

April 3, 2022

Tara A. Schwetz, Ph.D. Acting Principal Deputy Director National Institutes of Health Bethesda, Maryland 20892 120 South Riverside Plaza Suite 2000 Chicago, Illinois 60606-6995 800.877.1600

1120 Connecticut Avenue NW Suite 460 Washington, D.C. 20036

Re: Request for Information (RFI): Inviting Comments and Suggestions on a Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility

## Dear Dr. Schwetz:

The Academy of Nutrition and Dietetics (the "Academy") appreciates the opportunity to respond to the National Institutes of Health (NIH) Office of Evaluation, Performance, and Reporting's request for information "Inviting Comments and Suggestions on a Framework for the NIH-Wide Strategic Plan for Diversity, Equity, Inclusion, and Accessibility" published in the Federal Register on September 3, 2021. Representing over 112,000 registered dietitian nutritionists (RDNs),¹ nutrition dietetic technicians, registered (NDTRs), and advanced-degree nutritionists, the Academy is the largest association of food and nutrition professionals in the United States and is committed to improving the nation's health through food and nutrition.

# A. Academy's Strategic Plan

The Academy's Strategic Plan² encourages a shift in focus toward health equity, social determinants of health, and transparent involvement of broader constituencies, which we believe are critical to incorporate and address for ourselves, more broadly, and throughout the federal government. It is well-established that racial and ethnic minorities experience unique health and wellness challenges—especially related to nutrition—and are at a greater risk of having food insecurity as well as obesity.³ Included in the Academy's strategic plan are goals to "increase equitable access to nutrition and lifestyle services" and

<sup>&</sup>lt;sup>1</sup> The Academy approved the optional use of the credential "registered dietitian nutritionist (RDN)" by "registered dietitians (RDs)" to more accurately convey who they are and what they do as the nation's food and nutrition experts. The RD and RDN credentials have identical meanings and legal trademark definitions.

 $<sup>^2 \</sup> A cademy \ of \ Nutrition \ and \ Dietetics \ Strategic \ Plan. \ eatright PRO.org. \ \underline{https://www.eatrightpro.org/-/media/eatrightpro-files/leadership/bod/strategic-plan/academy-of-nutrition-and-dietetics \ strategic-plan \ sep-2017.pdf?la=en\&hash=D00E3FE00D1475FB416E20004DECC3C136D5D7E5.$ 

<sup>&</sup>lt;sup>3</sup> Vaccaro JA, Huffman FG. Sex and Race/Ethnic Disparities in Food Security and Chronic Diseases in U.S. Older Adults. *Gerontol Geriatr Med.* 2017(3). doi:10.1177/2333721417718344. Published June 30, 2017. ("Although the national average of household food insecurity is 14%, it is 22.4% for Hispanic households and 26% for African American households as compared with 11% for White non-Hispanics." (Internal citations omitted.)).

<sup>&</sup>lt;sup>4</sup> Wang L, Southerland J, Wang K, et al. Ethnic Differences in Risk Factors for Obesity among Adults in California, the United States. *Journal of Obesity*. 2017;2017:10 pages. <a href="https://doi.org/10.1155/2017/2427483">https://doi.org/10.1155/2017/2427483</a>.

"increase the diversity and cultural competence of the workforce to reflect the communities they serve."  $^{5}$ 

In a 2020 statement, then-Academy President Linda T. Farr, RDN, CSOWM, LD, FAND, made clear "[t]he Academy of Nutrition and Dietetics believes American society, leaders and organizations must commit to doing more to address systemic racism and pervasive inequities across all facets of society." To do so, it is critical for the NIH all federal agencies to consider the *Guidelines'* recommendations and the implementation thereof through a health equity lens, recently described as "the examination of who experiences the benefits and burdens of policies and programs as well as the basis for differential experiences." We welcome the opportunity to partner with NIH to achieve its own "vision for embracing, integrating, and strengthening [diversity, equity, inclusion, and accessibility (DEIA)] across all NIH activities to achieve the NIH mission."

