### Food and Governmental Power in the United States

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ABSTRACT: Many aspects of the food system in the United States are regulated by the government. The specific responsibilities of the federal government are codified in laws created by the legislative branch and interpreted in regulations promulgated by the executive branch. The two agencies responsible for most food regulation are the Department of Agriculture, whose primary concern is fresh meats, vegetables, and fruits, and the Food & Drug Administration, whose primary concern is processed food, Much of the government's efforts are spent on education rather than regulation. Only the commercial side of the food system is regulated by the government. Paralleling federal regulations are state and local regulations. Most sales of food to the consumer are regulated at a county level by local public health officers.

The power of the federal government over the food that Americans ingest is wildly misunderstood by the consuming public. Most are unable to delineate which government agencies are responsible for America's food supply, and most have little knowledge of the laws and regulations these agencies enforce. The following is a brief outline of the interaction of all levels of government in the United States with food.

## Applicable federal agencies

The two agencies with the most power over America's food supply are the Food and Drug Administration (FDA), an operating division of the Department of Health and Human Services (HHS), and the Department of Agriculture (USDA).<sup>2</sup> Both the USDA and HHS are cabinet-level organisations within the executive branch of the government.<sup>3</sup> Other agencies that oversee various aspects of food production include the National Oceanic and Atmospheric Administration (NOAA), an agency of the Department of Commerce; the Environmental Protection Agency (EPA), an independent agency; the Federal Trade Commission (FTC), an independent agency; the Centers for Disease Control (CDC), an agency of the Department of Health and Human Services; and U.S. Customs and Border Protection, an agency of the Department of Homeland Security. 4 The lesser food regulation responsibilities of some of these agencies will not be discussed in this paper.

Although the average American only hears about one of these agencies when a food-related enforcement action

occurs, most agencies of the federal government also have a strong educational purpose. Within the USDA, groups are assigned to both enforcement and education. An Under Secretary is assigned for each division and oversees each of the included services:

- Natural Resources and Environment
  - Forest Service
  - Natural Resources Conservation Service
- Farm and Foreign Agricultural Services
  - Farm Service Agency
  - Foreign Agricultural Service
  - Risk Management Agency
- Rural Development
  - Rural Utilities Service
  - Rural Housing Service
  - Rural Business Cooperative Service
- Food, Nutrition, and Food, Nutrition, and Consumer Services
  - Food and Nutrition Service
  - Center for Nutrition Policy and Promotion
- Food Safety
- Food Safety and Inspection Service
- Research, Education, and Economics
  - Agricultural Research Service
  - National Institute of Food and Agriculture
  - Economic Research Service
  - National Agricultural Statistics Service
- Marketing and Regulatory Programs
  - Agricultural Marketing Service
  - Animal and Plant Health Inspection Service
  - Grain Inspection, Packers and Stockyards
    Administration<sup>5</sup>

Within the USDA, the agency tasked with enforcement duties is the Food Safety and Inspection Service (FSIS).<sup>6</sup> The other agencies may have enforcement officers, such as the Forest Service, but they are not involved in the enforcement of food regulations.

The Food and Drug Administration is one of eleven operating divisions within HHS.<sup>7</sup> The FDA is in turn divided into four directorates.<sup>8</sup> The Office of Foods and Veterinary Medicine, one of these directorates, is further broken into two centres:

- Center for Food Safety and Applied Nutrition
- Center for Veterinary Medicine

Surprisingly, the Office of Human and Animal Food Operations within the FDA's Office of Global Regulatory Operations and Policy, not the Center for Food Safety, is responsible for enforcement of applicable food laws.<sup>9</sup> Besides federal agencies, each state has a variety of government agencies with responsibility for each state's food system, many that parallel the national agencies. <sup>10</sup> Public health is usually regulated at a county level, and individual counties may have additional agencies to deal with the local food system. <sup>11</sup> Individual cities may also promulgate ordinances that effect the food system. <sup>12</sup>

The tenth amendment of the United States Constitution states, 'The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.' Since the 1970s, the U.S. Supreme Court has been divided over how much authority the federal government has over state governments. With respect to food, the power is often limited to the item's relationship to interstate commerce. Consequently, many states have separately adopted federal regulations with amendments and exceptions. For example, the California Retail Food Code addresses many of the same issues of the U.S. Public Health Service/FDA Food Code and codifies them as part of state law.

