

New Approaches on Energy and the Environment

New Approaches on Energy and the Environment: Policy Advice for the President

Edited by
**Richard D. Morgenstern
and
Paul R. Portney**

Resources for the Future

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CHAPTER 16

Modernizing the Food Safety System

by Michael R. Taylor

Fundamental reform of the nation's essential yet tradition-bound food safety program requires presidential leadership. Mr. President, I recommend that you organize a bipartisan effort to design the food safety system of the future and implement it in a way that builds on current strengths but prepares the system for future success. While the U.S. food safety system has many strengths, over the century plus of its existence it has become organizationally fragmented, bound by obsolete statutes, and unable to make the best use of its scarce resources to protect the safety and security of the American food supply. To meet the persistent challenge of foodborne illness and the new challenges posed by the globalizing food system—illustrated by increased dependence on imports, the emergence of mad cow disease, and the threat of bioterrorism—fundamental reform is required. This reform should do several things: focus the system more effectively on prevention of foodborne illness; improve accountability across the system for meeting science-based food safety performance standards; establish an integrated food safety strategy and leadership structure; and emphasize risk-based resource allocation.

The Challenges

Calls to modernize the food safety system have come in numerous reports issued by the National Academy of Sciences (NAS) and the General Accounting Office, which point out that more than a dozen federal agencies have major responsibilities for food safety, but that the system lacks a focal point for food safety leadership, responsibility, and accountability. The U.S. Department of Agriculture (USDA) regulates meat and poultry products and processed eggs. The Food and Drug Administration (FDA) regulates all other foods, including seafood, dairy products, and shell eggs, except that the Environmental Protection Agency decides how much pesticide residue can be present in food, and the National Marine Fisheries Service in the Department of Commerce conducts an extensive fee-for-service inspection program for seafood. The Centers for Disease Control and Prevention (CDC) conducts

surveillance of foodborne illness, while the FDA, multiple components of USDA, and the Department of Homeland Security all have important food safety research programs.

This fragmentation reflects the unplanned accretion of programs and activities over the years and is grounded in statutes that contribute to, and in some instances compel, inconsistent and ineffective use of resources. For example:

- USDA individually inspects every one of the 7 billion poultry carcasses produced annually in the United States using a mandated approach that the NAS discredited nearly 20 years ago as largely ineffective in detecting real safety hazards, whereas the FDA struggles to inspect “high-risk” seafood plants once a year.
- USDA sends inspectors to every foreign meat plant producing for the U.S. market to verify that products are produced and inspected in accordance with U.S. standards, whereas the FDA depends almost entirely on border inspections that cover only 1 to 2 percent of import shipments and rely on inspectors detecting contamination problems after they have occurred.
- Some food safety problems and prevention opportunities fall entirely through the cracks. USDA attempts to address the dangerous pathogen *E. coli* O157:H7 at the meat slaughter and processing stage, and the FDA is responsible for the bacteria when it turns up in fresh produce, but neither agency has a mandate to tackle the problem on the farm, where *E. coli* O157:H7 originates in the gut of cattle and preventive measures are most likely to be effective.

Foodborne illness remains an important public health problem in the United States, with the CDC estimating 5,000 deaths and 325,000 hospitalizations annually, virtually all of which are preventable through better-targeted research, regulation, and education.

These and many other well-documented inconsistencies and gaps in the food safety system are themselves sufficient grounds for modernizing the system. They are part of the reason why foodborne illness remains an important public health problem in the United States, with the CDC estimating 5,000 deaths and 325,000 hospitalizations annually, virtually all of which are preventable through better-targeted research, regulation, and education.

But the new threats posed by America’s place in today’s global food system raise the stakes even higher, in both public health and economic terms. Open international markets make wider choices available to American consumers so that we can enjoy fresh produce year-round and have competitively priced options for meeting both nutritional needs and food preferences. These benefits come, however, with dependence on how food is grown, processed, and inspected elsewhere, and with the possibility of harmful contamination being introduced beyond the reach of any direct U.S. oversight.

In the winter months, most fresh fruits and vegetables consumed in the United States come from other countries, mostly in Latin America. Year-round, 70 percent of U.S. seafood is imported. To maintain the benefits of a diverse, economical food supply and to protect public health, the U.S. food safety system needs to modernize its approach to ensuring the safety of imported food.

Mad cow disease and bioterrorism further illustrate the new challenges confronting the United States as a key participant in the global food system. A single infected cow in Washington State disrupted trade with Canada and blocked all beef

exports to Japan, with significant economic consequences for American agriculture. Bioterrorism looms over the food supply as a threat to public health if not prevented, and as a potentially severe disruptor of the American economy if any incident is not contained and responded to swiftly, coherently, and in a manner that restores public confidence in the safety and security of the food supply.

On both mad cow disease and bioterrorism, the U.S. government responds today through ad hoc coordination among a fragmented patchwork of agencies with conflicting missions concerning food safety, the economic welfare of agriculture, trade policy, and homeland security. When it comes to the safety and security of the food supply, and maintaining confidence among American consumers and trading partners, a single official and agency with both a clearly defined food safety mission and accountability for success is needed.

On both mad cow disease and bioterrorism, the U.S. government responds today through ad hoc coordination among a patchwork of agencies with conflicting missions.