# B. Generate Clinical Evidence to Improve Generalizability of Clinical Trials

At the outset, we note that despite nutrition's preeminence in preventing our most prevalent chronic diseases, nutrition research is woefully, chronically underfunded among federal agencies, including the NIH, which invested only 5% of its 2018 total budget on nutrition research.<sup>8</sup> More specifically, there is a great need to support and prioritize research that includes persons from traditionally underrepresented groups, especially in clinical trials related to illnesses or diseases that have high prevalence or mortality rates among underrepresented groups. Generalizability or effectiveness of interventions may vary across groups, especially if the characteristics of treatment-seeking individuals vary. This is particularly salient to weight and blood lipid management, where prevalence may be high in some racial and ethnic minority populations but characteristics such as initial weight, response to medications, etc. may differ.<sup>9 10</sup> Moreover, priority for clinical trials or

<sup>&</sup>lt;sup>5</sup> Academy of Nutrition and Dietetics Strategic Plan. eatrightPRO.org. <a href="https://www.eatrightpro.org/-/media/eatrightpro-files/leadership/bod/strategic-plan/academy-of-nutrition-and-dietetics strategic-plan sep-2017.pdf?la=en&hash=D00E3FE00D1475FB416E20004DECC3C136D5D7E5.">https://www.eatrightpro.org/-/media/eatrightpro-files/leadership/bod/strategic-plan/academy-of-nutrition-and-dietetics strategic-plan sep-2017.pdf?la=en&hash=D00E3FE00D1475FB416E20004DECC3C136D5D7E5.</a>

<sup>&</sup>lt;sup>6</sup> A Message from Academy President Linda T. Farr, RDN, CSOWM, LD, FAND. Academy of Nutrition and Dietetics. <a href="https://www.eatrightpro.org/news-center/member-updates/from-our-leaders/a-message-from-academy-president-linda-t-farr">https://www.eatrightpro.org/news-center/member-updates/from-our-leaders/a-message-from-academy-president-linda-t-farr</a>. Accessed June 5, 2020.

<sup>&</sup>lt;sup>7</sup> Eyler AA, Valko CA, Macchi M, et al. Adjusting the Equity Lens: Gaps in Addressing Health Equity in State Chronic Disease Prevention. *Health Equity*. 2019;3(1):86-91. doi:10.1089/heq.2018.0075. Published March 29, 2019. *citing* Pertillar T, Pobutsky A, Brandt G, et al. Assessment of funding and other capacity needs for health equity programming. *J Health Dispar Res Pract*. 2017;9(Special Issue):72–94.

<sup>&</sup>lt;sup>8</sup> Boudreau C, Evich HB. How Washington keeps America sick and fa. Politico.com. <a href="https://www.politico.com/news/agenda/2019/11/04/why-we-dont-know-what-to-eat-060299">https://www.politico.com/news/agenda/2019/11/04/why-we-dont-know-what-to-eat-060299</a>. Published November 4, 2019.

<sup>&</sup>lt;sup>9</sup> Naito, R., Miyauchi, K., & Daida, H. 2017. Racial Differences in the Cholesterol-Lowering Effect of Statin. J Atheroscler Thromb 24(1): 19-25.

 $<sup>^{10}</sup>$  Franko, D., Thompson-Brenner, H., Thompson, D., et al. 2012 Racial/ethnic differences in adults in randomized clinical trials of binge eating disorder. J Consult Clin Psychol 80(2): 186-95.

other research that include significant numbers of persons from underrepresented groups need to include a patient-centered focus. $^{11\ 12\ 13}$ 

# C. Diversity, Research Needs, and the Dietary Guidelines for Americans

The importance of this need for greater generalizability was made clear during the development of the 2020-2025 Dietary Guidelines for Americans in the midst of a once-in-a-century global pandemic. The pandemic disproportionately impacted certain minority and at-risk communities — specifically African American, Latino, and low socioeconomic status ("low SES") communities—in addition to the majority of Americans either with or at-risk of developing nutrition-related chronic conditions, such as overweight and obesity,<sup>14</sup> diabetes and prediabetes,<sup>15</sup> high blood pressure and other risk factors of cardiovascular disease,<sup>16</sup> and compromised immunity.<sup>17</sup> The disparate impact underscores the need for research and guidelines applicable to all Americans; unfortunately, we note the Scientific Advisory Committee's repeated admonition that studies "may not be completely generalizable to the U.S. population as the result of differing participant characteristics," because of studies not adjusted for "key confounders, such as race/ethnicity." <sup>19</sup>

The Dietary Guidelines Scientific Advisory Committee also recognized the extent to which the nutrition research it reviewed failed to reflect the diversity of the American population comprising the 'general public' and the concomitant need for well-implemented recommendations that address both health disparities and cultural variations in dietary pattern consumption. Their Scientific Report details that the evidence base for many analyses came from studies predominantly on white, upper middle class individuals

 $<sup>^{11}</sup>$  Noah, B. 2003. The participation of underrepresented minorities in clinical research. Am J Law Med 29(2-3): 221-45.