Individual states cannot create regulations that supersede or are in conflict with federal regulations. A similar hierarchical relationship exists between states and counties. Similarly, food producers not involved in interstate commerce are less likely to be regulated by the federal government. Small producers, such as restaurants, greengrocers, and butcher shops, are likely to only be regulated at a local level. 17

# Changing laws into regulations

Politicians from modern democracies are happy to claim that laws should govern a nation. This is opposed to being governed by decisions of individual government officials. This principle is commonly known as the 'rule of law'. 18 The United States is no different than other modern states in that it also is governed by the rule of law. In America, laws are created by the legislative branch of the government, Congress, and enacted by the executive branch.<sup>19</sup> All federal laws are gathered into the United States Code (USC).<sup>20</sup> Unless the law specifically orders a cabinet secretary or agency head to perform specific actions, most laws are written such that agencies within the executive branch are instructed to create regulations that enact the provisions of the law. These regulations are gathered into the Code of Federal Regulations (CFR).<sup>21</sup> For example, the Organic Foods Production Act of 1990, Title 21 of the Food, Agriculture, Conservation, and Trade Act of 1990, contained language instructing 'The Secretary shall establish an organic certification program for producers and handlers of agricultural products that have been produced using organic methods as provided for in this chapter'.<sup>22</sup> The final set of rules created by the Secretary of Agriculture, encompassing all of the act, was published in the Federal Register as the National Organic Program in 2000 and was incorporated into the Code of Federal Regulations.<sup>23</sup>

The portion of the Code of Federal Regulations specifically addressing processed food and the FDA is

Title 21, Chapter I, Subchapter B, Parts 100-199. The subject matter of the document is quite extensive:<sup>24</sup>

- Part 101 Food Labeling
- Part 102 Common or Usual Name for Nonstandardized Foods
- Part 104 Nutritional Quality Guidelines for Foods
- Part 105 Foods for Special Dietary Use
- Part 106 Infant Formula Requirements Pertaining to Current Good Manufacturing Practice, Quality Control Procedures, Quality Factors, Records and Reports, and Notifications
- Part 107 Infant Formula
- Part 108 Emergency Permit Control
- Part 109 Unavoidable Contaminants in Food for Human Consumption and Food-Packaging Material
- Part 110 Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Human Food
- Part 111 Current Good Manufacturing Practice in Manufacturing, Packaging, Labeling, or Holding Operations for Dietary Supplements
- Part 112 Standards for the Growing, Harvesting, Packing, and Holding of Produce for Human Consumption
- Part 113 Thermally Processed Low-Acid Foods Packaged in Hermetically Sealed Containers
- Part 114 Acidified Foods
- Part 115 Shell Eggs
- Part 117 Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food
- Part 118 Production, Storage, and Transportation of Shell Eggs
- Part 119 Dietary Supplements That Present a Significant or Unreasonable Risk
- Part 120 Hazard Analysis and Critical Control Point (HACCP) Systems
- Part 123 Fish and Fishery Products
- Part 129 Processing and Bottling of Bottled Drinking Water
- Part 130 Food Standards: General
- Part 131 Milk and Cream
- Part 133 Cheeses and Related Cheese Products
- Part 135 Frozen Desserts
- Part 136 Bakery Products
- Part 137 Cereal Flours and Related Products
- Part 139 Macaroni and Noodle Products
- Part 145 Canned Fruits
- Part 146 Canned Fruit Juices
- Part 150 Fruit Butters, Jellies, Preserves, and Related Products
- Part 152 Fruit Pies
- Part 155 Canned Vegetables
- Part 156 Vegetable Juices
- Part 158 Frozen Vegetables
- Part 160 Eggs and Egg Products
- Part 161 Fish and Shellfish

- Part 163 Cacao Products
- Part 164 Tree Nut and Peanut Products
- Part 165 Beverages
- Part 166 Margarine
- Part 168 Sweeteners and Table Syrups
- Part 169 Food Dressings and Flavorings
- Part 170 Food Additives
- Part 171 Food Additive Petitions
- Part 172 Food Additives Permitted for Direct Addition to Food for Human Consumption
- Part 173 Secondary Direct Food Additives Permitted in Food for Human Consumption
- Part 174 Indirect Food Additives: General
- Part 175 Indirect Food Additives: Adhesives and Components of Coatings
- Part 176 Indirect Food Additives: Paper and Paperboard Components
- Part 177 Indirect Food Additives: Polymers
- Part 178 Indirect Food Additives: Adjuvants, Production Aids, and Sanitizers
- Part 179 Irradiation in the Production, Processing and Handling of Food
- Part 180 Food Additives Permitted in Food or in Contact With Food on an Interim Basis Pending Additional Study
- Part 181 Prior-Sanctioned Food Ingredients
- Part 182 Substances Generally Recognized as Safe
- Part 184 Direct Food Substances Affirmed as Generally Recognized as Safe
- Part 186 Indirect Food Substances Affirmed as Generally Recognized as Safe
- Part 189 Substances Prohibited From Use in Human Food
- Part 190 Dietary Supplements

