CHAPTER FOUR

Food and Politics in the Modern Age: 1920–2012

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It is unusual to think of food as being political. And yet, it is just as rare for a modern food system *not* to have its origins in national and international politics. Often, the politics of food is most visible in the debates and decisions made within official institutions of government. Farm subsidies, for example, are thrashed out in the halls of national and regional legislatures. Federal, state, and local institutions oversee food safety and food standards. Enormous international agencies structure the loan and trade agreements that govern world commerce. Politics, in the narrowest definition, consists of precisely these institutions, the decisions made within them, and the rules, laws, and norms that govern social and economic interactions.[1] But the politics of food in the modern age is hardly confined to such institutions. Political clashes over food also arise in everyday life.

The inconspicuous and often unrecognized decisions and activities that constitute everyday life also constitute a kind of politics.[2] At times, political differences about food may arise from collisions in values, customs, religious beliefs, and social priorities. Considered in this light, the politics of food is ubiquitous in the modern world.

As has been true throughout history, however, many of the most intense and far-reaching examples of food politics occur because of economic disputes over who benefits financially from the existing structures of food production, distribution, and consumption.[3] To demonstrate how such quarrels have unfolded in the modern age, we present case studies in areas of food politics related to food safety, food biotechnology, agricultural policies, dietary guidelines, health claims on food labels, and international trade. Some of these areas—food biotechnology and agricultural policies, for example—are notoriously political subjects. Others, such as food safety or dietary guidelines, appear to be inoffensive matters of routine inspection or common sense. However, because of their economic implications, even such mundane food matters often give rise to bitter, intractable, and long-standing political debates.

FOOD SAFETY

Food safety would seem to be the least political aspect of production and consumption; everyone wants food to be safe. Instead, this area best illustrates how economic considerations can quickly turn everyday food matters political. Producers want to increase their profit margins by spending as little as they can on the foods they sell. Consumers want to spend as little as possible on the foods that they buy. Economic pressures for lower prices encourage unscrupulous food producers to reduce costs by cutting corners.

Manufacturers can adulterate food by replacing costly ingredients with cheaper and sometimes harmful substitutes. Or, viewing safety procedures as expensive or time-consuming burdens, they ignore them or handle them sloppily.

These temptations and risks are nothing new. Nor is the need for government action to prevent and police them. Indeed, one of the most basic actions required of any government has been to oversee food safety and food quality. Throughout recorded history, codifying and enforcing the rules that specify how food must be produced, measured, and sold has traditionally been among the earliest ways that governments have intervened in the marketplace.[4] Industrialization and globalization, however, have drastically altered the shape and quantity of government action required to keep food free from adulteration and harmful microorganisms.

The imperative to reduce costs, coupled with the complexity of the modern food system, has created greater risks and more opportunities for contamination in food manufacturing. Food is now harder to trace and to keep safe due to the great distances it travels and the number of hands, trucks, warehouses, and processing plants through which it passes. The concentration of production and processing (whether in slaughterhouses, feedlots, factories, or farms) means that pathogens that once may have been isolated in a single product, batch, animal, or locale are now quickly dispersed throughout the food system.

The number of ingredients in many packaged foods, the amount of processing they undergo, and the sheer number of miles travelled by the average food product creates opportunities for innumerable ways to adulterate processed foods, contaminate agricultural commodities, and defraud, dupe, or sicken unsuspecting consumers. From *E. coli*-laced apples to *Salmonella*-ridden peanut butter, the production, transportation, and consumption of food in the modern world remain a risky and potentially lethal business.[5] Meanwhile, the long-distance transportation chain keeps food producers both geographically and temporally separated from their consumers, making it possible for producers to abjure responsibility for ensuring food safety.

While it might seem bad for business to sicken customers, food businesses have responsibilities to shareholders as well as to consumers. The same trust-building, transparency, and prevention measures likely to make for confident eaters may dismay stockholders interested in maximizing short-term profits.[6] As individuals are limited in what they can do to prevent safety problems, political institutions must be responsible for ensuring that safety measures are in place and actually followed.[7]

Strict standards require strict oversight. In the United States, oversight of any private industry is a politically charged issue.[8] Thus, food companies may resist mandatory safety procedures while appealing to the political notion of keeping government out of private business matters.

Distaste for federal oversight of economic actors helps to explain the history of food-safety regulations in the United States. For reasons of history, safety oversight is divided largely between two agencies: the U.S. Department of Agriculture (USDA) and the Food and Drug Administration (FDA). The USDA oversees the safety of meat and poultry, and receives three-fourths of congressional food-safety funding. The FDA regulates the

safety of all other foods—roughly three-fourths of the entire food supply—but receives only one-fourth of the funding. Although for years food safety advocates have urged the creation of a single food-safety oversight agency with authority to order recalls of contaminated products, the U.S. Congress has consistently failed to act. This intransigence perpetuates a food-safety regime replete with gaps, loopholes, and errors.

