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How to Sustain Sound Dietary Guidelines for Americans

Hanns Kuttner
Senior Fellow

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How to Sustain Sound Dietary Guidelines for Americans
Mission Creep Within the Federal Dietary Guidelines Advisory Committee
Threatens Americans' Health and Well-Being

Introduction

The fad diet. There's a reason why, in the U.S. at least, this term is widely understood. The media brings Americans a steady stream of findings about diet and health. One day, carbs are out and protein is in; the next Americans are buying Atkins in bulk. Next, we're told a glass of red wine a day will extend your life expectancy. But, today, that hypothesis is under increased scrutiny.¹

It's for this reason – to prevent fads and establish a core set of sound, scientific rules for nutrition – that in 1973 the Senate Select Committee on Nutrition and Human Needs sought to develop a list of dietary goals for Americans.²

That committee made a basic list of recommendations in 1977. The guidelines became an Executive Branch project when, in 1980, the federal government first issued its “Dietary Guidelines for Americans.” According to health.gov, these guidelines “provide authoritative advice for people two years and older about how good dietary habits can promote health and reduce risk for major chronic diseases.”

Straightforward enough.

In 1985, the Department of Health and Human Services and the Department of Agriculture (the two federal agencies that develop the guidelines) established a Dietary Guidelines Advisory Committee (DGAC) to begin the process which culminates in revised guidelines. This committee, appointed by the secretaries of the U.S. Department of Agriculture and the Department of Health and Human Services, was to consider all available scientific research in order to make sound nutritional recommendations for the nation.

Nearly 30 years after the establishment of the first such committee, the 2015 DGAC has moved away from its original diet and nutrition mandate into questions about the food-making process's impact on the environment and on humans. A new “sustainability” mindset has taken hold and “attainability” has taken a back seat. This shift may be due to the fact that current committee members come from the world of academia where the nascent study of sustainability has captured their imaginations. Further, the dominant research interests of the committee do not include how Americans shop for and buy food or what their concerns about nutrition are.

Revised dietary guidance will be issued in 2015. If efforts are not undertaken now to redirect the DGAC and the guideline-writing process, the 2015 revisions to the guidelines could go off in new and expansive directions. The breadth and direction could have far-reaching, negative effects on Americans and their health.

¹ Alice G. Walton, “Are Red Wine And Chocolate Not So Healthy After All?” *Forbes*, May 12, 2014.

² *The New York Times*, April 13, 1973.

History of U.S. Dietary Guidelines

The idea that the U.S. federal government should give advice about diet and nutrition has a long history. In 1894, the U.S. Department of Agriculture (USDA) published W.O. Atwater's instructions about how to obtain an adequate diet at the lowest cost.³ In 1916, when World War I threatened the supply of adequate food and nutrition, USDA published a food guide for young children that introduced the idea of grouping foods into different categories.⁴

The guidelines have a more recent history. As USDA explains, "In early 1977, after years of discussion, scientific review, and debate, the U.S. Senate Select Committee on Nutrition and Human Needs, led by Senator George McGovern, recommended Dietary Goals for the American people."⁵ One of the primary goals of this report was to set forth guidelines that would help Americans avoid "excessive intake of food components linked to chronic disease."⁶

The Dietary Guidelines for Americans, published by USDA and the Department of Health and Human Services (HHS) in 1980, was an outgrowth of Sen. McGovern's study. The first revisions came in guidelines published in 1985.

After those reports were issued, Congress sought to codify issuance of the guidelines and, in 1990, passed the National Nutrition Monitoring and Related Research Act, which required the Dietary Guidelines for Americans to be published every five years. (New dietary guidelines were released in 1990, 1995, 2000, 2005 and 2010.) The law states the guidelines "shall contain nutrition and dietary information and guidelines *for the general public ...*" (emphasis added) and "shall be promoted" by any federal agency carrying out a food, nutrition, or health program. That second provision means these guidelines will influence federal food programs – everything from the Administration for Community Living's congregate meals for older Americans to USDA's school lunch program to meals served to soldiers and sailors by the Department of Defense.

As noted, the Dietary Guidelines Advisory Committee (DGAC) was created in 1985 to develop a report⁷ that would be submitted to the secretaries of Agriculture and Health and Human Services to help them prepare the guidelines. Specifically, the advisory committee exists "to provide independent, science-based advice and recommendations." The committee's report neither binds nor limits the secretaries in what they then publish as dietary guidelines.

