

# Perspective: Challenges and Controversial Issues in the Dietary Guidelines for Americans, 1980–2015

#### **Marion Nestle**

Department of Nutrition and Food Studies, New York University, New York, NY

#### ABSTRACT

Since 1980, every edition of the Dietary Guidelines for Americans (DGAs) has recommended increased consumption of fruits, vegetables, and whole grains, but reduced consumption of saturated fat, sugars, and sodium and, therefore, their primary food sources. Every edition has generated controversy, mainly from producers of foods affected by "eat less" recommendations, particularly meat. Objections to the 2015 DGAs focused on environmental as well as scientific issues, but also on purported conflicts of interest among members of the Dietary Guidelines Advisory Committee. On this basis, critics induced Congress to authorize the National Academy of Medicine (NAM) to review the process of drawing up the guidelines. The NAM's 2017 reports should strengthen the process, but as long as science continues to support advice to reduce consumption of targeted foods, the guidelines will continue to elicit political controversy. *Adv Nutr* 2018;9:148–150.

Keywords: dietary guidelines, science vs. politics, meat industry, food policy, public policy, public health

## Introduction

The USDA and the US Department of Health and Human Services (HHS) have issued Dietary Guidelines for Americans (DGAs) every 5 y since 1980. Because the DGAs influence federal nutrition policy and can affect sales of targeted foods and beverages, they are of intense interest to the food industry (1). The producers of foods high in saturated fat, sugars, and sodium lobby relentlessly against guidelines suggesting that the intake of meat should be reduced, for example. In response to industry pressures, the 1980 guidelines addressed meat intake only indirectly; they advised Americans to "avoid too much fat, saturated fat, and cholesterol" (2). The National Academies of Science's Food and Nutrition Board also objected to the meat recommendation, ostensibly on scientific grounds. It argued that evidence was insufficient to recommend restrictions on fat or cholesterol for healthy people (3). In turn, critics of the Food and Nutrition Board's statement charged that its authors had financial ties to the meat, dairy, and egg industries that biased their interpretation of the science (4).

Since then, subsequent guidelines have continued to elicit controversy over their effects on the food industry, scientific quality, focus on nutrients rather than foods, use of euphemisms ("choose" instead of "eat less"), conflicts of interest among Dietary Guidelines Advisory Committee (DGAC) members, and the process itself (1). The 2015 DGAs resolved some of these issues by focusing on patterns of healthy eating, but generated political arguments about issues of sustainability, cholesterol, and conflicts of interest.

## **The Process**

When I was on the DGAC in 1995, our committee reviewed the research, wrote the research report, and also wrote the actual DGAs. Since 2005, however, the DGAC writes the research report, but the agencies (the USDA and HHS) now write the DGAs, separating the science from the actual guidelines and making the process more political. The development of the 2015 DGAC's 571-page scientific report was entirely transparent; all of the committee's decisions and actions

Perspectives articles allow authors to take a position on a topic of current major importance or controversy in the field of nutrition. As such, these articles could include statements based on author opinions or points of view. Opinions expressed in Perspectives articles are those of the author and are not attributable to the funder(s) or the sponsor(s) or the publisher, Editor, or Editorial Board of Advances in Nutrition. Individuals with different positions on the topic of a Perspective are invited to submit their comments in the form of a Perspectives article or in a Letter to the Editor.

This Perspective is based on a presentation to a symposium on the "History of Dietary Guidelines," ASN Scientific Sessions and Annual Meeting, Experimental Biology 2017, Chicago, Illinois, April 25, 2017.

Author disclosure: MN's salary from NYU paid for her research and blog at

www.foodpolitics.com. She also receives royalties from books and honoraria from lectures about matters related to this topic.

Address correspondence to MN (e-mail: marion.nestle@nyu.edu).

Abbreviations used: BMJ, British Medical Journal; DGAs, Dietary Guidelines for Americans; DGAC, Dietary Guidelines Advisory Committee; HHS, US Department of Health and Human Services; PCRM, Physicians Committee for Responsible Medicine.

were posted online. However, the process by which the USDA and HHS condensed that report into the 144-page DGAs is a mystery. Although the agencies sent an early draft to outside reviewers (of which I was one), they offered no explanation of how they arrived at their final decisions.

## **Sustainability**

The 2015 DGAC, recognizing the importance of linking agricultural policy to nutrition policy, concluded that "A diet higher in plant-based foods, such as vegetables, fruits, whole grains, legumes, nuts, and seeds, and lower in calories and animal-based foods is more health promoting and associated with less environmental impact than is the current US diet." On this basis, it recommended that dietary patterns be "lower in red and processed meat" (5).

