Consensus Study Report

HIGHLIGHTS

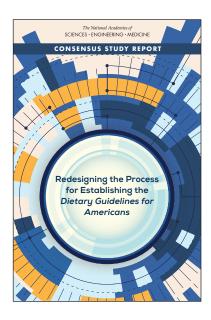
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Redesigning the Process for Establishing the *Dietary Guidelines for Americans*

The *Dietary Guidelines for Americans (DGA)* is the primary federal source of consistent, evidence-based nutritional and dietary information for promoting health and preventing chronic disease. The *DGA* informs federal food and nutrition programs, such as the National School Lunch Program, and serves as the basis for manufacturers to develop healthier products. The *DGA* has the promise to empower Americans to make informed decisions about what and how much they eat and has the potential to improve overall population health.

It is important that the *DGA* be viewed as valid, evidence-based, and free of bias and conflicts of interest, but questions have been raised as to whether this is the case. In response to recent challenges to federal nutrition guidance, Congress mandated that the National Academies of Sciences, Engineering, and Medicine (the National Academies) evaluate the process used to create the *DGA*. This mandate resulted in two reports. The first report, *Optimizing the Process for Establishing the* Dietary Guidelines for Americans: *The Selection Process*, highlighted opportunities to improve the Dietary Guidelines Advisory Committee (DGAC) selection process. This second report, *Redesigning the Process for Establishing the* Dietary Guidelines for Americans, offers a comprehensive review of the rest of the process used to update the *DGA*.

The National Academies committee's charge is to assess the process, not to evaluate the substance of the *DGA* or their use. As such, the findings in this report should not be considered as judgments about the quality of prior *DGA* reports.



OVERVIEW OF THE CURRENT DGA PROCESS

The figure below shows the existing primary steps for updating the *DGA* every 5 years, which is a complex, multistep process. A panel of nationally recognized experts, the DGAC, independently evaluates the scientific research and writes a report that serves as the scientific basis for the next edition of the *DGA*. The U.S. Department of Agriculture (USDA) and the U.S. Department of Health and Human Services (HHS) jointly review and author the *DGA*.

Over its more than 30-year history, the process for updating the *DGA* has become more evidence-based. However, the process has not been reconsidered in a way that allows it to adapt to changes, such as those in food diversity and prevalence of chronic diseases, while also maintaining the integrity of the process.

FINDINGS AND CONCLUSIONS

Some of the specific opportunities for improvements to the process identified by the National Academies committee include:

- more consistent interpretation of purpose and target audiences of the DGA;
- greater transparency of the overall process; and
- more rigorous methodological approaches to evaluation of evidence.

STEP 1 MONTHS 0-27
USDA and HHS complete administrative tasks and appoint Dietary Guidelines Advisory Committee

STEP 2 MONTHS 27-48
Dietary Guidelines Advisory Committee reviews science and produces an advisory report

STEP 3 MONTHS 48-60
USDA and HHS solicit and review comments on the advisory report from the public (months 48–50) and federal agencies

STEP 4 MONTHS 50-60
USDA and HHS update and release the Dietary Guidelines for Americans

Overview of the current DGA process

The scope of the *DGA* should also be broadened such that future editions focus on the general public across the entire life span, including all Americans whose health could benefit by improving diet, and not just healthy Americans ages 2 years and older.

The National Academies committee identified five values to improve the integrity of the process:

- *enhance transparency* to engender trust in the process;
- promote diversity of expertise and experience, including stakeholders such as the public, advocacy, food sector, academia, and professional organizations;
- support a deliberative process by obtaining input from multiple types of stakeholders and by adopting a process adaptable to changes in purpose and advances in evidence;
- manage biases and conflicts of interest, both financial and nonfinancial, to promote independence in decision making; and
- adopt state-of-the-art processes and methods, using validated, standardized processes and the most up-to-date data.

RECOMMENDED ACTIONS

A redesigned process can help achieve the stated goals and contribute to the credibility of the *DGA* and the trustworthiness of the process. Redesign can also improve the agility of the process and promote continuity of focus in key areas.

The National Academies committee recommends redistributing the current functions of the DGAC to allow for more targeted expertise and more time to deliberate and engage stakeholders. First, the committee recommends that a Dietary Guidelines Planning and Continuity Group be formed to allow for strategic planning, ongoing monitoring of evidence, and topic prioritization. If put into place, this group would be able to guide what topics would be reviewed for the next *DGA* cycle, as not all topics require a detailed review every 5 years. Second, technical expert panels should be used to provide content and methodological consultation during evidence evaluation.

The use of these panels would broaden the types of people who could help inform the development of the *DGA*. Third, a Dietary Guidelines Scientific Advisory Committee (DGSAC) should interpret the scientific evidence and draw conclusions on which the *DGA* would be based.

The federal writing team—the group that updates the *DGA*—should adhere to explicit and transparent standards for developing evidence-based guidelines and recommendations. Rationale for decisions made in regard to conclusions from the scientific report should be clearly stated, and omissions or deviations should be explicitly outlined by the secretaries of USDA and HHS.

The DGA has to be based on the highest standards of scientific data and analyses to reach the most robust recommendations. The steps used currently to evaluate the science are generally reasonable, but there are many ways in which the analyses need to be strengthened. For example, the Nutrition Evidence Library (NEL) was established to conduct evidence-based, systematic reviews in part to inform the DGA. A multipronged approach is needed to strengthen the NEL protocol. The National Academies committee recommends the roles of the NEL and the proposed DGSAC be clearly delineated to ensure the integrity of the review of the science, as well as incorporation of formal peer review. The NEL should also maintain state-of-the-art systematic review methods by enabling training of staff and collaboration with other groups, and investing in technological infrastructure.

Diet constitutes an extremely complex system of exposure that is known to influence health, and modeling can help to make sense of that complex system. Food pattern models should be enhanced to better reflect the complex interactions involved as well as the range of healthful diets. These models will be most useful as methods are strengthened to adapt to new areas of science, a better appreciation of the systems involved is formed, more systems science methods become available, and technology becomes increasingly more sophisticated.

The accuracy and efficiency of data analyses could be improved by standardizing and validating the processes used, both within and between *DGA* cycles, to identify nutrients of concern.¹ Standardization would

lead to consistent development of quantitative thresholds of inadequacy or excess to facilitate comparisons of descriptive data analyses over time, benefiting practitioners, consumers, and the food sector.

To understand and account for the interrelated factors at play in both population and individual health, the committee recommends making strides toward integrating systems mapping and modeling. When integrated fully into the *DGA* process, systems thinking can potentially influence the *DGA* recommendations based on a comprehensive knowledge of the relationships of interest between diet and health. The secretaries of USDA and HHS should commission research and evaluate strategies to begin to develop and implement systems approaches into the *DGA*.

CONCLUSION

Paired with the first report, which recommended ways to enhance transparency and minimize bias and conflicts of interest in the DGAC member selection process, this comprehensive review aims to provide a more agile, efficient, and effective process to improve the relevance and usefulness of the DGA.

¹ Nutrients of concern are nutrients that may be a substantial public health concern and are determined by evaluating the prevalence of nutrient inadequacies and excesses in the U.S. population and select population groups.

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To read the full report and to view related resources, please visit **nationalacademies.org/DGAreview**

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