The relationship between diet and health provides the rationale for federal dietary guidelines. When the Senate Select Committee issued its goals in 1977, Sen. McGovern said the goal was

³ W. O. Atwater, "Foods: Nutritive Value and Cost." Farmer's Bulletin #23. Washington: Government Printing Office, 1894. URL: ars.usda.gov/SP2UserFiles/Place/12355000/pdf/hist/oes_1894_farm_bul_23.pdf

⁴ The history of dietary recommendations is well told in Carol Davis and Etta Saltos, "Dietary Recommendations and How They Have Changed Over Time," in Elizabeth Frazao, ed., *America's Eating Habits: Changes and Consequences* Agriculture Information Bulletin 750. Washington: USDA Economic Research Service, 1999.

⁵ U.S. Department of Agriculture, [History of the Dietary Guidelines](#)

⁶ *ibid.*

⁷ The 2010 report ran to over 400 pages, with sections presenting eight areas of the science base ranging from energy balance to food safety. Dietary Guidelines Advisory Committee, 2010. Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010, to the Secretary of Agriculture and the Secretary of Health and Human Services. U.S. Department of Agriculture, Agricultural Research Service, Washington, DC.

not to eliminate the hazards of eating, but to reduce the risk factors associated with certain diets. (Sen. McGovern likened the committee's work to the Surgeon General's report on smoking, which he said didn't eliminate "the hazards of smoking" but allowed the industry to modify "its products to reduce risk factors."⁸) Sen. McGovern also focused on the simplicity⁹ of the goals and said he hoped they would reduce "confusion about what to eat and how our diet affects us."¹⁰

The mandate was clear: how could the federal government help Americans eat healthier so they could live longer.

DGAC's Mission Creep

Unfortunately, the DGAC is moving away from the focus of the original dietary guidelines. A look at the DGAC's deliberations reveals a movement among its members away from core concerns about Americans' nutrition and USDA's and HHS's mission to provide sound, scientifically-based advice for diet and health.

Historically, impact on human health defined the dietary guidelines' boundaries. The impact each recommendation would have on health, life expectancy and illness determined whether a topic belonged in the guidelines. Thus, the focus was on *what* people eat. The 2005 Dietary Guidelines added another concern: the risk of unsafe food. Because the question of how food was produced and cooked pertained specifically to food safety, the question – at this point – was still asked through the lens of human health.¹¹ (Food that becomes contaminated, either from production or handling processes, obviously could have a negative impact on health.)

The 2010 Dietary Guidelines, however, introduced, with a single reference, a novel concept for thinking about the links between diet and health: the issue of "sustainability." Specifically, those guidelines called for "safe, effective, and sustainable agriculture and aquaculture practices."¹²

Today, the 2015 DGAC shows signs that it wants to jump on that single reference and expand its mandate to look at a broader set of issues lumped under the heading of "sustainability." The current DGAC chair Barbara Millen has defined the committee's field of inquiry to include not just food and nutrition but also *anything* "health-related," and the DGAC has stretched its food safety subcommittee to also take on food sustainability.

To frame its deliberations about food sustainability, the DGAC invited expert Kate Clancy to present at its second meeting.¹³ Dr. Clancy defined "food security" as the ability of a country or

⁸ Jeffrey Mills, *The Associated Press*, January 14, 1977.

⁹ Marian Burros, "Recommending Drastic Diet Changes," *The Washington Post*, January 20, 1977.

¹⁰ Marian Burros, "Hill Report Asks Diet Changes," *The Washington Post*, January 15, 1977.

¹¹ "Chapter 10. Food Safety" in U.S. Department of Agriculture and U.S. Department of Health and Human Services *Dietary Guidelines for Americans 2005*. URL: www.health.gov/dietaryguidelines/dga2005/document/pdf/DGA2005.pdf

¹² "Chapter 6. Helping Americans Make Healthy Choices" in U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans, 2010*. 7th edition. Washington: Government Printing Office, 2010. URL: www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/Chapter6.pdf

region to produce most of its staple crop, to maintain its natural resource base for farming and ranching, obtain a modest contribution from local food and urban agriculture and adapt to the potential for climate change.¹⁴ Food security, then, begins an agenda that no longer pertains solely to health.

