



Drs. Nicastro and Lynch
NIDDK Office of Nutrition Research
nutritionresearch@nidk.nih.gov

November 15, 2020

Dear Drs. Nicastro and Lynch,

The [Society for Nutrition Education and Behavior \(SNEB\)](#) thanks the National Institutes of Health (NIH) for putting forth its [first strategic plan for NIH nutrition research](#). We also appreciate the invitation to provide comments on the data science challenges and opportunities in precision nutrition ([NOT-RM-21-005](#)).

SNEB represents the interests of more than 1,100 nutrition educators worldwide. We are dedicated to promoting effective food and nutrition education and healthy behaviors through research, policy, and practice that promote equity and support public and planetary health. Collectively, SNEB members have unique and valuable expertise on how to build healthy communities and food systems. Our members also work with individuals, families, and communities to achieve behaviors consistent with healthy lifestyles. Every day, our members help shape and translate nutrition research across multiple sectors and settings and in a variety of ways.

We greatly appreciate your consideration of our five enclosed comments as you move forward on your precision nutrition initiative and nutrition strategic plan. I am happy to discuss any questions you may have and I would greatly appreciate an invitation to address the importance of nutrition education and behavior at your [upcoming workshop](#), specifically, Section 6: Putting It All Together. Feel free to contact me at president@sneb.org and 317-328-4627.

Sincerely,

A handwritten signature in black ink that reads "Pamela Koch". The signature is written in a cursive, flowing style.

Pamela Koch, EdD, RDN
President, Society for Nutrition Education and Behavior

1) Education is critical to achieving healthful eating patterns; yet, it is consistently a missing component from NIH nutrition approaches

Leveraging new technologies and data science resources and approaches, such as personalized or precision nutrition, is exciting. But the need for individuals to change behaviors is the underlying assumed expectation that is needed to change dietary behaviors. Effectively communicating the findings that evolve from our national investment in this initiative are critical, especially for our most vulnerable populations that bare a disproportionate burden of diet-related chronic diseases. However, too often these vulnerable populations do not have a voice at the table in creating research initiatives aiming to improve their eating behaviors. Translating that knowledge into action will be necessary. Hence, we recommend in your forthcoming workshop and future steps implementing this novel initiative to better integrate nutrition educators and communicators, as well as investing in community-based participatory research that provides the formative work necessary to develop contextually and culturally relevant messages regarding this evolving area of science. Adding doctoral level expertise to the NIDDK Office of Nutrition Research in nutrition education and behavior, dietary guidance translational and implementation science, and nutrition communications is invaluable to reaching your goal of providing an evidence base for individualized dietary/nutrition recommendations.

While we appreciate the NIH's efforts to help build the evidence base to provide more effective individualized dietary recommendations, complementary investments should go into supporting the evidence base needed to strengthen our population level *Dietary Guidelines for Americans*, the cornerstone for many federal nutrition programs and policies. As described in a recent [report on national nutrition research](#), successive Dietary Guidelines Advisory Committees from the 1980 edition onwards have documented persistent, major research gaps for setting evidence-based guidelines. [A recent NIH analysis](#) of NIH-supported research grants and cooperative research projects between 2012-2017 determined [only 1.3%](#) of all research projects supported by NIH in recent years focused on the role of diet in the prevention or treatment of disease in humans. [Another recent NIH analysis](#) similarly reported large mismatches exist between the top causes of poor health versus research funding to address them, with the largest gap being for nutrition.

The NIDDK Office of Nutrition Research provided limited federal support to the Scientific Report of the 2020 Dietary Guidelines Advisory Committee (DGAC), which is instrumental to informing the *Dietary Guidelines for Americans* (DGA). As the NIH's current lead authority on nutrition research, we need this Office to work more closely with the HHS Office of Disease Prevention and Health Promotion and the USDA Center for Nutrition Policy and Promotion. Specific areas include: (1) Addressing the nutrition research gaps identified by the 2020 DGAC; and (2) Devising more effective and transparent strategies to communicate the outcomes of this precision nutrition initiative and broader nutrition research findings back to the DGA federal team and more

effectively shaping future editions of the DGAs. More transparent plans on how these evolving findings will be communicated to a variety of stakeholders is essential.

As pointed out in the [report on national nutrition research](#), the NIH and USDA need to provide more updated guidance to the public on the division of responsibility between the NIH and USDA when it comes to dietary guidance for prevention versus dietary guidance for clinical disease states. This is particularly important as more attention has been given to diet-related health disparities. Our hope is these contemporary discussions could move forward more progressive and transparent collaborative approaches, particularly maximizing this precision nutrition initiative in addition to more effectively addressing knowledge gaps and opportunities to reduce diet-related health disparities and strengthen the public health impacts of our social safety net.