The beef industry raised strong objections (6). USDA Secretary Tom Vilsack responded by comparing members of the DGAC to unruly children (7), and assuring the beef industry that "sustainability issues fall outside the scope of the dietary guidelines" (8). The beef industry induced 30 senators to complain to the USDA and HHS that the guidelines were anti-meat (9). The House Appropriations Committee directed Secretary Vilsack to insist that the DGAC focus on nutrient recommendations and not pursue an environmental agenda (10). Late in 2015, the secretaries of the USDA and HHS issued a joint statement: "we do not believe that the 2015 DGAs are the appropriate vehicle for this important policy conversation about sustainability" (11). Indeed, the 2015 DGAs do not mention the word "sustainability," nor do they directly call for less meat, despite the citation in the text of strong evidence for the health benefits of eating patterns that contain less meat and processed meats (12).

## **The Cholesterol Nonrecommendation**

Previous DGAs recommended limiting dietary cholesterol to 300 mg/d, an amount that translates to  $\sim$ 1.5 eggs/d. The 2015 DGAC's scientific review, however, concluded that "available evidence shows no appreciable relationship between consumption of dietary cholesterol and serum cholesterol ... Cholesterol is not a nutrient of concern for overconsumption" (5). This statement induced the Physicians Committee for Responsible Medicine (PCRM), a group advocating for plant-based diets and animal welfare, to lead a lawsuit against the USDA and HHS arguing that elimination of the cholesterol guideline violated the Federal Advisory Committee Act, which prohibits special interests from influencing the members of federal advisory committees. The lawsuit cited evidence that the egg industry deliberately funded research to counter the idea that eating eggs might raise blood cholesterol levels (13). The suit also charged that several DGAC members were biased against cholesterol because they consulted for the egg industry, were nominated by it, or held positions at a research center that actively sought eggindustry funding.

Once the DGAs appeared, however, the PCRM stopped complaining. Although the DGAs did not mention a daily upper limit for cholesterol intake, they stated that "this change does not suggest that dietary cholesterol is no longer important to consider when building healthy eating patterns ... individuals should eat as little dietary cholesterol as possible while consuming a healthy eating pattern" (12). Late in 2016, the court threw out the PCRM lawsuit on the grounds that because no legal definition of "inappropriate influence" exists, it is impossible to know whether the egg industry exerted undue influence on the DGAC (14).

## **Conflicts of Interest**

Other groups also challenged DGAC members' ties to the food industry (15). In 2015, the *British Medical Journal (BMJ)* published an article by the journalist Nina Teicholz criticizing the DGAC for scientific weaknesses in its report and for conflicts of interest among its members. Teicholz, who opposes advice to reduce meat and fat, argued that the DGAC's recommendations were based on reviews by organizations such as the American Heart Association and the American College of Cardiology, which receive support from food companies (16). Outraged, the Center for Science in the Public Interest petitioned the *BMJ* for a retraction (17).

The *BMJ* sent the Teicholz article to 2 respected academics for review. Both agreed that Teicholz's argument was scientifically flawed and poorly documented, but advised against retraction (18). The *BMJ* disclosed Teicholz's own conflicts of interest, and published extensive corrections to her article, thereby confirming the Center for Science in the Public Interest's analysis (19). The reviewers also agreed that the guidelines' process was insufficiently rigorous, and that a review of the DGAC's composition, structure, and conflict-of-interest policies was warranted.

Teicholz's BMJ article was funded by the Arnold Foundation, which also funded her pro-fat group, the Nutrition Coalition. This group lobbied Congress and convinced it to agree that the "entire process used to formulate and establish the guidelines needs to be reviewed before future guidelines are issued" and to grant \$1 million to the National Academy of Medicine for this purpose (20). The National Academy appointed Robert Russell, professor emeritus at the Friedman School at Tufts University, to chair a review committee. His committee released its first report-on the DGAC selection process—early in 2017 (21). It recommended thirdparty nomination and a transparent conflict-of-interest process for DGAC members. The second report confirmed those recommendations and also recommended specific steps that the USDA and HHS should take to strengthen the scientific credibility of the guidelines and to make their decisions more transparent (22). Whether the agencies will implement these recommendations for the 2020 guidelines remains to be seen.

By congressional fiat, the next DGAs are to appear in 2020. Even if the process of compiling the guidelines becomes more rigorous and transparent, committee scientists must continue to make scientific decisions independent of pressures from industry to weaken public health recommendations and from federal agencies in thrall to industry interests. DGAC scientists should continue to interpret the existing science as best they can, and should insist on stating their conclusions clearly, succinctly, and unambiguously, thereby making it clear that any controversies about the DGAs are much more about politics than they are about science.