The pattern of eating that best contributes to sustainability of land, air and water, as outlined by Dr. Clancy, includes:

- A plant-based diet;
- Reduced meat consumption, identifying beef as the meat posing greatest concern;
- Fish consumption, provided it comes with advice about which fish should be consumed; and
- Diverse diets, meant to maintain genetic diversity.¹⁵

The food sustainability subcommittee has similarly proposed a broad approach to sustainability, outlining, “the links between how our food is grown, caught, produced, processed, and transported and the health of humans and the environment” –massively extending the definition of what falls within the scope of guidelines about diet and nutrition.¹⁶

At the recent March 14, 2014 DGAC meeting, the subcommittee presented an analytical framework examining five diets: the average American diet, a diet that followed the federal dietary guidelines, a Mediterranean diet, a vegetarian diet and a diet that had decreased meat and dairy in favor of more plant sources. It modeled these diets to determine the food components of each and then suggested each diet could be subjected to a “life cycle assessment” that took into account what happens in the production, packaging, transportation and retail distribution of food. The assessment of each diet was made in terms of “sustainability outcomes” in two domains: environment, including energy use, land use, water use, greenhouse gas emissions and biodiversity and security outcomes, including consumer cost.¹⁷

What would this overly complex process mean for Americans and nutrition in the U.S.?

Eventually, it could mean Americans will be told they should buy only locally-grown produce or avoid certain foods – like meat and dairy – altogether. The increased prescriptiveness of what is a "good" diet would increase consumers' costs and imply the end of entire sectors of American agriculture – all in an effort to regulate behavior that *has nothing to do with nutrition*.

The focus on sustainability turns the challenge of addressing Americans' nutritional needs into a justification for a broad program of social change. By expanding the range of questions that the

¹³ "Invited Expert Presentations," URL: <http://www.health.gov/dietaryguidelines/2015-binder/meeting2/ExpertPresent.aspx>

¹⁴ Kate Clancy, "Dietary Guidelines and Sustainability. Presentation by Kate Clancy to the 2015 Dietary Guidelines Advisory Committee. January 13, 2014." URL: http://www.health.gov/dietaryguidelines/2015-binder/meeting2/docs/workGroupPresentations/Kate_ClancyDG_1-13-14_final_2-27-14.pdf

¹⁵ *ibid.*

¹⁶ "Dietary Guidelines Advisory Committee Meeting 2," URL: http://www.health.gov/dietaryguidelines/2015-binder/meeting2/docs/Minutes_DGAC_Mtg_2.pdf

¹⁷ "Subcommittee 5: Food Sustainability and Food Safety. 2015 DGAC Meeting 3. March 14, 2014." URL: <http://www.health.gov/dietaryguidelines/2015-BINDER/meeting3/docs/subcommittees/SC-5.pdf>

general public should consider in making choices about what to eat, the committee contemplates a vast expansion in the range of policy questions that would be handed over to experts about diet. It's likely the DGAC's expanded definition of health could mean everything from farm policy to carbon emissions should be determined by dietary guidance.

Ultimately, the topic of "sustainability" threatens to overcome any other discussion by the DGAC. This mission creep is problematic both because it moves beyond the DGAC's stated mandate, which is to focus on the relationship between nutrition and health, and also because in the process of expanding its mission the DGAC will dilute attention from the guidelines that will help improve Americans' diets.

The consequence of mission creep is that the core mission – in this case nutrition and its effect on health – would be watered down and even relegated to a secondary role.

The make-up of the panel could be one possible reason the committee seems to have been captured by ideologues and expanding its mission.

The process for developing the guidelines that will be issued next year (2015) began in October 2012 with the solicitation of nominations for the DGAC.¹⁸ The solicitation asked for nominees who were "knowledgeable" and "respected and published experts." It also asked for nominees with expertise in cardiovascular diseases, type 2 diabetes, obesity, osteoporosis, cancer and ten additional fields.¹⁹ It's important to note the list of fields focused on linkages to health.

Appointees to the DGAC were named in 2013 and all came from academic backgrounds.²⁰ While the panel has impressive credentials, it now lacks a practical sense of the food industry or the buying and eating habits of most Americans. For example, in 2010 the panel included a member who had "practical knowledge of food production and food regulation."²¹ No one on the 2015 panel can claim a similar perspective.