The inadequate funding provided to the FDA, for instance, explains why an internal investigation found this glaring disparity: from 1970 to 2007, the food industry grew exponentially, but FDA inspections decreased by 78 percent. Since the early 1990s, Congress had imposed more than one hundred new tasks on the FDA, but given it little additional funding to conduct these tasks.[9]

One result of the FDA's weakened condition is that food-safety problems are discovered after contaminated foods are consumed. Just in 2009, the FDA had to deal with a large number of recalls of foods already on the market, as a result of discoveries of suspected or proven contamination with potentially lethal bacteria: *E. coli* O157:H7 (refrigerated cookie dough); *Bacillus cereus* (Slim-Fast drinks); *Listeria monocytogenes* (bean sprouts, frozen waffles, smoked salmon, soft cheeses, packaged sandwiches); and *Salmonella* in an absurdly long list of foods: alfalfa sprouts, cantaloupes, chocolate-covered peanuts, cilantro, chai tea, dry milk powder, granola nut clusters, green onions, ground red pepper, hazelnuts, hot cocoa mix, parsley, peanuts, peanut butter, peanut butter-containing products, pistachios, romaine lettuce, spinach, tahini, trail mix, yogurt, and watermelons.[10] These represent only a selection of items recalled in 2009, and do not include the meat and poultry products regulated by the USDA.

In some of these incidents, investigators found evidence of only casual attention to food safety. Food companies, for example, have strong disincentives to test products for harmful bacteria. Products that test positive must be recalled. The politics of food safety means that food companies have little incentive to protect consumers beyond lawsuits and class-action settlements, from which many businesses soon recover. Hence: the need for independent oversight and authority to impose preventive measures and to recall contaminated products.

At the international level, the FDA's limited capacities demonstrate how thinly federal resources are stretched to meet the demands of food imports

to the United States. The number of FDA-inspected imported goods increased from 2.8 million shipments in 1997 to 8.2 million in 2007. Lacking additional resources to keep up with this growth, the FDA managed to inspect less than 1 percent of these shipments in 2007.[11]

The contemporary global food system presents even more opportunities for potential harm. Many food ingredients are untraceable without teams of sleuths. When a mysterious substance in nearly one hundred brands of American pet foods sickened cats and dogs throughout the United States in 2007, it took two months, three companies, several research laboratories, and one federal agency to pin down the toxin (melamine, an industrial chemical) and its origin (China).[12] While this episode involved pet, not human, food, it illustrated the interconnectedness of the world food supplies for people, food animals, and pets. Despite harsh punishment for the perpetrators, melamine turned up in Chinese infant formula and was responsible for causing kidney problems in nearly 300,000 infants. It continued to appear in milk-containing food products around the world throughout the following years.[13]

While international commerce in foodstuffs has become easier and more frequent, establishing political agencies whose authority matches the problems and distances at issue has never been more difficult. Nevertheless, several European countries have attempted to consolidate oversight of food safety into single agencies or institutions. In the late 1990s, Denmark, Ireland, and the United Kingdom (along with Canada) created such agencies, followed more recently by Germany, the Netherlands, and New Zealand. In 2003, primarily as a response to the BSE so-called mad cow outbreak, the European Food Safety Authority (EFSA) was established to provide independent scientific advice on all matters with a direct or indirect impact on food safety. Although the approaches taken by these countries varied, all established a single agency to oversee or to enforce food-safety procedures. Because these benefits have not been fully evaluated and because these countries are all smaller than the United States, officials of U.S. food-safety agencies believe that such approaches have only limited ability in their country.[14]

Overall, economic considerations continue to remain the guiding concern for food producers operating across national borders. As we discuss below, without strong political institutions, the default governing authority for handling international food-safety and production standards is the

World Trade Organization (WTO), whose chief purpose is to end barriers to trade between nation states, not to manage food-safety problems.

FOOD BIOTECHNOLOGY

Some of the most political issues in the food-safety realm, however, are not strictly matters of safety. The catch-all term *food biotechnology* is an imprecise phrase that refers to the use of recombinant DNA technology to adjust or intervene in the genetic processes of plants, animals, and microorganisms.[15] Applications range from the technology used to *alter* the genetic structure of plants and animals, to the set of reproductive techniques used to clone, or *replicate,* adult animals. These applications are similar in the level of fear and loathing that they generate among the public.

Some characterize the dread and outrage generated by biotechnology as a moral virtue and describe it as "the wisdom of repugnance," while others characterize it as a kind of gastronomic queasiness or, pejoratively, as an expression of scientific ignorance.[16] Whatever its designation, the sense of unease voiced by many consumers about food biotechnology indicates a difficult political problem. Social, economic, and political issues are at stake with biotechnology policies which, in the contemporary policy-making environment, are difficult to discuss, let alone resolve. The result is public anxiety about patenting forms of life, the labeling of biotechnology products, intellectual property rights, long-term social and environmental risks, the implications of the technologies, and the regulatory system itself.[17] Such concerns are often funneled into the one setting in which it is possible and permissible to object to and criticize food biotechnology: the realm of food safety.[18]

Supporters routinely argue that genetically modified seeds provide the solution to hunger, poverty, and the pressures of world population growth.[19] By adjusting plant traits to enable staple crops to weather pests, droughts, and other adversities, proponents argue that agricultural biotechnology can increase harvests and allow farmland to support growing populations. Critics, however, wonder how such benefits are possible when populations most in need of the technology can least afford it, and existing methods of sustainable agriculture are bypassed in favor of technological approaches.[20] Most often, however, these disagreements are discussed not on their own terms, but are instead swept into scientific disputes about risk, safety, and hazards.

