health decisions. *Health Res Policy Systems.* 2018;16(1):45.
- National Center for Chronic Disease Prevention and Health Promotion. Accessed June 24, 2023. <https://www.cdc.gov/chronicdisease/about/prevent/index.htm>
- Look Ahead Research Group. The Look AHEAD Study: a description of the lifestyle intervention and the evidence supporting it. *Obesity.* 2006;14:737–752.
- Raynor HA, Anderson AM, Miller GD, et al. Partial meal replacement plan and quality of the diet at 1 year: Action for Health in Diabetes (Look AHEAD) trial. *J Acad Nutr Diet.* 2015;115:731–742.
- Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA. Diabetes Prevention Program Research Group. Reduction in the incidence of type 2 diabetes with lifestyle intervention or metformin. *N Engl J Med.* 2002;346:393–403.
- Look Ahead Research Group. Reduction in weight and cardiovascular disease risk factors in individuals with type 2 diabetes: one-year results of the Look AHEAD trial. *Diabetes Care.* 2007;30:1374–1383.
- Albert SM, Venditti EM, Boudreau RM, et al. Weight loss through lifestyle intervention improves mobility in older adults. *Gerontologist.* 2022;62(6):931–941.
- van Dammen L, Wekker V, de Rooij SR, Groen H, Hoek A, Roseboom TJ. A systematic review and meta-analysis of lifestyle interventions in women of reproductive age with overweight or obesity: the effects on symptoms of depression and anxiety. *Obes Rev.* 2018;19(12):1679–1687.
- Lasikiewicz N, Myrissa K, Hoyland A, Lawton CL. Psychological benefits of weight loss following behavioural and/or dietary weight loss interventions. A systematic research review. *Appetite.* 2014;72(1):123–137.
- Rubin RR, Wadden TA, Bahnson JL, et al. Look AHEAD Research Group. Impact of intensive lifestyle intervention on depression and health-related quality of life in type 2 diabetes: the Look AHEAD Trial. *Diabetes Care.* 2014;37(6):1544–1553.
- Cardel MI, Newsome FA, Pearl RL, et al. Patient-centered care for obesity: how health care providers can treat obesity while actively addressing weight stigma and eating disorder risk. *J Acad Nutr Diet.* 2022;122(6):1089–1098.
- Jebeile H, Libesman S, Melville H, et al. Eating disorder risk during behavioral weight management in adults with overweight or obesity: a systematic review with meta-analysis. *Obesity Reviews.* 2023;24(6). 2023;e13561.
- Centers for Disease Control and Prevention. What is health equity?. Accessed May 21, 2023. <https://www.cdc.gov/healthequity/whatis/index.html>
- Centers for Medicare & Medicaid Services, CMS Framework for Health Equity 2022–2032. Accessed November 29, 2023. <https://www.cms.gov/files/document/cms-framework-health-equity-2022.pdf>
- Academy of Nutrition and Dietetics. ANDHII. Accessed June 24, 2023. <https://www.andhii.org/>
- Alberga AS, Russell-Mayhew S, von Ranson KM, McLaren L. Weight bias: a call to action. *J Eat Disord.* 2016;7(4):34.
- Fruh SM, Nadglowski J, Hall HR, Davis SL, Crook ED, Zlomke K. Obesity stigma and bias. *The J Nurse Pract.* 2016;12(7):425–432.
- S.596 - Treat and Reduce Obesity Act of 2021. Published 2021. Accessed July 22, 2023. <https://www.congress.gov/bills/117/th-congress/senate-bill/596/text>
- Academy of Nutrition and Dietetics. Take action. Published 2023. Accessed July 22, 2023. <https://www.eatrightpro.org/advocacy/take-action>
- Hartmann-Boyce J, Theodoulou A, Oke JL, et al. Long-term effect of weight regain following behavioral weight management programs on cardiometabolic disease incidence and risk: Systematic review and meta-analysis. *Circ Cardiovasc Qual Outcomes.* 2023; e009348.
- National Academies of Sciences, Engineering and Medicine, Health and Medicine Division, Food and Nutrition Board. Roundtable on Obesity Solutions. The challenge of treating obesity and overweight: proceedings of a workshop. 2017. Accessed November 29, 2023.

