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

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, more than two billion people are overweight and at risk for chronic disease, and all of us are subject to the impact of food production on climate change.

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. 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. 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.

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. For example, a
Editorial

Marion Nestle, PhD, MPH

CONFLICTS OF INTEREST
The author’s work is supported by New York University retirement funds, book royalties, and honoraria for lectures about matters relevant to this comment.

REFERENCES

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 school-children (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. 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. Household food purchases already produce 16% of total US greenhouse gas emissions.

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. Increasing atmospheric CO₂ concentrations cause crops to produce less micronutrients and less protein while increasing the proportion of sugars.

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...
agroecological principles contribute to public health by fostering more variety in the diet by emphasizing nutrient-dense foods and by enhancing the climate resilience of food sources. When they are embedded in local food systems, such farms help expand the availability of culturally appropriate foods, help restore traditional food practices, decrease reliance on processed foods, and connect people to the farmers whose agricultural practices contribute to the care or detriment of environmental health.

Encouraging more diversified agriculture means moving beyond the paradigm of planting vast monocultures and relying on industrial animal feeding operations for meat production. Public and planetary health require a move toward resource-conserving crop rotations, reintegrating animals back into crop systems, and widely adopting agroecological and regenerative practices. These practices mitigate climate change by leaving and sinking greenhouse gases in the soil, but they also improve resilience against the climate disruptions already under way.

Many conservation practices can be incorporated into conventional agriculture systems, where sheer scale means that even small changes play an outsized role in improving agricultural sustainability. Existing federal programs demonstrate that large, conventional farms will adopt new practices if given the right policy incentives. They will also grow different (i.e., more nutritious) crops if there is sufficient demand downstream for the changes to make economic sense.

THE 2018 FARM BILL

The 2018 Farm Bill is a mixed bag for farmers who prioritize sustainability through crop diversification. Consider three examples—drawn from the Farm Bill’s Nutrition, Horticulture, and Conservation sections, respectively—of farm bill programs that support sustainable production.

First, the Food Insecurity Nutrition Incentives program provides cash incentives to encourage the purchase of fresh fruits and vegetables with Supplemental Nutrition Assistance Program (SNAP) benefits (Brownell et al., p. 988). In addition to improving nutrition among SNAP families, this mutually beneficial program can bolster diversified farms by increasing purchases by SNAP recipients at local farmers markets. In renaming it the “Gus Schumacher Nutrition Incentives Program” in honor of its late champion, the new farm bill gives the Food Insecurity Nutrition Incentives program permanent status and provides $536 million over 10 years. The Food Insecurity Nutrition Incentives program remains a small program by farm bill standards, but it proves the concept that thoughtful public programs can pay double dividends to public health and sustainable agriculture.

Second, the past several farm bills included programs to help diversified farms access local markets. Farmers can receive support in opening and operating farmers markets, adding value to the crops they grow and building infrastructure to support regional food systems. By rolling several smaller programs into the new Local Agriculture Market Program, the 2018 Farm Bill provides permanent, mandatory funding for these initiatives. This is a significant win for farmers and consumers.

Third, working lands conservation programs encourage farmers to adopt more sustainable practices or technologies. The Conservation Stewardship Program, which distinguishes itself as the only conservation program that facilitates a comprehensive stewardship approach across whole farms, provides cost share for diversification practices such as adopting resource-conserving crop rotation or planting cover crops. The House’s version of the 2018 Farm Bill would have eliminated the Conservation Stewardship Program, but fortunately the final version maintained the program. Unfortunately, the Conservation Stewardship Program took a $3.6 billion cut over 10 years, and conservation funding overall retained the $6 billion cut from the 2014 Farm Bill.

Despite these relative “victories,” the 2018 Farm Bill continues a decades-long trend of providing massive support for monoculture farming while leaving diversified and sustainable agriculture to fight over the crumbs. The result is a food system that remains yoked to processed foods and unprepared to weather the gathering storm of environmental threats.

UNITED FRONT

Promoting a sustainable and nutritious diet for American families will require a much closer partnership between advocates for sustainable agriculture and public health practitioners. In recent farm bills, public health advocates remained narrowly focused on protecting and promoting SNAP and remained silent on significant questions of agricultural policy. This strategy succeeded in excluding provisions from the bill that would have tightened work requirements on SNAP recipients. Meanwhile, working lands conservation absorbed a body blow, and commodity and crop insurance policy further entrenched an agricultural system tailored to overproduce inexpensive, unsustainable, processed foods.