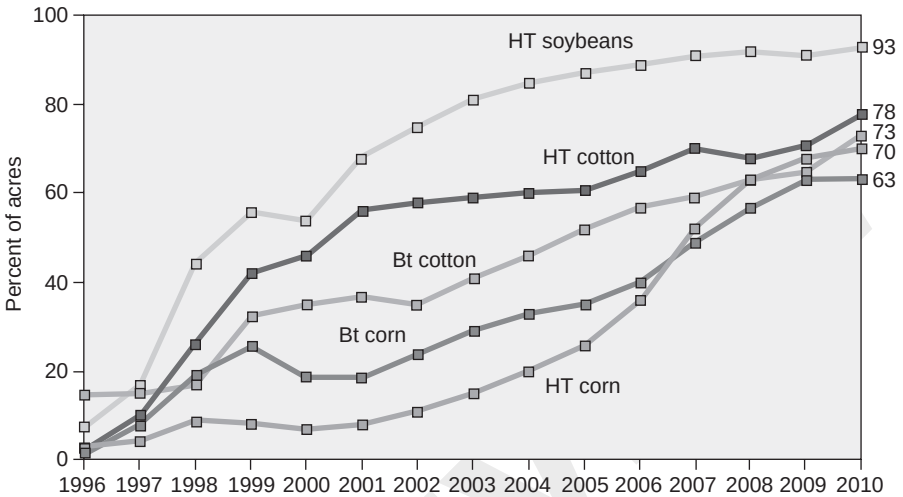

FIGURE 4.1: Rapid growth in adoption of genetically engineered crops continues in the United States. Data for each crop category includes varieties with both HT (herbicide tolerant) and Bt (Bacillus thuringiensis) toxin traits. *Sources*: 1996–1999 data are from Fernandez-Cornejo and McBride (2002). Data for 2000–2010 are available in the ERS data product, Adoption of Genetically Engineered Crops in the United States. Tables 1–3.

Trade disputes between the United States and the European Union, for instance, over the use of biotechnology products in exported agricultural items have ostensibly occurred because of food-safety concerns—despite profoundly different social and political attitudes between these trading partners with respect to biotechnology.[21] In 2003 the European Union enacted a law that required all food products containing genetically modified organisms (GMOs) to be labeled as such and to be traced back to their origins. This traceability, for most Europeans, is seen as a consumer right and thus ensuring a safe and reliable food supply, while for many producers and even consumers in the United States it is regarded as inconvenient at best. The transformation of public mistrust and unease into a discussion of relative safety levels is in part a pragmatic response to a messy dispute, but it is also a successful move on the part of biotechnology companies to control the terms and outcome of the discussion.

Whether in domestic or international political disputes, contemporary regulatory systems that focus on biotechnology as an issue of food safety often pit public concerns and values against corporate interests in a sphere in which corporations have far greater resources. The politics of food

biotechnology is consequently about public access and deliberation in a political setting where those with the greatest financial stakes in the debate are also the ones that set its terms. Meanwhile, in other areas of food politics—such as agricultural policies—ordinary citizens have even less of a say in determining long-term plans and principles.

AGRICULTURAL POLICIES

Throughout the twentieth and twenty-first centuries, governments have struggled to ensure that food supplies are not only abundant but also safe, nutritious, and affordable. These attempts can be understood as political interventions into the agricultural economy. Such interventions have taken several paths, ranging from government-run collective farms to government subsidies for private farms. Rarely do these grand schemes begin out of a desire to alter agriculture alone. Guaranteeing an ample food supply can be understood as a political necessity—if not a basic moral duty—of *any* government, but in the twentieth century these obligations were caught up in the concurrent needs of nation-states to transform, maintain, and adjust their economies—needs that continue to the present day.

In the Soviet Union, for instance, the leaders of the 1920s and 1930s embarked on an ambitious plan to industrialize the traditional peasant economy.[22] Doing so required transferring people and resources from small-scale agriculture to large industries—and accomplishing this transition at breakneck pace. In 1917, the peasantry made up 85 percent of the population.[23] Some peasant farmers were compelled to leave the land and work in factories, others were forced or encouraged into state-run collective farms, and many of those who resisted "disappeared."[24] Russian historian Nicholas Riasanovsky estimates that at least five million individuals vanished—many sent to concentration camps in Siberia or Central Asia.[25]

With similar dispatch, the first of several five-year plans to transform the agricultural economy was completed in a mere four years—leading to a series of terrible famines.[26] The worst of these swept the USSR in the early 1930s. Although this famine cannot be blamed entirely on the strict, quick, and unrealistic farming schedules developed by Soviet planners, the adjustment plan almost certainly worsened an already dire problem caused by poor weather, soil, and economic conditions.[27] The result was widespread

privation and worse: at the height of the 1932–1933 famine, more than 4.5 million individuals are believed to have perished across the Soviet Union.[28]

The consequences of rapid industrialization in China were even more extreme. Similar to the Soviet Union's programs, Chinese plans for swift industrial development involved bringing agriculture under state control in the form of collective farms.[29] Also similarly, the Chinese policies, launched in 1952, came at great human cost and caused an immediate agricultural crisis. Following widespread upheaval and disarray, grain production fell into precipitous decline by the end of the 1950s. By 1961, the combination of the shortage of food in rural areas, the official disbelief in the shortage, and the inability to redistribute existing supplies is believed to have caused the death of approximately thirty million individuals.[30]

In striking contrast to these stories of hardship, crisis, and collectivization, policymakers in the United States have enjoyed touting the virtues of the independent American farmer and have wrestled with a chronic problem of surplus. However, while American farms have remained private, their very independence and success could be maintained only through vast amounts of government support at levels which continue to this day.

As with agricultural planning in the USSR and China, American farm policies did not originate with a desire to reshape the food system. Rather, they emerged from a perceived need to prop up the entire economic system. In the United States, agricultural assistance to individual farmers was intended to be a short-term tactic to jump-start the economy.