- <https://nap.nationalacademies.org/read/24855/chapter/1>
35. Commission on Dietetic Registration. CDR'S interdisciplinary obesity and weight management certification. Accessed June 24, 2023. <https://www.cdrnet.org/interdisciplinary>
  36. McCabe CF, O'Brien-Combs A, Anderson OS. Cultural competency training and evaluation methods across dietetics education: a narrative review. *J Acad Nutr Diet.* 2020;120(7):1198-1209.
  37. Lekas H-M, Pahl K, Fuller Lewis C. Rethinking cultural competence: shifting to cultural humility. *Health Serv Insight.* 2020;13. <https://doi.org/10.1177/1178632920970580>
  38. Health Resources and Services Administration, National Center for Health Workforce Analysis. Sex, race, and ethnic diversity of U.S. health occupations (2011-2015). Accessed November 29, 2023. <https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/data-research/diversity-us-health-occupations.pdf>
  39. Dosedel E. Compensation and benefits survey 2021. *J Acad Nutr Diet.* 2021;121(11):2314-2331.
  40. Academy of Nutrition and Dietetics. Inclusion, diversity, equity and access. Accessed May 30, 2023. <https://www.eatrightpro.org/idea/inclusion-diversity-equity-and-access>
  41. Diversify Dietetics. Homepage. Published 2023. Accessed October 26, 2023. <https://www.diversifydietetics.org/>
  42. Academy of Nutrition and Dietetics. Academy of Nutrition and Dietetics strategic plan. Published 2021. Accessed July 22, 2023. [https://www.eatrightpro.org/-/media/files/eatrightpro/about-us/strategic-plan-april-2021\\_.pdf?rev=4ae6845187f04ed99207981ba93e5ea9&hash=A05151F06CA9F510624C22F3751C9C71](https://www.eatrightpro.org/-/media/files/eatrightpro/about-us/strategic-plan-april-2021_.pdf?rev=4ae6845187f04ed99207981ba93e5ea9&hash=A05151F06CA9F510624C22F3751C9C71)
  43. Baxter SD, Landry M, Rodriguez J, Cochran N, Sweat S, Dotimas L. Improved demographic data are needed for more accurate assessment of race/ethnic and gender diversity in the nutrition and dietetics profession. *J Crit Diet.* 2022;6(2):28-44.

## AUTHOR INFORMATION

This Academy of Nutrition and Dietetics position was approved by the Council on Research on October 20, 2023. The previous position paper was published in December 2015. The current position is in effect until December 31, 2030. Position papers should not be used to indicate endorsement of products or services. All requests to use portions of the position or republish in its entirety must be directed to the Academy at [journal@eatright.org](mailto:journal@eatright.org).

## REVIEWERS

The full draft of the Position Paper was reviewed internally by key Academy leaders. The Position Paper was then reviewed by the Academy's Council on Research. It was then posted on the Academy's professional website for member input. Any member was welcome to review and invited to answer questions about the Position Paper. Co-authors edited the manuscript, and it was reviewed by the Council on Research again.

Address correspondence to: Mary Rozga, PhD, RDN, Research, International, and Scientific Affairs, Academy of Nutrition and Dietetics, 120 S Riverside Plaza, Suite 2190, Chicago, IL 60606-6995. E-mail: [mrozga@eatright.org](mailto:mrozga@eatright.org)

## STATEMENT OF POTENTIAL CONFLICT OF INTEREST

H Raynor is the principal investigator on National Institutes of Health (NIH) grant on child weight management (5R01DK121360) and co-editor of the Academy's Weight Management Handbook. S. D. Baxter is project director on grant from National Center on Health, Physical Activity, and Disability. T. Halliday received grant funding from NIH R21 (R21DK115200) through June 2021, NIH KL2 award (KL2TR002539) through June 2023, and currently has a BUILD Dairy grant through the Western Dairy Center through December 2024 and an NIH K01 award (K01DK134800) through April 2026. N. Malik receives funding from Optimal Healthy Daily, LLC, for a podcast. M. Rozga is a dietitian employed by the Academy of Nutrition and Dietetics.

## FUNDING/SUPPORT

This Position Paper was funded by the Academy of Nutrition and Dietetics.

## ACKNOWLEDGEMENTS

The authors thank the reviewers listed above for their constructive comments and suggestions. The authors would also like to thank reviewers of the supporting systematic review and evidence-based practice guideline.

## AUTHOR CONTRIBUTIONS

All authors worked collaboratively to conceive of the research questions, eligibility criteria, and outcomes for the supporting systematic review and guideline. H. Raynor wrote the first draft of the Position Paper manuscript. All authors reviewed and edited the manuscript in detail and approved the final draft.