AGRICULTURAL SUSTAINABILITY AND DIET

Considering the interdependence of agriculture and nutrition, the public health community cannot remain passive on questions of agricultural policy. During the 2015 debate on sustainability in the dietary guidelines, a group of scholars argued that embracing the connections between agricultural sustainability and diet could awaken new political coalitions and also highlight that government can and should take a more hands-on role in ensuring food system sustainability. It is time to answer that call. By working together, public health and sustainable agriculture groups can shepherd reforms that realign US agricultural policy with the health of our citizens and environment.

REFERENCES


CONTRIBUTORS

D. Lee Miller drafted the editorial and M. B. Schwartz and K. D. Brownell provided feedback and edits.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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The authors declare no conflicts of interest.
Primer on US Food and Nutrition Policy and Public Health: Food Assistance

See also Nestle, p. 985; Miller et al., p. 986; Schwartz et al., p. 989; and Concannon, p. 991.

In the food assistance section of this US food and nutrition policy primer, we focus on inadequate access to healthy food, a problem that fuels the dual burden of food insecurity and obesity. Vast numbers of Americans are affected, with staggering public health consequences. Nearly 12% of all American households, and almost 18% of children younger than 18 years, experience food insecurity. At the same time, 20% of American children are overweight or obese, triple the number from the 1970s, and two thirds of adults are overweight or obese, with a cascade of associated medical, social, and economic disadvantages. In the other editorials in this series, we address agriculture (p. 986) and school nutrition (p. 989).

Getting food right is essential for the health and vitality of the nation. This broad and complex task involves numerous matters, beginning with the way food is produced and ending with food being consumed or lost. Among the most pressing issues, in the past and the present, is helping people in need receive access to nutritious and affordable food.

Economic and social circumstances can make it difficult for individuals and families to afford healthy food, with tragic consequences. Parents face agonizing decisions about how food is parcelled among their children when they themselves go hungry. Paying for food versus heat versus medicine can become a daily struggle.

Children convey the saddest story of all. Inadequate nutrition during critical stages of child development amounts to a life sentence, because key cognitive and other functions will never recover. Children may be too tired or depleted to learn in school, are more vulnerable to illness, and can begin a cycle of falling behind that never ends.

SNAP AND WIC

The US government can and has responded in compassionate ways, by supporting a variety of food assistance programs. Two of the key programs are SNAP (Supplemental Nutrition Assistance Program, formerly known as food stamps) and WIC (Special Supplemental Nutrition Program for Women, Infants, and Children). Both programs have highly beneficial effects and are cost-effective but are under constant pressure from those who oppose the programs on fiscal, political, or moral grounds. It is all that proponents of these programs (e.g., champions in Congress, a variety of nongovernmental organizations) can do to protect the programs from monetary cuts, which makes needed growth and improvement of the programs an elusive goal.

SNAP is the largest part of the massive Farm Bill, passed by Congress approximately every five years. In December 2018, after a grueling multiyear fight, Congress passed the most recent Farm Bill, estimated by the Congressional Budget Office to cost $867 billion over 10 years: $664 billion, or 77% of the overall cost, is for nutrition programs, mostly for SNAP.

Approximately 40 million people participate in SNAP. The strong bipartisan support for the Farm Bill indicates a convergence of interests of traditional agriculture with those of both urban and rural areas where food and nutrition policies are pressing.

WIC, authorized originally under the Child Nutrition Act of 1966 and currently under the Healthy and Hunger-Free Kids Act of 2010, provides supplemental nutrition foods, nutrition education and counseling, and screening and referral to mothers during and after pregnancy and during breastfeeding and to non-breastfeeding postpartum mothers, infants, and children up to their fifth birthday. WIC reaches approximately 7.3 million women, infants, and children each month and serves 53% of all infants born in the United States. Annual costs in 2017 were $5.6 billion.

In the most recent iteration of the Farm Bill, the opponents made predictable and serious threats not only to reduce benefits but also to change eligibility, notably by increasing work requirements in ways that would reduce benefits to as many as two

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Threats to funding for SNAP and WIC do not align with data showing program benefits and positive return for every dollar invested. Not surprisingly, participation in SNAP decreases food insecurity, a key outcome in its own right. Access to SNAP in childhood is associated with a variety of positive health and economic outcomes that can be measured decades later. In addition, data from the US Department of Agriculture and from other researchers show a significant anti-poverty effect. Of the households receiving SNAP benefits, 10% rise above the poverty threshold, and in women, economic self-sufficiency increases. This food assistance program also has a positive effect on the nation’s economy. Research by Zandi showed that increasing food stamp payments by $1.00 per year increased gross domestic product by $1.73.

