July 18, 2014

To the Dietary Guidelines Advisory Committee:

The Johns Hopkins Center for a Livable Future (CLF) is an interdisciplinary academic center based within the Johns Hopkins Bloomberg School of Public Health. CLF investigates the interconnections among diet, food production, public health, and ecosystems. We commend the DGAC for exploring ways to integrate sustainability into the 2015 Dietary Guidelines for Americans **(Request 5-2)**. On behalf of the Center for a Livable Future and 30 faculty, staff, CLF-Lerner Fellows, and research assistants who have signed below, we are pleased to submit the following comment on how the 2015 DGA can help guide American diets toward individual health while simultaneously promoting the sustained capacity of our food system to provide the healthy and nutritious foods that should be available to all Americans, now and for future generations.

As stated in the 2010 DGA, the document's ultimate goal is to "improve the health of our Nation's current and future generations by facilitating and promoting healthy eating and physical activity choices so that these behaviors become the norm among all individuals." Accordingly, sustainability-related recommendations are central to the guidelines' goals[1] and should frame and be integrated throughout the document, not as footnotes but rather as the underpinning of all advice about diet. Given that we know a great deal about which dietary patterns will most facilitate a healthy food system, the government can have the most positive impact on current and future food security by helping consumers understand that long-term individual health and food system sustainability are inseparable, independent of any political pressure to do otherwise. The Committee might look to the Nordic Nutrition Recommendations 2012 as an example of evidence-based dietary guidelines that promote sustainability as an essential aspect of population health.[2]

CLF makes the following recommendations to the Committee:

1. Encourage consumers to **reduce food waste**, and provide strategies to assist them in doing so.
    a. ***Rationale:*** An estimated 31-40% of the Nation's food supply is wasted,[3,4] much of it at the consumer level. Wasted food represents a missed opportunity to support food insecure households and is a misuse of human, economic, and natural resources. Fortunately, it is possible to reduce consumer food waste through effective behavior change communication, particularly when combined with other action. For instance, a multifaceted campaign in the United Kingdom achieved a 21% reduction in consumer food waste between 2007 and 2012.[5]
    b. ***Strategies:*** The 2015 DGA can direct consumers by placing a statement about reducing food waste on the main dietary guidelines graphic, and presenting messaging on the benefits of reducing food waste and guidance on how to do so in alignment with the EPA's "Food: Too Good to Waste" campaign.[6] (See Comment #407 for further perspectives on this issue.)

2. While the guidelines appropriately emphasize the healthfulness of seafood consumption, they should advise consumers to **eat products lower on the aquatic food chain.**
    a. ***Rationale:*** Aquatic animals lower on the food chain have lower levels of bioaccumulated contaminants and are a more sustainable choice than larger aquatic animals, which have undergone drastic population decline. (See comment #149 for further perspectives on this issue.)
    b. ***Strategies:*** Advise consumers to choose products lower on the aquatic food chain such as shellfish, sardines, anchovies, and herring. Refrain from recommending species that are associated with harmful fishing or farming practices such as bottom trawling or dredging, including shrimp and farmed Atlantic Salmon.

3. The new guidelines should **communicate with emphasis the many benefits of a plant-based diet,** which include sustainability in addition to individual health.
    a. ***Rationale:*** The average American continues to consume significantly more meat than recommended by previous USDA guidelines despite mounting evidence of the negative health and environmental impacts of our high-meat diet. The vast majority of these animal products are produced in a manner that places unsustainable demands on finite resources and presents what the Pew Commission on Industrial Farm Animal Production characterized as "…an unacceptable level of risk to public health and damage to the environment."[7] For example, the production of livestock often contributes to soil degradation and ground and surface water contamination, accounts for 14.5% of all anthropogenic greenhouse gas emissions,[8] and uses approximately 75% of the world's agricultural land.[9] In addition to these environmental impacts that threaten current and future food security, great risk is posed by the use of antimicrobial drugs in livestock for purposes other than treating illness. 80% of all antimicrobials sold in the US are used in agriculture.[10] Misuse of antimicrobials in animal agriculture for purposes other than disease treatment contributes to the selection, generation, propagation and spread of antibiotic-resistant bacteria, which can result in life-threatening infections in humans.[11] Plant-based diets (which range from those involving low animal product consumption to vegan diets) lessen the demand for animal products and are associated with lower levels of LDL cholesterol and a lower risk of cardiovascular disease, hypertension, and type 2 diabetes.[12]
    b. ***Strategies:*** To advance acceptance of the plant-based diet already recommended in the 2010 guidelines, we advise that the Committee use language and graphics that emphasize alternative protein sources, especially protein sources that are lower on the food chain. Given that current consumption drastically exceeds the RDA for protein,[13] we urge the Committee to inform consumers that a plant-based diet can provide adequate protein. To this end, we recommend that the new guidelines provide more explicit guidance on how to adopt plant-based diets. Strategies such as eliminating meat one day per week, as recommended by the Meatless Monday

