



ASN Highlights the Need for Multiple Methods Within Nutrition Research to Advance the Field

Paul M Coates

The author is the 2021–2022 President of the American Society for Nutrition.

© The Author(s) 2022. Published by Oxford University Press on behalf of the American Society for Nutrition. This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited. For commercial re-use, please contact journals.permissions@oup.com. Published online July 8, 2022.

The author, Dr. Coates, retired in 2018 as Director of the Office of Dietary Supplements (ODS), a division of the National Institutes of Health (NIH). He is currently President of ASN.

Address correspondence to PMC (e-mail: coatespm@gmail.com).

The more than 8500 nutrition scientists and researchers that make up the American Society for Nutrition (ASN) use a wide variety of methodologies in their research. Each has a place and, when used and interpreted appropriately, helps to build the evidence base required to make informed decisions in basic research and clinical practice, as well as in policy development and implementation. To emphasize this point, in May 2020, the ASN Board of Directors commissioned a task force to prepare a white paper to highlight the strengths, limitations, and interpretations of the broad spectrum of methods used in nutrition science and how they work synergistically. The white paper, “Valuing the Diversity of Research Methods to Advance Nutrition Science,” is published in the Society section of *Advances in Nutrition* (1).

While the primary audience for this white paper is the world of nutrition researchers and other nutrition professionals, improved understanding of the many methods used in nutrition research is also important for the various audiences that translate nutrition research, including journalists, educators, clinicians, and policy-makers. In fact, the genesis of this white paper was a growing concern by the ASN Board of Directors regarding polarization within the nutrition science community and other audiences and the negative implications that this discord can have on the translation and application of nutrition science. Too often, differences of opinion are shaped as conflicts when they should be considered as areas of needed collaboration, where all methods in nutrition science may be used in a complementary fashion to advance health and well-being.

The ASN assembled a task force made up of 15 ASN members in July 2020, led by 2 coauthors, and tasked the group with drafting this white paper. We take this opportunity to thank the chairs and members of the task force for their diligent efforts. The review of research methodologies was completed through the lens of precision nutrition, as this has been identified as a high-priority future research direction. This was done to emphasize the essentiality of data harmonization, rather than speaking to the specific issue of precision nutrition. To support this view,

the task force identified 7 broad categories in nutrition science in which to review common research methods:

- Health disparities
- Cognitive performance and behaviors
- Dietary assessment
- Nutritional status
- Genetics and epigenetics
- Microbiome
- Cross-cutting considerations

The authors note how each category of nutrition research methodology provides important and unique information; however, they also identified limitations in the methods and the conclusions that can be drawn from different research approaches. These limitations underscore the fact that no single approach is sufficient to comprehensively address many of the questions in nutrition science. In many sections of the report, therefore, it is noted that the greatest value comes from combining research methods.

The ASN Board of Directors believes that the ASN membership will find “Valuing the Diversity of Research Methods to Advance Nutrition Science” to be a crucial document to help understand research methods and areas of study within nutrition science beyond their own. We urge ASN members to embrace and communicate the main message of this report: that all research methods used by nutrition scientists have value and, when combined, build the strongest evidence base to support advancement of our field.

References

1. Mattes RD, Rowe SB, Ohlhorst SD, Brown AW, Hoffman DJ, Liska DJ, et al. Valuing the diversity of research methods to advance nutrition science. *Adv Nutr* 2022; doi: 10.1093/advances/nmac043.