United States' farm assistance was originally enacted into law in the 1930s as a central component of President Franklin Delano Roosevelt's New Deal. The special legislation was intended to bring economic relief to Americans battling the Great Depression. At the time, over one-fifth of the American population was employed in agriculture.[31] Policymakers maintained that providing aid and stability to this crucial 20 percent of the labor force would do much more than help farmers. By enabling farmers to purchase manufactured goods, the direct farm aid would also—planners argued—bring economic stability to the entire economy.[32] The assistance programs consisted of an extensive set of government-backed loans, price supports, and disaster insurance.

The policies were immensely and immediately popular among farmers. Within a few years, more than one-third of gross farm income came from

government programs, and farmers quickly came to view these measures as entitlements rather than as historical curiosities.[33] By 1942, the temporary measures of 1933 had been renewed and it was soon evident that the farmers' sense of economic need conjoined with their formidable ability to lobby lawmakers would make the subsidy programs difficult to eliminate.[34]

Because the 1930s legislation creating the programs was provisional, American agricultural subsidies must be continually renewed by Congress—a process which occurs roughly every five to seven years. Lawmakers from farm states soon learned that they could use their votes on *non-farm* issues as bargaining chips, using a vote, say, for a transportation bill, in exchange for a vote for what is now widely known as the Farm Bill. Over time, this process was cemented by tailoring significant chunks of the Farm Bill to suit the politics of urban lawmakers.[35] The 1977 Food and Agriculture Act, for instance, provided the usual agricultural subsidies for farmers, but also included food-stamp programs for city-dwellers, ensuring enthusiastic support from rural and urban lawmakers alike. This long-standing mutual assistance policy of U.S. legislators is an important reason why the (temporary) subsidy programs of the 1930s have not yet been brought to a close. Those with a direct economic stake in the subsidies have successfully captured the political process. The relationships between farmers, their commodity-specific lobbies, and the legislators who bargain on their behalf have proved so impervious to outside influence that they have been enshrined in the study of American politics as the *iron triangle* of influence-peddling: a now-classic example of institutionalized corruption.[36]

Comparable issues bedevil the European Union (EU). European politicians have clung to programs of intensive economic assistance to domestic farmers. The effects of the U.S. and EU systems are similar: both produce too much food. The EU farm-assistance program, however, is certainly more complex than the American system. The Common Agricultural Policy, or CAP, integrates a widely varied collection of national policies into a single, harmonized structure for collecting funds and disbursing subsidies—all while attempting to protect the economic goals and agricultural traditions of very different regions.[37]

A look at Germany's contribution to the CAP illustrates how this works. Immediately following World War II, the West German government gave farmers special economic treatment in order to maintain an adequate

food supply, ensure a stable economy, and lock in the typically conservative votes of farmers and their families.[38] In one stroke, the West German government remedied a food shortage and made a political commitment to protect the economic needs of a network of small, traditional family farms.[39] This promise to uphold the ideal of the small family farm translated into economic policies—namely high levels of price supports and protection from competition—which were, along with the commitment to the ideal itself, eventually transferred into pan-European policies. Germany's 1955 Agricultural Act, for instance, which decreed a federal commitment to maintaining a fair standard of living for individual farmers—and did so through the measures mentioned above—is nearly identical to Article 39 of the 1957 Treaty of Rome—the first declaration of the EU's agriculture program.[40]

The Treaty of Rome is one of the founding documents of European political and economic unity, and the Common Agricultural Policy laid out in Article 39 was of particular importance.[41] Much like agricultural subsidies in the United States, and designs to modernize or support the farm sectors in other countries, the origins of the CAP are inextricable from the broader economic goals of the European Union and its member states.

In the decades following World War II, a principal goal of politicians across Europe was to prevent such a conflict from occurring again. By forcing historically competitive and hostile nations such as France and Germany to work together, leaders within Europe hoped to create a single political and economic community within which war would be unlikely—if not impossible.[42] To this end, the CAP binds former competitors together in a system of mutual assistance. The first CAP agreements went into effect in 1962 with the goal of creating: (1) a single market, in which agricultural goods can circulate freely; (2) a system of common financing, which collects revenues and distributes benefits as a unit; (3) guaranteed minimum prices for specified agricultural commodities; and (4) import tariffs to protect CAP member states' agriculture from cheap competition abroad.[43]

Thanks to the importance of agriculture in many European economies, demands for agricultural protectionism from countries such as Germany, and the widely varying spectrum of products grown in the European Union, the CAP remains Europe's single most expensive program—and also one of the most complex and contested—though reforms have been enacted, including

its decrease in size, decoupling subsidies from production, and the new role of farmers as landscape and environmental stewards.[44] Much like American agricultural policies, the CAP is tremendously efficient in terms of generating an abundance of food. This is an accomplishment not to be overlooked in light of the grave famines that occur frequently in other regions of the world. However, in both the European Union and the United States, these accomplishments can be considered fundamentally inefficient in the sense that they drastically distort the basic relationship between supply and demand.