Recommendations

Modernization of the food safety system to meet these challenges requires major statutory and organizational change. In our system of government, however, broad-based reform too often comes only in response to real or perceived crises. That certainly has been so in the case of many U.S. health and environmental programs, and we have seen in the United Kingdom and other countries the political potency of food safety in times of crisis. In response to its mad cow crisis, the United Kingdom scrapped its old multiagency food safety structure and unified its food safety functions in the newly created Food Standards Agency.

In the United States, you as president have an opportunity to read the signals about the shortcomings of the U.S. system and provide leadership for change in advance of any catastrophically disruptive crisis. Recognizing the difficulty of making sweeping reforms through the normal legislative process and the need to unite diverse stakeholders behind a reform agenda, you should exert your leadership through a three-step process involving design, legislation, and implementation of reform.

Modernizing the food safety system requires major statutory and organizational change.

Design

You should establish a Bipartisan Presidential Commission on Food Safety Reform to design statutory and organizational reform in accordance with principles and objectives that you enunciate. The commission should be formed in consultation with congressional leaders of both parties and include a prominent and diverse group of food safety leaders, experts, and stakeholders. Your charge to the commission should be grounded in the expert consensus reflected in the numerous NAS and GAO reports and point toward a food safety system with the following attributes:

- **Focus on prevention.** Effective prevention of food safety hazards and foodborne illness is the key to protecting public health and maintaining the confidence of consumers and trading partners in the safety of the American food supply. The

food safety agencies have embraced the principle of prevention by mandating the adoption of Hazard Analysis and Critical Control Points (HACCP) in meat, poultry, seafood, and juice processing plants, but they have no statutory mandate and uncertain legal authority to build a system that works to prevent the introduction of food safety hazards across the spectrum from the farm to the table.

- **Clear standards of accountability.** An effective system of prevention depends on the government being able to set food safety performance standards that establish a standard of care that companies can be held accountable for meeting. This principle is well established for chemical hazards, but industry challenges of USDA's initial attempts to apply the concept to microbial hazards have revealed the obsolescence of current food safety laws, which were adopted before microbial pathogens came to the fore as a public health problem of central concern to food safety regulators.
- **Integration of strategy and leadership.** Experts widely recognize that prevention of foodborne illness and management of such problems as mad cow disease and bioterrorism require an integrated, systems approach from farm to table and should harness the tools of research, regulation, and education in a coherent strategy. This is made impossible by the current organizational fragmentation of the system, which fragments food safety leadership and defeats accountability for the system's successes and failures. Fragmented leadership domestically also undercuts U.S. food safety leadership internationally, which has negative health and economic implications.
- **Risk-based resource allocation.** In the end, the success of the food safety system depends on making the best possible use of resources to target and minimize the hazards that pose the greatest risk to public health and the overall safety and security of the food supply. The food safety agencies have no congressional mandate for risk-based resource allocation, and the meat and poultry laws, which control the allocation of at least 60 percent of federal food safety resources, largely preclude it.

Legislation

Based on the legislative and organizational design developed by your commission, you should provide leadership for a legislative process to replace the current food safety laws with a modern, unified law. A successful legislative process requires that diverse stakeholders benefit in diverse ways from the outcome. Your leadership role in this process is to help all stakeholders see the mutual advantages of food safety reform while ensuring that the legislative outcome is faithful to the principles and objectives embodied in your charge to the commission. You also should prepare a resource plan for consideration by Congress to ensure that the funding provided for the new system is at an adequate level and comes with the flexibility needed to make the system a success.

Implementation

The transition to a new statutory and organizational structure is an enormous management task. Such change is inherently costly and disruptive. You should devise a five-year transition plan that minimizes the cost and disruption, avoids lapses in protection during the transition, and prepares the system for success.

Cautionary Notes

Virtually universal agreement exists that if we were starting from scratch, we would not design the food safety system the way it is today, with multiple agencies and with statutes that both lack a modern food safety mandate and contain old mandates that block risk-based resource allocation. The principle opposition to change comes from those who argue that the current system is working well enough and that the costs and disruption of transitioning to a new system outweigh the benefits. This argument needs to be taken seriously in the formulation of the implementation and transition plan, but it overlooks the fact that the costs of reform are incurred in the relative near term, whereas the benefits will be enjoyed over the long term. If the functioning of the system over the next five to ten years were the only concern, we might just try to do the best we can with the tools we have and hope that a major food safety crisis does not occur during that period. But if the concern is for the longer term, we should be more willing to invest now in change that will return benefits for years to come.

This reality of the long-term nature of the benefits of food safety reform is why presidential leadership is so important. Some of the strongest resistance to change has come from the food safety agencies themselves, whose managers and leaders are understandably focused on the unrelenting stream of immediate problems that they are responsible for addressing today and every day. It is unrealistic and unfair to expect the agencies to lead the way on fundamental structural reform.

It is rather for society, through its political leadership, to judge whether the current system is performing well enough and whether the country's long-term health and economic well-being will be served by sticking with the status quo on food safety. Among our political leaders, you as president are best situated to make that judgment, to make the case publicly for change, and to lead the process. Without your leadership, it is unlikely that change will occur, at least until circumstances force change in an atmosphere of crisis.

It is unrealistic to expect agencies to lead the way on structural reform. It is rather for society, through political leadership, to judge whether the country's long-term health and economic well-being will be served by sticking with the status quo.

M.R.T.