Additionally, the current panel lacks geographic balance. Four appointees – more than one-quarter of the board – are from Massachusetts – a state that represents 2.1 percent of the U.S. population. It is clear that instead of including experts who reflect the country's regional and cultural diversity and who have knowledge of Americans' actual eating habits, the panel is now populated with academics whose concerns are theory rather than practice.

Sustainability Argument Lacks Hard Evidence

¹⁸ "Announcement of Intent to Establish the 2015 Dietary Guidelines Advisory Committee and Solicitation of Nominations for Appointment to the Committee Membership," *Federal Register* vol 77 #208, pp. 65384-65385.

¹⁹ The *Federal Register* list of fields, described as "may include, but are not limited to" continues with pediatrics, gerontology, maternal health, food process science safety and technology, public health, nutrition education and behavior change, and nutrition-related systematic review methodology.

²⁰ "HHS AND USDA announce the appointment of the 2015 Dietary Guidelines Advisory Committee," May 31, 2013 URL: www.health.gov/dietaryguidelines/2015DGAC-Announced-Release.pdf

²¹ Appendix E-6: Biographical Sketches of the 2010 Dietary Guidelines Advisory Committee Members in *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010*. Washington: Agricultural Research Service, 2010.

The DGAC’s sustainability focus is particularly problematic because there is little evidence linking sustainability with nutrition and health.

Indeed, policy-making based on the relationship between health and diet poses challenges in general. For example, in the last 30 years, the average life expectancy has increased by about five years. This progress could not have been made without declines in the mortality risk from the causes most closely tied to diet and nutrition. For example, while the overall death rate in 2010 was 72 percent of the 1980 level, the death rate in 2010 due to ischemic heart disease/heart blood supply was 33 percent of the 1980 level. Over the same time period, however, we have witnessed obesity—also closely tied to diet—grow to the point of being classified as an epidemic, with significant implications for public health. One might think the contradictions suggested by these divergent statistics would inject a sense of modesty in the DGAC in making recommendations linking diet and health.

As the authors of the dietary guidelines move their attention more and more to sustainability, however, it poses a growing threat to the notion that the guidelines are science-based. In fact, much of the scientific evidence that has been marshaled by the several DGAC bodies over the past generation is evidence that arises from findings of association, rather than causality. Relying on the typical justification of “peer-reviewed academic publications” is not helpful if the data used in those studies do not allow drawing causal inferences that apply to human behavior. And very little of the data used by the DGAC rises to the standard of causal evidence. Furthermore, as the DGAC seeks to make the dietary guidelines more detailed, modeling—forecasting trends in health based on underlying assumptions about the relationship between certain foods and health, rather than observing actual outcomes—plays and will play a larger and larger role.

The table below shows a classification of evidence, ranked by the strength of its claim:

Strength	Standard of proof	Type
Causal	"beyond the shadow of doubt"	Randomized clinical trial Quasi-experiment
Association	"preponderance of evidence"	Epidemiological investigation
Modeled	"as reasonable as the assumptions"	Spreadsheet/computer program

The experience thus far of the DGAC marshaling evidence about sustainability suggests how inadequate the evidence is in this new territory. For example, the subcommittee’s systematic review of the literature linking sustainability with health turned up only 15 relevant studies, all based primarily on a modeling approach.²²

²² "Subcommittee 5: Food Sustainability and Food Safety. 2015 DGAC Meeting 3. March 14, 2014." In looking for potential evidence of the link between sustainability and health, the subcommittee addressing sustainability identified an initial universe of 1,685 articles using search terms applied to databases. All were screened by title; 1,598 were excluded. Of the 87 that remained, examination of the abstract showed that 63 of these could be

This small stack of evidence is a very thin reed upon which to build a whole new dimension of federal dietary guidance.

Sustainability may be a niche interest for academics, but the evidence it provides now about its connection to diet and health is just not compelling.

The Unintended Consequences of Mission Creep

While sustainability is a hot topic among the DGAC, in most areas of the country where families are still trying to shake off the effects of the Great Recession and put nutritious – and affordable – food on the table, the discussion is nearly nonexistent.