campaign and recent statements from the Intergovernmental Panel on Climate Change, provide consumers clear and simple steps to reduce meat consumption and consume more plant-based proteins.

4. Encourage consumers to choose foods and beverages that are **minimally processed and packaged**.
    a. ***Rationale:*** Processing and packaging contributes to the energy of food production, which comprises 15.7% of the Nation's overall energy use.[14,15] Additionally, many processed foods utilize palm oil, which is known to contribute to deforestation, biodiversity loss, and increased greenhouse gas emissions.[16] While some processing and packaging is necessary for food preservation, reliance on heavily processed and packaged convenience foods works against the Committee's recommendations for diets low in sodium, fat, and sugar.
    b. ***Strategies:*** We urge the Committee to remind consumers that minimally processed and packaged foods do double-duty in working towards both individual health and the health of future food systems. The Committee might adopt language similar to Brazil's dietary guidelines, also currently open for comment, which urge consumers to choose fresh and staple foods.

5. **Highlight synergies** between dietary recommendations for nutrition and sustainability.
    a. ***Rationale:*** A comparison of six diet patterns including the Mediterranean diet found that the diets' health and sustainability scores "go largely hand in hand."[17] By highlighting these synergies, the dietary guidelines can help address consumers' substantial lack of awareness of how their dietary choices may impact food security and environmental sustainability for future generations, as well as for some, contributing to motivation for change. Regardless of the rationale for consumer compliance with the DGA, adherence to the guidelines is beneficial for both individual health and ecological sustainability.
    b. ***Strategies:*** Communicate with emphasis to consumers that eating a diverse array of foods lower on the food chain, such as fruits and vegetables, is beneficial in two important ways: for individual health, and for its relatively low environmental impact.

6. Consider ways that consumers can **support sustainable food production methods.**
    a. ***Rationale:*** Sustainable food production methods are those that promote soil quality, conserve freshwater and other natural resources, promote agricultural biodiversity (which can conserve variation in micronutrient availability), protect pollinators and other beneficial organisms, and provide adequate livelihood and good working conditions for farmers and other workers throughout the food system. Such foods can be purchased from farmers markets and other direct marketing venues, and

increasingly, in supermarkets. Supporting these practices increases the resilience and sustainability of our food production system for both humans and the environment.[18]

b. ***Strategies:*** Although current food labels may not perfectly capture all aspects of sustainable food production, we urge the Committee to encourage consumers to choose foods with the following labels whenever possible – USDA organic, free range, grass-fed, pasture-raised, no antibiotics added, and Marine Stewardship Council (MSC) certified – as well as seeking locally produced foods.

Thank you for your attention and consideration regarding the importance of sustainability in the 2015 Dietary Guidelines for Americans. Diet is one part of a larger system of environmental, social, and economic sustainability. The guidelines have the power to inform Americans of how their food choices impact food security and environmental sustainability for future generations. The nutrition of our children and grandchildren depends on us getting it right today and continuing to do so tomorrow. For additional information and/or assistance with incorporating messages to improve the sustainability of individual diets into the dietary guidelines, please contact Roni Neff, PhD, MS, at rneff@jhsph.edu or (410) 614-6027.

Sincerely,

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