By supporting what farmers grow—regardless of what they can sell—both the EU and U.S. programs boost the supply of basic commodities well above the level of demand. This can be understood as a benefit in the sense that a reserve supply of food protects national economies from price swings and poor harvests, but this chronic state of excess creates its own set of calamities. Chief among them are nutritional dilemmas, ecological destruction, and international quarrels.[45]

The influence of northern-hemisphere agricultural policies on the economies of southern-hemisphere nations, for instance, is well illustrated by the trajectory of developing-country farm sectors in the later twentieth century. Domestic policies in both developed and developing countries supported a one-way flow of cheap foodstuffs across international borders from the affluent and over-productive north to the developing south. Governments in developing countries watched as cheap imports flooded their markets and drove their own farmers to cities in search of work.[46] In some countries, where the turbulent growth of democratic political systems has coincided with a brisk displacement of agricultural populations, newly unemployed and landless workers have been quick to demand what they describe as their political and economic rights to land.[47] In other places, the rural exodus has been essential to industrialization by creating a burgeoning urban labor pool.[48]

Across the board, the economic interests of the north have shaped the terms, laws, and practices not only of the international trade in food, but also of developing nations' agriculture. Exports from abroad directly affect what developing-nation farmers are able to grow profitably for domestic consumption. In many places, the inability of small domestic producers to compete with the external supply of cheap food has meant that formerly self-sufficient countries became dependent on food imports from the developed world.[49]

Over the course of the twentieth and twentieth-first centuries, while some governments have stepped into the agricultural economy in order to radically transform it, others have thus stepped away from it, subject to the economic policies of more powerful nations. Some governments have intervened in the farm sector in order to preserve hallowed ideals—or to support the economic interests of a narrow sector of producers. In all of these cases, national farm politics have effects that are felt far beyond national borders and impact far more than the lives of farmers themselves. In our widespread nutritional crises of both surfeit and scarcity, in the perplexing political traditions of both right and left, and in the tightly interwoven economic systems of both north and south, the farm politics of the last hundred years have contributed to, and continue to perpetuate some of the fiercest and most deeply felt conflicts of modern life.

DIETARY GUIDELINES

One consequence of the farm-support traditions of the modern developed world is an excess of calories available in the food supply. These complicate the making of dietary guidelines. Although dietary guidelines are supposed to be based on science, they are subject to pressures from food companies concerned about the business implications of advice to restrict certain nutrients or foods.

Advice to consume *more* of a country's agricultural and food products in order to prevent nutrient deficiencies raises few controversial issues. Advice to *restrict* intake of certain foods to prevent obesity and chronic diseases, however, is inevitably controversial. The producers of foods targeted for restriction routinely use the political process to weaken, undermine, or eliminate dietary guidelines that suggest eating less of their products.

The history of dietary guidelines and food guides is rife with examples of controversy over advice to eat *less*. Like any other business in today's global marketplace, food companies must expand sales, meet growth targets, and produce immediate returns for investors. Because all but the poorest countries in the world provide more food than is needed by their populations, the food industry is especially competitive. The U.S. food supply provides an average of nearly 4,000 kilocalories per person each day, nearly twice the amount required by the population. Unlike the situation with shoes,

clothing, and electronics, consumption of food is limited even for those with the largest appetites, making competition especially intense. The need to sell more food in an overabundant marketplace explains why the annual growth rate of the American food industry is only a percentage point or two, why food companies compete so strenuously for a sales-friendly regulatory and political climate, and why they so aggressively defend the health benefits of their products and attack critics of their marketing, selling, and lobbying practices.[50]

More often than not, food-industry pressures have succeeded in inducing government agencies to eliminate, weaken, or thoroughly obfuscate recommendations to eat less of certain nutrients and their food sources—or to consume less food overall. United States' policymakers learned this lesson in 1977. When Senator George McGovern's Select Committee on Nutrition and Human Needs released a report suggesting that Americans reduce consumption of meat, eggs, full-fat dairy products, sugars, and salt, the affected industries protested and persuaded Congress to intervene. This level of opposition established an apparently unshakable precedent: dietary advice must never suggest eating less of anything. Over the years, dietary guidelines' committees have internalized this approach.

Since 1980, the USDA and the U.S. Department of Health and Human Services (HHS) have jointly issued *Dietary Guidelines for Americans* every five years as a policy statement on nutrition and health. The *Guidelines* provide dietary advice to reduce risks for chronic diseases for everyone over the age of two years and constitute an official statement of government policy regarding all federal nutrition education, training, food assistance, and research programs. Although they are explicitly set forth as "science based," specific recommendations are invariably influenced by the economic interests of food-industry stakeholders.[51]

The 1980 version of the sugar guideline, for example, simply said, "Avoid too much sugar." By 2005, under pressure from sugar-industry groups, the *Guidelines* used twenty-three additional words to make the same point, beginning with "Choose and prepare foods and beverages with little added sugars or caloric sweeteners."[52]

Such politics extend to the international level. In 1992, Geoffrey Cannon, a British writer on food politics, surveyed dietary guidelines produced by thirty countries, mainly European, and found their content—and

the politics behind them—to be virtually identical to those above.[53] More recent guidelines produced by the World Health Organization for the thirty member countries of the European Region continue this tradition,[54] as do food-based guidelines and reports collected by the Food and Agriculture Organization from individual countries in its various world regions.[55] These make it clear that the politics of dietary guidelines remains consistent no matter where the guidelines are issued.

In the early 2000s, the World Health Organization (WHO) began work on a global strategy to help member nations reduce the burden of death and disease related to poor diet and inactivity. The process began with an expert consultation involving international scientists who were asked to review research and make recommendations. Their report, commonly referred to as "Technical Report 916," appeared in 2003.[56] The process also involved stakeholder consultations with member states, United Nations (UN) agencies, governmental and non-governmental organizations, the food industry, and other private-sector groups, as well as negotiation of co-sponsorship with the Food and Agriculture Organization (FAO) of the UN. The final Global Strategy, released jointly by the two UN agencies, was ratified by member states in May 2004.[57] In this process, the dietary guidance components proved especially contentious.