 $<sup>^{\</sup>rm 12}$  Fisher, J. & Kalbaugh, C. 2011. Challenging Assumptions About Minority Participation in US Clinical Research. Am J Public Health 101(12): 2217-22.

<sup>&</sup>lt;sup>13</sup> Frank, L., Basch, E., Selby, J., & the Patient-Centered Outcomes Research Institute. 2014. The PCORI perspective on patient-centered outcomes research. JAMA 312(15): 1513-4.

<sup>&</sup>lt;sup>14</sup> Fryar CD, Carroll MD, Ogden CL. Prevalence of overweight, obesity, and severe obesity among adults aged 20 and over: United States, 1960–1962 through 2015–2016. *National Center for Health Statistics*. 2019 November.

 $https://www.cdc.gov/nchs/data/hestat/obesity\_adult\_15\_16/obesity\_adult\_15\_16.pdf?fbclid=IwAR21UAAe-08HkKPv-GDcoa4-sikpSZanba2LXX5uz1QgbeodwX5NADxSEl8. Accessed August 13, 2020.$ 

<sup>&</sup>lt;sup>15</sup> Centers for Disease Control and Prevention. A Snapshot: Diabetes in the United States. 2017 November. <a href="https://www.cdc.gov/diabetes/library/socialMedia/infographics.html">https://www.cdc.gov/diabetes/library/socialMedia/infographics.html</a>. Accessed August 13, 2020.

<sup>&</sup>lt;sup>16</sup> Whelton PK, Carey RM, Aronow WS, et al. 2017

ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults. *Journal of the American College of Cardiology*. 2018;71(19). doi:10.1016/j.jacc.2017.11.006.

<sup>&</sup>lt;sup>17</sup> How Many Americans are Immunocompromised? Berman Institute Bioethics Bulletin. http://bioethicsbulletin.org/archive/how-many-americans-are-immunocompromised.

<sup>&</sup>lt;sup>18</sup> Boushey C. 2020 Dietary Guidelines Advisory Committee Public Meeting. [transcript]. March 12, 2020. 176. https://www.dietaryguidelines.gov/sites/default/files/2020-06/2020*DGA*CMtg5TranscriptDay1FINAL.pdf. <sup>19</sup> *Id.* at 140.

that often failed to be adjusted for important "potential confounders, such as race/ethnicity [and] socioeconomic status."<sup>20</sup> Other Scientific Report conclusions include:

- For example, with regard to dietary patterns before and during pregnancy and GDM, the Scientific Report recognized, "Generalizability of the studies is limited to healthy White women who have access to health care. Women of other races and ethnicities and those of lower socioeconomic status are underrepresented in this body of evidence. A major reason for grading this evidence as "limited" was the lack of adequately powered randomized controlled trials, few cohorts contributing to the observational studies, issues with risk of bias including self-reported exposure and outcome, and limited generalizability."<sup>21</sup>
- With regard to gestational weight gain and dietary patterns consumed during pregnancy, the Committee found "[p]eople with lower socioeconomic status (SES), adolescents, and racially and ethnically diverse populations were underrepresented in the body of evidence."<sup>22</sup>
- Similarly with regard to dietary patterns consumed during pregnancy and hypertension, the report concluded "[l]imited evidence in healthy Caucasian women with access to health care suggests dietary patterns before and during pregnancy higher in vegetables, fruits, whole grains, nuts, legumes, fish, and vegetable oils and lower in meat and refined grains are associated with a reduced risk of hypertensive disorders of pregnancy, including preeclampsia and gestational hypertension."<sup>23</sup>
- Regarding supplementation during infancy and childhood, "[i]nformation on race and/or ethnicity of the participants was not provided in most of the studies. The countries of study origin were Canada, the United States, and Finland, but without knowing more about the characteristics of the participants, it is difficult to judge the potential risk factors for vitamin D deficiency that may have been present."
   Specifically, for vitamin D, the Committee emphasized "[f]uture studies should be appropriately powered, include racially and ethnically diverse samples, and report baseline infant vitamin D status, human milk vitamin D content, and sun exposure."
- The Committee also found "[e]vidence is insufficient to estimate the association between dietary patterns before and during pregnancy and risk of hypertensive

<sup>&</sup>lt;sup>20</sup> Boushey C. 2020 Dietary Guidelines Advisory Committee Public Meeting. [transcript]. March 12, 2020. 176. https://www.dietaryguidelines.gov/sites/default/files/2020-06/2020DGACMtg5TranscriptDay1FINAL.pdf.