2) Translational and implementation science investments are essential

Eating behavior is addressed in the NIH strategic plan and in this call for comments; however, the description in the strategic plan is out of touch with the state of the science. Further implementation efforts should ensure internal and external expertise is sought in behavioral science with particular specialization in eating behaviors among vulnerable populations. Identifying individualized dietary recommendations is helpful but without a better understanding of how to change behavior we will not see the promise of precision nutrition come to fruition. Data to prioritize include analyses that would provide more insights on how the food environment influence eating behaviors and health outcomes. Moreover, data that can provide insights on the social determinants of health and commercial determinants of food choices that have significant influence on the availability, accessibility and affordability of foods and beverages should be prioritized.

Adding doctoral level expertise to the NIDDK Office of Nutrition Research in nutrition education and behavior, dietary guidance, translational and implementation science, and nutrition communications will be invaluable to ensuring we can effectively communicate the findings of a precision nutrition initiative, particularly to the most vulnerable populations. Additional investments in translational and implementation science research are necessary to show the complexity of people's lives and how to make our messages more culturally and contextually relevant, especially given inequities and the challenges of our food supply that is dominated by ultra-processed foods and beverages.

3) Our social safety net should be a prioritized data consideration

Stronger, more coordinated partnerships with the USDA should be prioritized to make necessary investments in administrative data critical to better understanding the role and potential for strengthening our social safety net, particularly our suite of 15 federal nutrition assistance programs. This call for comments, nor the NIH strategic plan explicitly discuss our social safety net, federal nutrition assistance, nor meaningful new relationships with the USDA – not even in Objective 3.3 that focuses on infant developmental and health outcomes, even though about half of all infants born in this

country participate in the [USDA Special Supplemental Nutrition Program for Women, Infants, and Children \(WIC\)](#).

High quality data relevant to our food environment, including authorized [SNAP](#) and WIC retail outlets, should also be prioritized in the precision nutrition initiative. Evidence indicates the food environment influences diet-related chronic diseases, particularly among racial/ethnic minority, low-income, and rural communities. The food environment is mentioned 8 times in the NIH nutrition strategic plan and there are two references to environmental data in this call for comments. Without question, recommending foods and beverages to eat to an individual or community where those foods and beverages are not available has repeatedly been demonstrated to be contextually insensitive and an ineffective approach.

4) Address ethical, legal and social implications of precision nutrition

Similar to the investments made at the launch of [the Human Genome Project](#), the NIH should build in a substantial program to focus on ethical, legal and social implications of precision nutrition. This is particularly sensitive around issues of [discrimination](#) and as our nation grapples with the impact of preexisting conditions on healthcare insurance. The precision nutrition initiative has not fully acknowledged or examined these complex issues thus far and a better understanding of the ethical, legal, and social implications will be necessary for any legislative and regulatory responses to the evidence generated from this new initiative. The Human Genome Project devoted 3% to 5% of their annual project budgets towards studying the ethical, legal, and social issues surrounding the availability of genetic information. Efforts should be made to build on these investments and learn from the successes and shortcomings of what became known as the world's largest bioethics program.

5) Strengthen the authority, coordination, and funding for NIH nutrition science

SNEB stands with a [growing coalition of 70+ organizational supporters](#) for strengthening federal nutrition research, including at the NIH. As explained in the [national nutrition research report](#), the promise of precision nutrition has been hampered by inadequate funding and coordination. Besides NIH, other departments and agencies, including USDA, DoD, FDA, NSF, NASA, and VA, have expressed great interest in personalized or precision nutrition. With new appropriations for the NIH precision nutrition initiative, we ask the NIH to take a whole-of-government approach to better leverage and harness the potential and powerful, expensive 'omics platforms and related data science advances to develop personalized recommendations.

Much work is needed to advance our understanding of providing individualized dietary recommendations. But, this work cannot be done in a silo, particularly without the USDA. Other key reasons to work closely with the DGA team at USDA and HHS and the federal nutrition assistance programs at USDA is to: (1) Avoid duplication; (2) Leverage whole-of-government investments across multiple relevant departments



and agencies, including public-private partnerships, such as [the USDA Branded Food Products Database](#); and (3) Develop and disseminate more coordinated messages to key stakeholders within the government, non-government, industry, academic sectors and, mostly importantly, the public. Avoiding confusion is of utmost importance.

SNEB will do our part to advocate for increased investments, authority and coordination and we appreciate the internal NIH efforts to do the same. A dedicated staff of only 4.5 FTE is inadequate to launch an effective precision nutrition initiative, nor tackle the leading cause of chronic diseases and profound health disparities crippling our nation's economy. We can do better.