In the United States, lobbyists for sugar-trade organizations induced the HHS to submit critiques of the draft based on materials they provided.[58] Although sugar-trade groups ostensibly based their arguments on science, their concerns were decidedly economic. Such a recommendation, they said, would be likely to produce "serious, detrimental and long-lasting effects on the agriculture and the economy of [sugar-producing] countries."[59] Just prior to release of "Technical Report 916," The Sugar Association threatened to ask Congress to withdraw U.S. funding for the WHO. It demanded that the WHO immediately withdraw the report.

At the same time, industry groups were attempting to convince member states that acceptance of the 916 report would adversely affect the economies of sugar-producing countries. The World Sugar Research Organization, for example, distributed a report illustrating the loss to sugar-producing countries that would occur if global sugar consumption dropped to 10 percent of calories. Despite flaws in this analysis, it convinced many member states to lobby against the recommendation.[60]

In May 2004, the fifty-seventh World Health Assembly endorsed the Global Strategy, but with major concessions to the sugar industry. Analysis of drafts produced between April 2003 and May 2004 provided substantial evidence of industry influence. As ratified, the Global Strategy states that foods high in fat, sugar, and salt increase the risk for non-communicable diseases, but the sugar recommended simply stated, "limit the intake of free sugars." The Global Strategy remains the basis of dietary advice set forth by the World Health Organization.

Even more recent examples abound. The dietary guidelines' committee in the United States that prepared the seventh edition in 2010 was asked to prepare "science-based" recommendations. Once again, lobbyists for every food product or group likely to be affected by the guidelines prepared materials for the committee, testified at committee meetings, and worked behind the scenes to make sure that the guidelines did not suggest eating less of their products.[61] Indeed, the 2010 Dietary Guidelines suggest eating less of "solid fats and added sugars" but say little about reducing intake of the food sources of those nutrients.[62]

HEALTH CLAIMS ON FOOD LABELS

Marketing food to the general population involves another set of political issues. As the food system has grown more complicated, so has the sort of information necessary to understand what is in a particular food and what it does. While food-labeling laws *require* producers to display certain pieces of information on food packaging, regulations about health claims *limit* what food producers may say about their products. The history of health claims on food labels reflects the tension between the interests of food producers in using health messages in marketing, and those of regulators concerned that labels display information that is truthful and not misleading.

Food packages did not always display health messages. Although they might have done so in the nineteenth century, the U.S. Food and Drug Act of 1906 specified that food labels could not bear statements that might be "false or misleading in any particular way"—an interdiction interpreted to preclude health claims.[63] Following legal challenges by food manufacturers, Congress passed the Sherley Amendment in 1912, which prohibited food packages from displaying statements that were both false *and* fraudulent.

For almost a century, the FDA interpreted any statement of health benefit on a food product as meeting both criteria.

The FDA made an exception for statements of nutrient content. Manufacturers began to add vitamins to food products almost as soon as these nutrients were discovered—vitamin D to breakfast cereals as early as the 1920s, and vitamin C, iron, and B-vitamins during the war years of the 1940s. The FDA allowed these additions as part of a general effort to improve the health of men fighting the battles of World War II. In 1955, Kellogg introduced Special K cereal fortified with seven vitamins and iron. But the FDA limited the amounts of nutrients that could be added to levels that replaced nutrients lost in processing.

These limitations weakened after 1969. That year, President Nixon held a White House Conference on Food, Nutrition, and Health for the purpose of recommending ways to end hunger and malnutrition in America.[64] Food companies, well aware of the marketing potential of added vitamins, seized the opportunity to recommend more widespread nutrient fortification. A food industry committee suggested fortifying not only wheat, corn, and rice, but also snack foods and chocolate. But some consumer groups at the conference urged caution, explicitly stating that the addition of vitamins to such foods would promote marketing, not health.

Nevertheless, in response to the conference recommendations, the FDA relaxed some of its restrictions on fortification. It allowed nutrient fortification of certain categories of foods but continued to restrict their amounts. In the 1970s, cereal manufacturers demanded wider fortification. The FDA eventually conceded and permitted labels to say such things as "contains 7 essential nutrients." But the agency continued to refuse to allow statements that the foods could prevent, treat, or mitigate disease. Such statements, the FDA argued, constituted drug claims that required scientific substantiation.

In 1984, unbeknownst to the FDA, the Kellogg Company arranged with the National Cancer Institute to endorse a health claim for All-Bran cereals. Within six months, All-Bran's market share increased by 47 percent, thereby demonstrating that health claims sell food products.[65] Kellogg, although conceding that the purpose of its campaign had been to promote sales of All-Bran, asserted that its actions were a public service in informing the public about the benefits of fiber, and it filed a lengthy citizens' petition with the FDA to allow health claims.[66] In what can hardly be a coincidence,

Congress incorporated the petition's suggestions about health claims virtually intact when it passed the Nutrition Labeling and Education Act of 1990. This act required the FDA to consider ten specific health claims and to permit those that were scientifically substantiated to be displayed on food labels.

