


# Primer on US Food and Nutrition Policy and Public Health: *Marion Nestle Comments*

 See also Miller et al., p. 986; Brownell et al., p. 988; Schwartz et al., p. 989; Concannon, p. 991; and Franckle et al., p. 992.

The profound influence of food policies on public health is best illustrated by the vast number of people affected by these policies. All three of the most prevalent problems in worldwide public health—undernutrition, overnutrition, and climate change—have roots in dysfunctional food systems. Hunger and malnutrition affect more than 800 million people,<sup>1</sup> more than two billion people are overweight and at risk for chronic disease,<sup>2</sup> and all of us are subject to the impact of food production on climate change.<sup>3</sup>

How the US food system affects public health is a matter of intense current interest. “Food system” means the totality of processes through which food is produced, transported, sold, prepared, consumed, and wasted.<sup>4</sup> Policies governing these processes emerged piecemeal over the past century in response to specific problems as they arose, with regulatory authority assigned to whatever agency seemed most appropriate at the time.<sup>5</sup> Today, multiple federal agencies oversee food policies. For some policy areas, oversight is split among several agencies—the antithesis of a systems approach.

US food policies deal with eight distinct purposes, all of them directly relevant to public health:

1. *Agricultural support:* Overseen by the US Department of Agriculture (USDA), agricultural support policies are governed by farm bills passed every five years or so. These bills determine what crops are raised and grown, how sustainably, and the extent to which production methods contribute to pollution and greenhouse gas emissions.
2. *Food assistance:* The USDA also administers food assistance for low-income Americans through programs such as the Supplemental Nutrition Assistance Program (SNAP, formerly food stamps), the Women, Infants, and Children program, and school meals.
3. *Nutrition education:* This policy is set forth in dietary guidelines revised every five years since 1980 (overseen jointly by the USDA and the US Department of Health and Human Services) and in the MyPlate food guide (USDA).
4. *Food and nutrition research:* The National Institutes of Health and the USDA fund studies of diet and disease risk.
5. *Nutrition monitoring:* The USDA and the Centers for Disease Control and Prevention are responsible for keeping track of the quantity and quality of

the foods we eat and how diet affects our health.

6. *Food product regulation:* Rules about food labels, health claims, and product contents are overseen by three agencies: the USDA for meat and poultry; the Food and Drug Administration (FDA) for other foods, beverages, and dietary supplements; and the Federal Trade Commission for advertising.
7. *Food safety:* Regulation of food safety is split between the USDA for meat and poultry and the FDA for other foods.
8. *Food trade:* More than 20 federal agencies are involved in regulating the export and import of food commodities and products, among them are the FDA, the USDA, and the Department of Homeland Security.

This list alone explains why advocates call for a coordinated national food policy.<sup>6</sup>

The food policy primers in this issue of *AJPH* address the critical links between agricultural policies and health (Miller et al., p. 986) and key components of food assistance policies: direct food aid to the poor

(Brownell et al., p. 988) and nutrition standards for school food (Schwartz et al., p. 989). Their authors are well-established policy experts whose thoughtful comments on the political opposition these programs face make it clear why food system approaches to addressing hunger, obesity, and climate change are essential.

Politics stands in the way of rational policy development, as the editorial by Franckle et al. (p. 992) suggests. Although its authors found substantial bipartisan support for introducing incentives to improve the nutritional quality of foods purchased by SNAP participants, congressional interest in this program remains focused almost entirely on reducing enrollments and costs. Please note that for a special issue of *AJPH* next year, I am guest editing a series of articles on SNAP that will provide deeper analyses of that program’s history, achievements, needs for improvement, and politics. Stay tuned.

In the meantime, how can US public health advocates achieve a systems approach to oversight of the eight food and nutrition policy areas? A recent report in the *Lancet* suggests a roadmap for action. It urges adoption of “triple-duty” policies that address hunger, obesity, and the effects of agricultural production on climate change simultaneously.<sup>7</sup> For example, a

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largely—but not necessarily exclusively—plant-based diet serves all three purposes, and all federal food policies and programs, including SNAP, should support it. The primers and editorial should get us thinking about how to advocate a range of food system policies that do a better job of promoting public health. Read on. **AJPH**

Marion Nestle, PhD, MPH

### CONFLICTS OF INTEREST

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# Primer on US Food and Nutrition Policy and Public Health: Food Sustainability



See also Nestle, p. 985; Brownell et al., p. 988; Schwartz et al., p. 989; and Concannon, p. 991.

This section of the Primer on US Food and Nutrition Policy and Public Health deals with agricultural sustainability, which determines the type of nutrition, and therefore health outcomes, that will be offered to Americans threatened by food insecurity (Brownell et al., p. 988) and to 30 million schoolchildren (Schwartz et al., p. 989).

The farm bill is the most important vehicle for agricultural policy and a key opportunity to diversify US agriculture, make it sustainable, improve nutrition, and meet public health goals. The recent farm bill offered a mixed bag for public and environmental health, but genuine reform will require new political coalitions to champion agricultural policy that is good for people and the planet.

## LINKING AGRICULTURE TO PUBLIC HEALTH

Scholars and practitioners increasingly recognize the bonds

between public health and the food system. The link runs far deeper than the food system's responsibility to provide safe and nutritious foods. Too often ignored are the policy choices that determine how the United States produces its food and the attendant public health and environmental outcomes.

Dietary choices determine more than health. They bear directly on environmental quality, especially land use; water quality; and climate change.<sup>1</sup> Globally, rising incomes and urbanization are driving widespread adoption of a Western diet, heavy on meat, refined sugars, and fats. Diet-related disease aside, scientists estimate such a shift in eating patterns will cause greenhouse gas emissions from agriculture—already a major source of global emissions—to rise 80% by 2050.<sup>2</sup> Household food purchases already produce 16% of total US greenhouse gas emissions.<sup>3</sup>

Dietary health and environmental health are mutually dependent, but far less attention has been paid to how environmental concerns jeopardize nutrition. For example, a growing and disturbing body of research concludes that climate change is degrading the nutrient composition of crops.<sup>4</sup> Increasing atmospheric CO<sub>2</sub> concentrations cause crops to produce less micronutrients and less protein while increasing the proportion of sugars.<sup>5</sup>

In US policy circles, attempts to link public health and food sustainability meet stiff resistance. In 2015, the US Dietary Guidelines Advisory Committee recommended the inclusion of food system sustainability as part of the 2015 Dietary Guidelines, then

under development. This effort ultimately failed, yielding to agribusiness lobbyists, who were reinforced by the secretary of agriculture, who admonished the Advisory Committee for “coloring outside the lines.” This was a missed opportunity and should be corrected as work begins on the 2020 Dietary Guidelines.

Ultimately, realigning the US food system to serve the mutual ends of public health and sustainability requires an ambitious agenda far beyond the dietary guidelines, and although there is no panacea for agriculture, there is a clear imperative for the US food system to become an engine of balanced nutrition, environmental stewardship, and climate resilience.

## AGRICULTURAL DIVERSITY

Crop diversification is a useful proxy for progress toward these goals. Farms that raise a diversity of crops (and animals) using

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