The benefits from WIC are at least as impressive. Research has shown that WIC participation is associated with fewer premature births, fewer infant deaths, lower incidence of low and very low birth weights, and greater likelihood of prenatal care. For every dollar invested in WIC, savings in health care costs are estimated to range from $1.77 to $3.13.

These economic benefits do not capture the very human benefits of children missing less school and learning more effectively, children having improved resilience to disease, and families having less stress about uncertain food access. Stress, with its own set of serious biological consequences, often is not discussed in the context of food assistance programs but is likely an important area in which benefit occurs.

MAXIMIZING REACH

Persistent threats to funding of food assistance programs make it difficult to address the key issues—namely, how these programs can best reduce poverty, improve nutrition, and protect public health. If battles over funding would cease and benefits were extended to all in need, then attention could focus on maximizing reach and effect. For instance, the percentage of individuals eligible for SNAP who are actually enrolled varies widely across states, from a low of 56% to a high approaching 100% (https://fns-prod.azureedge.net/sites/default/files/ops/Reaching2016.pdf). Improving low enrollment rates would provide significant benefit at little cost to the states.

Modeling the effects of various nutrition standards for SNAP and WIC would be helpful, as would additional studies on financial incentives to improve diet quality; analyses of the benefits and drawbacks of controversial possibilities such as the restriction of SNAP benefits for the purchase of sugar-sweetened beverages; better use of technology to improve enrollment and to ease use of benefits; and above all, ensuring that the nutrition promoted and provided through such programs maximizes health, cognitive development in children, and other key outcomes.

CONFLICTS OF INTEREST

The authors have no conflicts of interest to disclose.

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Primer on US Food and Nutrition Policy and Public Health: Protect School Nutrition Standards

This section of the Food and Nutrition Policy Primer deals with the integrity of school nutrition standards. This is one of the three pillars of food policy along with preventing food insecurity (Brownell et al., p. 988) and fostering agricultural sustainability (Miller et al., p. 986).

The school nutrition environment is the healthiest it has been in decades, and the current administration’s regulation rollbacks threaten this achievement. The federal school lunch program feeds more than 30 million American children each school day, and the application of empirically based nutrition standards to both practice and policy must be protected from political and industry influences.

2010 HEALTHY HUNGER-FREE KIDS ACT

As directed by the 2010 Healthy Hunger-Free Kids Act (HHFKA; Pub L No. 111-296), the US Department of Agriculture (USDA) updated the nutrition regulations for the National School Lunch Program, School Breakfast Program, Child and Adult Care Food Program, and Smart Snacks (i.e., snacks available outside of school meals) to align with the Dietary Guidelines. The HHFKA school lunch regulations increased fruits and vegetables, whole grains, and fat-free and low-fat milk, and decreased sodium, saturated fat, and trans fat. In addition, calorie maximums for meals were set by age group. The new regulations have worked—the nutrient density of lunches has increased and energy density has declined.1

All students have benefited from the HHFKA changes because updated nutrition standards apply not only to the school meals but also to food throughout the school building. The Smart Snack nutrition standards apply to all foods and beverages sold outside school meals (e.g., a la carte, vending, and fundraisers), as well as foods marketed on school property. This is critical because the food industry uses branded curriculum materials and fundraising programs in schools to develop brand loyalty among students.

The food industry lobbied successfully against some of the proposed changes in 2012. Initially, the USDA proposed limiting starchy vegetables (e.g., potatoes) to one cup per week to promote a greater variety of vegetables. This measure was supported by a national study that found that students in elementary schools that served french fries more than once a week had a significantly higher likelihood of obesity.2 However, the National Potato Council pushed back, and members of Congress helped potatoes stay in school meals.3

Another struggle concerned tomato paste and pizza. Historically, tomato paste has been credited on the basis of the whole tomatoes that went into the paste, while other purees have been credited by volume served. The USDA attempted to close this loophole, but the companies that produce school pizza protested. Congress protected industry interests through an appropriations bill, and pizza sauce continues to count as a vegetable serving.4

THE NEW USDA COURSE

Despite this vigorous industry pushback, the policies in place at the end of the Obama administration signified tremendous progress in school nutrition. However, on December 6, 2018, the USDA reversed course by reintroducing 1% flavored milk, weakening the whole grain requirements, and ending a plan to progressively reduce sodium over several years.5

Secretary of Agriculture Sonny Perdue claimed that children were not eating the healthier school meals, and food service authorities needed the flexibility. His position appears to have been heavily influenced by the School Nutrition Association, because the whole grain and sodium regulation rollbacks were identical to those requested in the 2018 School Nutrition Association’s legislation and policy position paper.6

There are several problems with the School Nutrition Association and USDA position. First, research shows that children are eating the healthier meals, and the proportion of school lunches consumed versus wasted has not changed.7 Second, the argument that schools need more flexibility is contradicted by the public comments submitted in response to the proposed rules released in 2017. The USDA received 86,247 comments and 96% opposed the School Nutrition Association and USDA position by indicating that flexibilities were not needed because of widespread compliance with existing standards. Third, school meals must retain strong sodium and whole grain standards to align with the Dietary Guidelines and help children meet their nutritional needs.