<sup>&</sup>lt;sup>21</sup> Scientific Report at 206.

<sup>&</sup>lt;sup>22</sup> Scientific Report at 210.

<sup>&</sup>lt;sup>23</sup> Scientific Report at 206.

<sup>&</sup>lt;sup>24</sup> Scientific Report at 423.

<sup>&</sup>lt;sup>25</sup> Scientific Report at 423-424.

disorders of pregnancy in minority women and those of lower socioeconomic status."<sup>26</sup>

- The Committee's finding that "[a] distinct advantage of these structured patterns is the replication and comparability of study findings. On the other hand, these patterns may not represent all cultural or regional variations of dietary intakes."<sup>27</sup>
- "Understanding the extent to which the entire population and various subgroups
   (e.g. age, sex, race and ethnic origin, food security status, income) achieve food
   group and food component intake recommendations is the foundation for tailoring
   powerful public health communication strategies focusing first on food-based
   strategies..."<sup>28</sup>

The Academy underscores the Committee's recognition that many of the studies relied upon in their Scientific Report only or primarily included white women with access to health care as study participants.<sup>29</sup> These limitations represent a critical impediment to the generalizability of evidence and recommendations. Unrepresented and unstudied demographics represent a majority of the population and the lack of relevant studies examining them raises questions as to their applicability to the general public.

For example, supplementation in infants is understudied, including iron supplementation for infants with iron deficiencies, <sup>30</sup> recognizing the frequency that iron supplementation is appropriate for breast-fed infants, and more research is needed across a racially and ethnically diverse infant population to understand the impacts of iron supplementation on "growth, including potential effects on morbidity, the microbiome, zinc and copper status, and oxidative stress or lipid peroxidation."<sup>31</sup> In addition, there currently exists no standard reference for the nutritional value for human milk that spans the full course of lactation.<sup>32</sup> Needed research includes analysis of milk from a diverse population of women with children of varying ages. Samples should also be linked to data on maternal diet and relevant demographic characteristics such as age and parity to better understand how these characteristics affect milk composition.

We strongly encourage the NIH to work with USDA and HHS to initiate and fund a call to action for these and more research questions and study designs dedicated to accounting for underrepresented groups that also examine different family structures. **The lack of evidence relevant to minority and low SES populations remains a weakness in the** 

<sup>&</sup>lt;sup>26</sup> Scientific Report at 206.

<sup>&</sup>lt;sup>27</sup> Scientific Report at 476.

<sup>&</sup>lt;sup>28</sup> Scientific Report at 96.

<sup>&</sup>lt;sup>29</sup> Scientific Report at 206 ("Generalizability of the studies is limited to healthy White women who have access to health care. Women of other races and ethnicities and those of lower socioeconomic status are underrepresented in this body of evidence. A major reason for grading this evidence as 'limited' was the lack of adequately powered randomized controlled trials, few cohorts contributing to the observational studies, issues with risk of bias including self-reported exposure and outcome, and limited generalizability.").

<sup>&</sup>lt;sup>30</sup> *Id.* at 786.

<sup>31</sup> Ibid.

<sup>&</sup>lt;sup>32</sup> *Id*.at 768.

**literature and needs to be elevated as a priority going forward.** Related to health disparities, we urge the NIH to undertake, fund, or advocate for more research on minority groups and birth outcomes, such as the effects of vitamin D supplementation on birth outcomes in Black mothers.<sup>33</sup>

# D. Supporting Health Equity

While exploring the areas of precision medicine and nutrition, it is important for the NIH to not lose site of the value of investing in interventions that have the potential to be received by those at the intersection of highest risk and lowest resources. Expensive medications and medical devices are not always accessible to the patients who need them. Research on interventions which are more cost-effective but have long range impact on outcomes, such as increased access to healthy foods for pregnant women and children, need to be equally prioritized. Overweight, obesity and inflammation are root causes of many of the conditions broadly addressed by the NIH's research and thus the NIH should be focusing on improving the health of communities where these diseases are most prevalent and the causes of these diseases.