Additional acts further weakened the FDA's ability to prevent use of unsubstantiated health claims. In 1994, Congress passed the Dietary Supplement Health and Education Act, which effectively deregulated supplements and permitted them to bear a new kind of claim that a supplement can support some *structure* or *function* of the body. Although this act did not apply to foods, and still does not, manufacturers sued the FDA any time the agency denied a claim. In 1997, Congress passed the FDA Modernization Act, which further weakened the FDA's ability to control health claims on food labels. During the Bush administration, the FDA lost most of the health claims lawsuits and stopped fighting them. The requirements for scientific substantiation weakened and nutrient-content, health, and structure–function claims proliferated on food products.[67]

A fourth category of claims, front-of-package (FOP) endorsements of nutritional quality, began to appear in 1995, with the American Heart Association's symbol indicating that a product is low in saturated fat and cholesterol (but not necessarily sugar). PepsiCo introduced its Smart Spot in 2004, soon followed by Kraft's Sensible Solutions. In 2007, General Mills' cereals displayed tokens indicating the content of specific nutrients, based on European models. Other companies followed suit. FOP symbols proliferated to such an extent that *Consumer Reports* developed a website to track and evaluate them.[68]

Never before in American history have food products displayed so many symbols and statements proclaiming nutrition and health benefits. FOP claims, although often used in violation of FDA labeling regulations, are ubiquitous in food marketing. Recently, the FDA embarked on an initiative to review FOP labeling and asked the Institute of Medicine (IOM) to consider the eventual recommendation of a single, standardized guidance system.[69]

The bewildering array of claims for increasingly remote health benefits has recently elicited political action. The Smart Choices Program, a voluntary initiative involving several food companies and health organizations, became the focus of an embarrassing exposé by the *New York Times* and

threatened legal action by the Connecticut Attorney General when its logo of approval appeared on a children's sugar-sweetened cereal. The companies withdrew from the program. The FDA now intends to examine the entire issue of nutrition labeling, but whether the agency will be able to retake control of health claims in the face of food-marketing imperatives remains to be seen. In this arena, as in food safety, the FDA remains handicapped by a lack of political and financial support, and faces powerful industries determined to act in their own self-interest.

A similar situation is occurring in Europe. In Great Britain, for example, the Food Standards' Agency (FSA), concerned about rising rates of obesity, began in 2006 to encourage food companies to use FOP labels to identify levels of fat, saturated fat, salt, and sugars in their products. In particular, the FSA recommended a *traffic-light approach* that marked high levels of fat, saturated fat, sugar, and salt as red, medium levels as yellow, and low levels as green.

The British food industry strongly objected to this approach and proposed an alternative, nutrient-based guidance daily amount (GDA) approach that identifies the percentages of various nutrients in a product. In response to consumer confusion generated by the competing schemes, the FSA conducted a study and concluded in 2009 that the best-understood approach would combine the words high, medium, and low with traffic-light colors *and* percentage GDAs. The food industry continues to object to *any* traffic-light labels, not least because consumers understand them so well and tend to avoid products marked in red. It wants the European Union, which seems much more amenable to food-industry lobbying, to make the final decision. Indeed, the European Parliament narrowly defeated the traffic-light proposal early in 2010, and instead suggested one that allows companies to decide voluntarily how to combine traffic-light colors, text, or percentage GDAs.[70] For food companies, much is at stake in their ability to market products to consumers.

INTERNATIONAL TRADE

The self-interested actions that constitute the politics of food at the domestic level are compounded when food-policy disputes involve other countries, especially when the disputes concern international trade. Political

leaders of any country may aspire to keep grocery prices low enough to avoid civic unrest, political instability, and food insecurity, but are often beholden to their own agriculture sectors. Agricultural interests demand government support to keep prices high as well as government assistance to sell their excess goods abroad at competitive prices—goals that sometimes conflict with the needs of nations to develop their own agricultural systems. Aid for such systems can be perceived as helping the competition and hurting the long-term interests of farmers in wealthier nations.[71] Similarly, governments can and do maintain higher-than-normal prices by restricting free trade—either by limiting imports or assisting exports.

In recent years, most countries in the world (150 out of nearly 200) have joined the World Trade Organization (WTO), whose stated purpose is to *reduce* barriers to free trade.[72] It is no surprise that these three goals—supporting domestic growers, placating consumers concerned about food prices, and eliminating trade barriers—often clash. Resolving the contradictions among these goals requires coordinated international action that in turn conflicts with the interests of individual countries.

For the latter half of the twentieth century, international agreements have established rules for navigating these waters. Immediately after World War II, most countries of the world agreed to set up several international political and economic organizations—such as the United Nations and International Monetary Fund—intended to bring a measure of order, stability, and cooperation to world affairs. One of these institutions was a treaty known as the General Agreement on Tariffs and Trade (or GATT). Signed in 1947 by twenty-three countries, GATT was created in order to eliminate trade barriers and end discrimination in international trade.[73] With respect to trade in agriculture, however, trade barriers and unfair discrimination in such areas as domestic farm subsidies proved to be such touchy issues that even talking about these subjects was postponed for three decades.[74]

In 1995, the WTO replaced the GATT framework. In the discussions preceding the creation of the WTO, member states agreed to discuss and even change their agriculture trade policies, but the WTO tools for liberalizing farm subsidies and trade policies have done little to change the national and international organization of world trade in agriculture. The old system of political bargaining—in which nation-states haggle and barter to settle who can produce and trade in what goods—remains firmly in place.[75]

Shoring up the incomes of domestic producers, whether of hogs or sugar beets, often means keeping prices for these commodities high enough at *home* for the growers to make a profit, but low enough *abroad* for growers to be able to sell the excess in world markets. As a legacy of the ongoing farm-subsidy policies, wealthy countries typically have had and continue to have excess food. But their governments, while providing subsidies, must also keep international competition at bay. To do so, they tend to block cheap imports from abroad by imposing boycotts, tariffs, or quotas. Countries that export commodities such as sugar beets or cane are left with few markets in which to sell their products.