Children consume too much sodium. The Tolerable Upper Intake Levels for sodium established in the Dietary Reference Intakes is 1900 to 2300 milligrams per day for children aged 4 to 18 years. The average school lunch (just one meal for the day) contains an average of 1377 to 1588 milligrams, approximately 70% of the daily total. This is why in 2009 the National Academy of Medicine recommended that by 2020 a lunch contain no more than

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one third of the child’s daily Dietary Reference Intake for sodium. The 2011 USDA-proposed rule set the more gradual goals of three progressive targets by 2014, 2016, and 2022, but this administration’s recently released rule pushes target 2 to 2024–2025 and eliminates the final target altogether. The USDA now argues that it is prudent to wait for the 2020 Dietary Guidelines; however, this is entirely unnecessary in light of robust science and existing recommendations.

Children also do not consume enough whole grains. The Dietary Guidelines recommend that at least half of the grains we eat should be whole grains. In 2012, at least half of the grain products served in schools had to be “whole grain–rich” (i.e., contain more than 50% whole grains), and, by 2014, all grains served needed to meet this standard. Exemptions were allowed for districts demonstrating hardship in meeting the requirement, and in 2017–2018, about one quarter of all school districts requested exemptions. Yet, the other three quarters did not ask for exemptions and were presumably serving only whole grain–rich products. The recently released rule eliminates the requirement to request an exemption, effectively allowing all districts to go back to the 2012 policy that only half of the grains served must be whole grain–rich.

Finally, beyond the school building, strong school food nutrition standards provide an incentive for the food industry to invest in reformulation. This occurred when the USDA released the Smart Snacks standards for competitive foods. Major companies created “look alike” versions of popular brands so they could continue to be sold in schools. The weakened school meal standards not only allow less nutritious products in schools today but also decrease the motivation for food manufacturers to create products with less sodium and more whole grains for schools to serve in the future.

Federal nutrition policies influence what millions of American children eat at school every day. In spite of the recent steps backward by this administration, the foods available today in schools are significantly healthier than those served before the HHFKA, but the threat of further backsliding remains. We must continue to support the integrity of the national child nutrition programs by using science to inform this critical area of public policy.

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CONFLICTS OF INTEREST
The authors declare no conflicts of interest.

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Primer on US Food and Nutrition Policy and Public Health: Kevin Concannon Comments

See also Miller et al., p. 986; Brownell et al., p. 988; and Schwartz et al., p. 989.

Three articles included in this issue of AJPH reflect current policy, practice, and opportunity in the public health, food, and nutrition arena. The timeliness of these articles is most welcome given the recent legislative accomplishments of the US Congress in its work on the 2019 Farm Bill, which was passed without major cuts to the Nutrition Title as previously proposed by the US House of Representatives in 2018 version. And, on the equally hopeful side, there are early indications that both committees of the House and Senate intend to proceed on anticipated reauthorization of child nutrition programs.

As noted in the primer on US Food and Nutrition Policy, the reach of these principal federally sponsored domestic food programs has major public health impacts by reducing hunger and food insecurity while increasing healthy nutrition and related benefits for millions of Americans. Table 1 lists the programs and their budget for 2019. The Supplemental Nutrition Assistance Program (SNAP) serves more than 40 million individuals monthly, and its beneficiaries include children and adults—from newborns to our most senior citizens. SNAP remains one of the strongest components in domestic safety net and public health programs. Its enrollment numbers are significantly affected by the strength and contemporary state of the US economy as well as policy elements.

The Special Supplemental Nutrition Program for Women, Infants and Children program (WIC) is another critical program for millions of American families, serving several million monthly. Congress recently increased its budget in the 2018 Farm Bill to help families recover from the Great Recession; it is an important tool to help families in the early years meet the needs for their infants and children.

In the Obesity Prevention and Treatment category, the Healthy Hunger-Free Kids Act (HHFKA) starts to reverse the complacency around child nutrition. In 2012, the eight principal food programs were required to meet the 2012 goals by 2014, 2016, and 2022, but this administration changed the rule to push target 2 to 2024–2025 and eliminate the final target. The USDA now argues that it is prudent to wait for the 2020 Dietary Guidelines; however, this is entirely unnecessary in light of robust science and existing recommendations.