# E. Supporting Researchers from Underrepresented Backgrounds

The Academy applauds goals for increased support for researchers from backgrounds underrepresented in science. We specifically call out that junior faculty and researchers need support and mentorship, including more opportunities for small grants to participate on study sections and network, particularly in an environment with limited budget and restrictions to human research.

## F. Opportunities for Collaboration

Racial/ethnic groups, as typically categorized in the United States, are not monolithic and represent a diversity of cultures, nationalities, and languages and research must take this heterogeneity into account. The Academy encourages the NIH to include these intersectional considerations when addressing DEIA in its internal and extramural workforce, its structure and culture, and the research it supports. Targeted research focusing on specific racial and ethnic groups is essential for researchers and practitioners to have a better understanding of minority populations and to address the specific diseases that are predominate among these individual groups. Collaborations that could help address these disparities include strategic partnerships with organizations that have an interest in minority health outcomes such as:

• The Academy of Nutrition and Dietetics: The Academy is home to several member interest groups (MIG) that represent nutrition professionals from a variety

<sup>33</sup> See, e.g., Bodnar LM, Simhan HN. Vitamin D may be a link to black-white disparities in adverse birth outcomes. *Obstet Gynecol Surv*. 2010;65(4):273-284. <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222336/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3222336/</a>. doi:10.1097/OGX.0b013e3181dbc55b

of racial and ethnic minority background. The National Organization of Blacks in Dietetics and Nutrition (NOBIDAN) is the largest member interest of group of the Academy, with over 600 nutrition and dietetics practitioners who are African American or of African-decent.<sup>34</sup> The Latinos and Hispanics in Dietetics and Nutrition (LAHIDAN) MIG is the oldest member interest group of the Academy, devoted to the improvement of food, nutrition and health care for Latinos and Hispanics in the United States and its territories.<sup>35</sup> The Asian Americans and Pacific Islanders (AAPI) member interest group promotes culturally-relevant evidence-based nutrition and dietetics practice for people of Asian or Pacific Islander origin.<sup>36</sup> The Indians in Nutrition and Dietetics (IND) MIG brings together practitioners of [South Asian] Indian origin and those interested in learning more about this culture.

- National Minority Quality Forum: NMQF is a research and educational
  organization that aims to ensure that high-risk racial and ethnic populations and
  communities receive optimal health care. The organization integrates data and
  expertise in support of initiatives to eliminate health disparities.
- **National Medical Association**: NMA is the oldest national organization representing African American physicians and their patients in the U.S.; this professional and scientific organization represents the interests of more than 30,000 African American physicians and the patients they serve.

#### **G.** Additional Recommendations

The Academy also notes the relevance of comments from the American Society for Nutrition (ASN) in response to NIH's Request for Information "Inviting Comments and Suggestions to Advance and Strengthen Racial Equity, Diversity, and Inclusion in Biomedical Research and Advance Health Disparities and Health Equity Research" submitted electronically April 9, 2021, and encourages the NIH to consider recommendations therein.

#### H. Conclusion

The Academy appreciates the opportunity to comment to the NIH on request for information on its strategic plan for DEIA. Please contact either Jeanne Blankenship at 312-899-1730 or by email at jblankenship@eatright.org or Pepin Tuma at 202-775-8277 x6001

<sup>34</sup> https://www.nobidan.org/home

<sup>35</sup> https://www.eatrightlahidan.org/home

<sup>&</sup>lt;sup>36</sup> https://www.aapimig.org/home

<sup>&</sup>lt;sup>37</sup> American Society for Nutrition (ASN) Comments in Response to the National Institutes of Health (NIH) Request for Information (RFI): Inviting Comments and Suggestions to Advance and Strengthen Racial Equity, Diversity, and Inclusion in Biomedical Research and Advance Health Disparities and Health Equity Research Available at <a href="https://media.nutrition.org/wp-content/uploads/2021/04/NIH-Submission-Form-Responses.4.9.2021.pdf">https://media.nutrition.org/wp-content/uploads/2021/04/NIH-Submission-Form-Responses.4.9.2021.pdf</a>. Accessed March 28, 2022.

or by email at ptuma@eatright.org with any questions or requests for additional information.

Sincerely,

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Signi 1.1-

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