This problem becomes worse when wealthy countries that support domestic prices also provide *export subsidies* for commodities. These allow producers from nations with strong political systems and agricultural support networks to flood world markets with artificially cheap goods. By paying growers more for their products than they would receive on the world market, developed countries create outlets for their own surpluses—while undercutting the farm sectors of less developed countries whose governments cannot afford subsidies.

All of these tactics are political maneuvers intended to satisfy commodity groups that double as key political constituencies. The result is that politicians face a *two-level game* when negotiating with other nations—they must represent national interests on the world stage but without jeopardizing their political position in domestic politics.[76] Often, these levels conflict. Supporting domestic industries without alienating trading partners, international allies, or one's own citizens, while at the same time looking out for the interests of developing countries, is usually impossible.

The EU's difficulties with the politics of sugar trade illustrate the problem. Indeed, EU representatives to the WTO must engage with three layers of political and economic conflicts: those of individual nation-states, those within the European Union, and those which the European Union enters into as a WTO member.

Sugar beets, for example, are subsidized heavily by national governments and are among the most profitable and widely-grown crops in the European Union. European Union countries produce so much beet sugar that the region experiences a chronic excess. The European Union has long attempted to keep its sugar producers in business by blocking cheap

imports. It further supports growers by helping them sell excess sugar on the world market.[77] Nevertheless, the European Union is obligated under WTO rules to remove trade barriers and cease dumping its excess sugar in world markets.[78] The result is that the European Union produces more sugar than it needs and can export. Yet at the same time, it is a major *importer* of sugar—mainly from African, Caribbean, and Central American countries—in order to meet its commitments to assist these states.[79] The economic absurdity of this position is surpassed only by the political incongruity of EU-wide policies that aim to help the very countries that are harmed by the farm policies of individual EU nations.

As a result of such incongruities, food disputes fuel some of the most controversial trade disagreements in the modern world.[80] However, not all of them concern agriculture. Some have roots in—or make appeals to—food safety. Food-safety standards are governed by a particular WTO accord known as the "Agreement on Sanitary and Phytosanitary Measures," or SPS, for short.[81] The SPS framework relies on the standards for food safety set by an international organization created in 1963 by the FAO and the WHO: the Codex Alimentarius Commission.

The standards agreed upon by the Commission are known informally as the Codex. The WTO uses the Codex, in conjunction with its authority under the SPS agreement, to determine what food-safety measures are appropriate in the context of international trade.[82] The SPS structure seems simple enough: it standardizes requirements for food safety, labeling, and inspections to protect plants, animals, and consumers from potentially harmful contaminants. However, accusations that trading partners have violated food-safety standards are often made in situations where it is uncertain whether food safety, political demands, or economic grievances are the most immediate sources of discontent.

One of the most long-running SPS clashes—over hormones used in American beef—demonstrates why this is the case. In 1987 the European Community blocked imports of American beef by banning six natural and artificial growth hormones used in its production. The United States responded by imposing tariffs on European imports equivalent to the value of the blocked beef exports—worth approximately $100 million.[83]

When the WTO went into effect in 1995, the beef feud was still raging, and the United States sued the European Community, arguing that

it had violated the recently adopted SPS measures by failing to conduct a risk analysis on the disputed growth hormones. Under the rules agreed to in the SPS treaty, WTO members must rely on international standards for food safety in the Codex—unless they have commissioned risk analyses that prove the inadequacy of the international standards.

The European Union eventually did conduct risk analyses, but WTO legal panels issued mixed verdicts on the case. These allowed the European Union to continue its ban *and* the United States to continue its punitive measures—which were now extended to retaliatory tariffs on goods such as Bordeaux wine.[84] Since no international organization has the power to force either side to back down, the dispute simmers on—with the United States continuing to argue that the EU's goal is to keep American beef out of its markets. Which side is right? What are the *real* issues at stake? In the context of international trade, the politics and economics of modern food production and distribution are so tightly linked as to be indistinguishable.

CONCLUSION

The steady industrialization of food production has generated new political conflicts about how food should be produced, processed, marketed, consumed, and even understood. The scale and complexity of the modern global food system has increased opportunities for lapses in food safety—deliberate as well as inadvertent. Similarly, in the realm of food marketing, labeling, and nutrition, the need to turn a profit—and an ever larger profit at that—creates stunning clashes of values and interests. In the otherwise volatile politics of the twentieth and twenty-first centuries, the entrenched farm-support programs of the United States and Europe, instituted in times of scarcity, have become irreversible in times of plenty. The vast agricultural output of the global food system has resulted in food excesses that create their own sets of longstanding political conflicts. Yet at the same time, unequal distribution of food and economic resources leave more than a billion people on the verge of starvation.

As the principal stakeholders in these food debates hold economic interests in their outcomes, these case studies illustrate a fundamental point: when food controversies become fodder for major national and international political quarrels, their root cause can often, if not always, be traced

to the underlying financial or economic interests of the most influential participants. It is over the distribution and organization of resources that governments, corporations, and other organizations are most likely to engage in bitter and prolonged conflicts. In the cases that we have examined, these conflicts have been gradually incorporated into political institutions, practices, and traditions. As such, they continue to shape the most distant structures and the most ordinary routines of the modern food system.