If the federal government opts to develop new guidelines on very inconclusive evidence about sustainability, it risks providing nutrition information that is misguided and could do harm. Focusing on theoretical sustainability impacts also could put the guidelines out of reach for most Americans – and make the guidelines irrelevant to "the general public," the audience directed by statute. The rationale for the government to provide advice on diet rests on the ability of that advice to improve health outcomes. By tramping off into new fields and offering advice that is distant from the eating habits of most Americans the government risks undermining its ability to speak to most Americans.

Each consequence makes for a less healthy America. It would be a tragedy if what is still essentially an academic discussion comes at the expense of Americans making good choices that will improve their health.

As the report from the DGAC moves forward to those who must decide what authoritative advice the federal government should give the American people, policy officials will have to decide what guidance the general public will actually consider and, eventually, adopt. They must be mindful that they are writing to a public that is blessed with a longer life expectancy and lower mortality rates due to fewer nutrition-related diseases, but that is also struggling to afford groceries at their local discount mart and cannot fathom spending additional dollars at stores that put sustainability ahead of or on par with basic nutrition.

They must also consider what these new guidelines and regulations would mean for federal programs and their beneficiaries. How would they effect participants in the SNAP (food stamp) program? It's likely beneficiaries' dollars wouldn't stretch as far and their nutrition would suffer unless the federal government offered more generous benefits. And what about U.S. troops in the field? How would a diet with fewer of the proteins that come from meat and dairy effect their health – and strength?

Americans who live hundreds of miles from organic grocery stores are not likely to meet or even take seriously many of the committee's recommendations if they are far-off from the consumption patterns of the general public. Similarly, low-income families have a greater need

excluded. Of the 24 reviewed by reading the entire article, 10 more were excluded. An additional article was identified through a hand search, leaving 15 studies to be included in the subcommittee's systematic review.

to include convenient sources of protein and other essential nutrients, such as meat or dairy products, in their diet. A plant-based diet holds no sway for them.

The DGAC and the U.S. secretaries of Agriculture and Health and Human Services must consider attainability – rather than sustainability – when recommending dietary guidelines.

What the DGAC Should Do

The historical mission of the Dietary Guidelines for Americans is still relevant. As the 2010 DGAC noted in its report, the majority of the American public is “overweight or obese and yet under-nourished in several key nutrients.”²³ Basic nutrition and health still merit the DGAC’s focus.

To ensure the 2015 guidelines adhere to this core mission and provide sound dietary guidelines accessible to the general public, the DGAC should not be allowed to veer off into territory not placed under its purview and already considered by other federal government entities. Instead it must:

- *Focus on what’s important.* The most important nutrition issue for the general public continues to be the imbalance between calories consumed and calories expended. Attention is a scarce commodity. Each additional suggestion the DGAC makes reduces the average importance of other issues.
- *Speak to people where they are.* Proposals that do not respect income, heritage, culture and lifestyle are unlikely to be adopted. Change is costly and difficult. The burden lies on those who want change to demonstrate to the American people that change is worthwhile.
- *Become open and transparent.* The DGAC must make an effort to increase transparency by opening its subcommittee meetings to the public and broadcasting them online. (Full committee proceedings are viewable online.) The DGAC should also use the full breadth of available research. Any research the committee uses should be made available to the public while it is being considered and not kept hidden until after the DGAC’s final report is issued to the Departments of Agriculture and Health and Human Services.
- *Have a more diverse composition.* The committee should include experienced professionals with practical experience, not just academics. Additionally, there should be a focus on regional and cultural diversity to ensure a broad range of experiences and nutritional concerns.

Additionally, the USDA and Department of Health and Human Services should create a process by which each new set of Dietary Guidelines for Americans is evaluated. Looking at what has worked and what has not in the past will prevent mission creep and allow USDA and HHS to focus on creating guidelines that not only sound good on paper – or in academia – but also lead to marked and sustained improvement in the health of Americans. Guidelines that are practical, attainable, culturally and budget sensitive have the strongest chance of reaching consumers and stimulating behavior change.

²³ *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans, 2010.* Washington: Agricultural Research Service, 2010.

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Hudson Institute
1015 15th Street, N.W.
Sixth Floor
Washington, D.C. 20005

P: 202.974.2400
info@hudson.org
www.hudson.org