## **Acknowledgments**

The sole author had responsibility for all parts of the manuscript.

## References

- Nestle M. Food politics: how the food industry influences nutrition and health. 10th anniv. ed. Berkeley (CA): University of California Press; 2013.
- 2. United States Department of Agriculture, United States Department of Health and Human Services. Nutrition and your health: dietary guidelines for Americans. Washington (DC): Government Printing Office; 1980.
- 3. National Research Council (US). Food and Nutrition Board. Toward healthful diets. Washington (DC): National Academy of Sciences; 1980.
- 4. Wade N. Food Board's fat report hits fire. Science 1980;209(4453):248–50.
- Dietary Guidelines Advisory Committee. Scientific Report of the 2015 Dietary Guidelines Advisory Committee. Washington (DC); 2015.
- Purdy C. Attack on meat has industry seeing red. Politico Pro 19 February 2015. [cited 2017 May 31]. Available from: https:// www.politico.com/story/2015/02/dietary-guidelines-2015-115321.
- Hagstrom J. Vilsack likens dietary guidelines committee to 3-year-old. The Hagstrom Report [Internet]. 2015 [cited 2017 May 30]. Available from: http://www.hagstromreport.com/2015news\_files/2015\_0227\_ vilsack-likens-dietary-guidelines-committee-3-year-old.html.
- Tracy T. Washington Wire [Internet]. The Wall Street Journal: Dow Jones & Company, Inc.; 2015 [cited 2017 May 31]. Available from: https://blogs.wsj.com/washwire/2015/03/11/vilsack-dietaryguidelines-are-about-health-not-environment/.
- Thune J, Daines S, Fischer D, Ernst J, Inhofe JM, Enzi MB, King A, Grassley C, Hoeven J, Perdue D, et al. Letter to the Honorable Sylvia Mathews Burwell and Honorable Thomas J. Vilsack. In: HSM Burwell HTJ Vilsack, editors. Washington (DC): United States Senate; 2015. p. 3. [cited 2017 May 31]. Available from https://www.agri-pulse.com/ext/ resources/pdfs/d/i/e/1/5/DietaryGuidelinesLetter03122015.pdf.

- 10. Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Bill, 2015, House of Representatives 2nd Sess. 2014.
- Vilsack T, Burwell S. USDA, Food and Nutrition [Internet]. Washington (DC): US Department of Agriculture; 2015 [cited 2017 May 31]. Available from: https://www.usda.gov/media/blog/2015/10/6/2015dietary-guidelines-giving-you-tools-you-need-make-healthy-choices.
- 12. United States Department of Health and Human Services, United States Department of Agriculture. Dietary Guidelines for Americans, 2015–2020. Washington (DC): United States Department of Health and Human Services and United States Department of Agriculture; 2015. Contract No.: HHS-ODPHP-2015-2020-01-DGA-A Home and Garden Bulletin No. 232.
- Physicians Committee for Responsible Medicine, McDougall J, Agarwal U, Shapiro D, Forrester DD, plaintiffs v. Vilsack T, Burwell SM, defendants. Complaint for declaratory and injunctive relief. US District Court, Northern District of California; 2016.
- Beeler L. Physicians Committee for Responsible Medicine, et al, v. Thomas V. Vilsack, et al, defendants. Order Dismissing Case. United States District Court Northern District of California: United States District Court; 2016. p. 15.
- Herman J. Saving US dietary advice from conflicts of interest. Food Drug Law J 2010;65(2):285–316.
- Teicholz N. The scientific report guiding the US dietary guidelines: is it scientific? BMJ 2015;351.
- 17. Abrams A, Adams-Campbell LL, Akabas SR, Anderson C, Appel LJ, Arós Borau F, Ascherio A, De Backer G, Becker AB, Bes-Rastrollo M, et al. Letter requesting BMJ to retract "investigation." CSPI, 5 November 2015. [cited 2017 May 31]. Available from: https://cspinet.org/letterrequesting-bmj-retract-investigation.
- Independent experts find no grounds for retraction of The BMJ article on dietary guidelines [press release]. BMJ 2016.
- The scientific report guiding the US dietary guidelines: is it scientific? The British Medical Journal 2016;355.
- Division A- Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2016. Congressional Directives, 2016.
- 21. National Academies of Science E, and Medicine. Optimizing the process for establishing the Dietary Guidelines for Americans: the selection process. Washington (DC): National Academies Press; 2017.
- 22. National Academies of Sciences, Engineering, and Medicine. Redesigning the process for establishing the Dietary Guidelines for Americans. Washington (DC): National Academies Press; 2017.