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CONFLICTS OF INTEREST
The authors declare no conflicts of interest.

REFERENCES

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TABLE 1—Programs of the US Food and Nutrition Service and Their Allocated Budgets for 2019

<table>
<thead>
<tr>
<th>Program Name and Abbreviation</th>
<th>Fiscal Year 2019 Budget, $</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplemental Nutrition Assistance Programs (SNAP)</td>
<td>73 218 300,000.00</td>
</tr>
<tr>
<td>National School Lunch Program (NSLP)</td>
<td>12 091 834,000.00</td>
</tr>
<tr>
<td>Women, Infants, and Children (WIC)</td>
<td>6 005 000,000.00</td>
</tr>
<tr>
<td>School Breakfast Program (SBP)</td>
<td>4 816 238,000.00</td>
</tr>
<tr>
<td>Child and Adult Care Food Program (CACFP)</td>
<td>3 815 328,000.00</td>
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<tr>
<td>Summer Food Service Program (SFSP)</td>
<td>519 456,000.00</td>
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<td>The Emergency Food Assistance Program (TEFAP)</td>
<td>306 083,000.00</td>
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<tr>
<td>Commodity Supplemental Food Program (CSFP)</td>
<td>238 120,000.00</td>
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<tr>
<td>Fresh Fruit and Vegetable Program (FFVP)</td>
<td>176 000,000.00</td>
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<tr>
<td>Senior Farmers’ Market Nutrition Program (SFMNP)</td>
<td>20 600,000.00</td>
</tr>
<tr>
<td>Farmers’ Market Nutrition Program (FMNP)</td>
<td>18 548,000.00</td>
</tr>
<tr>
<td>Team Nutrition</td>
<td>17 004,000.00</td>
</tr>
<tr>
<td>Special Milk Program (SMP)</td>
<td>8 065,000.00</td>
</tr>
<tr>
<td>Food Distribution Program on Indian Reservations (FDPIR)</td>
<td>998,000.00</td>
</tr>
</tbody>
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(WIC) is the second largest domestic nutrition and health program and is one of the nation’s most effective public health programs. Its impact on such a large number of infants and their mothers each year is a potent example of broad public health policy, health promotion, and future health care cost avoidance. Furthermore, WIC has the notable feature of serving all infants across the country who qualify under its income eligibility guidelines regardless of residency status. In communities across the United States, WIC works in tandem with SNAP, resulting in approximately half of WIC households qualifying for and receiving SNAP benefits.

As I noted, child nutrition legislation is expected to be the subject of congressional hearings this year, with the intention of updating and reauthorizing the Healthy Hunger-Free Kids Act of 2010 (HHFKA). The principal components of the HHFKA are WIC, the National School Lunch Program, the School Breakfast Program, and several smaller adjunctive nutrition programs.

The National School Lunch Program (NSLP) is provided daily in almost 100,000 US schools—from pre-K through grade 12. With updated nutrition policies and menu standards, it has resulted in a demonstrably improved food and nutrition environment in US schools. The NSLP directly feeds some 30 million students each day and, through the School Breakfast Program, serves close to half that number in school breakfasts. The stronger nutrition standards required by the HHFKA have been implemented in all participating schools and embraced by most parents and educators, professional nutritionists, pediatricians, and school nurses. However, these are aspects of the HHFKA school meals requirements that are not supported by the food industry and significant numbers of school food service representatives.

Considering both Farm Bill and child nutrition programs in the HHFKA, close to $100 billion is expended in these specific federal nutrition programs annually. It is obvious that practice and policies supporting food sustainability can be furthered at various stages in the growth, harvesting, processing, and presentation of foods. Using financial support and incentives through these core federal food and nutrition programs can incentivize sustainable food practices.

Diversification of crops, conservation practices, and more careful use of water, soil, and chemicals are essential to achieving food sustainability. Specific changes in practices and monitoring are required at all stages in the growth, harvesting, processing, and consumption of foods. The significant dollar impacts and associated regulatory influences of federal programs can be aligned to support food sustainability. Government policy and nongovernment farm and producer interests can also align to better support food sustainability.

On matters of nutrition and sustainable food systems, voices urging action in the public health community here in the United States and beyond are being raised. Earlier this year leading experts published a major report with recommendations in the EAT–Lancet Commission on Healthy Diets from Sustainable Food Systems. This report is prompting needed discussions and proposed steps forward at various levels in the farm, food, and nutrition communities across many countries. It is very early in these discussions, but they have begun and they deserve engagement by all of us.

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CONFLICTS OF INTEREST
The author has no conflicts of interest to declare.