Many of the parts of Title 21 address specific ingredients that shall be included in specific food products. (See the section on Standards of Identity later in this paper.) This can cause problems for producers wishing to create substitute products. Under the wording of Title 21, for example, mayonnaise must contain egg yolks in some form.<sup>25</sup> Consequently, it becomes impossible to manufacture a vegan product and call it mayonnaise.

The portion of the Code of Federal Regulations specifically addressing raw food and the USDA is longer and far more complicated than that addressing the FDA. All of Tittle 7 of the CFR addresses agriculture, but it is primarily the first three chapters that directly addresses the food we eat.<sup>26</sup>

- Chapter I Agricultural Marketing Service (Standards, Inspections, Marketing Practices), Department of Agriculture. (Parts 27 - 209)
- Chapter II Food and Nutrition Service, Department of Agriculture (Parts 210 299)
- Chapter III Animal and Plant Health Inspection Service, Department of Agriculture (Parts 300 - 399)

Other parts of Title 7 deal with other aspects of agriculture, such as research and conservation, as determined by Congress.<sup>27</sup>

The Food Safety and Inspection service, although part of the USDA, is governed under Title 9, Chapter III.<sup>28</sup> Besides covering government inspections at a national level, much of the requirements for proper labelling can be found in these regulations.

## Separating should from shall

Federal regulations are intended for the producers of food, whether the farmer, rancher, manufacturer, or distributor. They do not directly regulate the consumers of food. Local agencies are responsible for regulating businesses selling directly to consumers, whether the food is raw or cooked, eaten in or taken out.<sup>29</sup>

In addition to regulations that specify what 'shall' be done, Federal agencies issue codes, guidances, and standards that specify what 'should' be done. Other government publications may include specifications, reports, and newsletters.

## Breaking the code

The Code of Federal Regulations, as a container for a group of regulations, is a classic code as defined by the Oxford English Dictionary.<sup>30</sup> Within various government entities there are other codes designed to promote safety and comfort within society. Building codes are an example of such documents that exist at all levels of government.

The Department of Public Health, about every four years, publishes the *Food Code*.<sup>31</sup> The 2013 version, the most recent available, consists of eight chapters and seven annexes.

- Chapter 1 Purpose and Definitions
- Chapter 2 Management and Personnel
- Chapter 3 Food
- Chapter 4 Equipment, Utensils, and Linens
- Chapter 5 Water, Plumbing, and Waste
- Chapter 6 Physical Facilities
- Chapter 7 Poisonous or Toxic Materials
- Chapter 8 Compliance and Enforcement
- Annex 1 Compliance and Enforcement
- Annex 2 References
- Annex 3 Public Health Reasons/Administrative Guidelines
- Annex 4 Management Of Food Safety Practices Achieving Active Managerial Control of Foodborne Illness Risk Factors
- Annex 5 Conducting Risk-Based Inspections
- Annex 6 Food Processing Criteria
- Annex 7 Model Forms, Guides, and Other Aids<sup>32</sup>
  The Code is issued under the signatures of the FDA
  Commissioner, the FSIS Administrator, and the CDC

Director. Together, these individuals represent both HHS and USDA. As stated in the introduction:

The Food Code is a model code and reference document for state, city, county and tribal agencies that regulate operations such as restaurants, retail food stores, food vendors, and foodservice operations in institutions such as schools, hospitals, assisted living, nursing homes and child care centers. Food safety practices at these facilities play a critical role in preventing foodborne illness. The Food Code establishes practical, science-based guidance for mitigating risk factors that are known to cause or contribute to foodborne illness outbreaks associated with retail and foodservice establishments and is an important part of strengthening our nation's food protection system.<sup>33</sup>

As stated in the introduction, the Code is meant as reference. Local, usually county-level, inspectors will use the Code as guidance even though many do not understand the Code's provisions.

The fifty individual states and a few of the territories have developed retail food codes based on the national code but with additional language designed to regulate food operations unique to the state or territory. For example, the California Retail Food Code adds extensive language relative to the establishment and operation of cottage-food operations.<sup>34</sup> These small businesses, often run from a home kitchen, are not addressed in the *Food Code*.

Like the federal *Food Code*, enforcement of state codes falls upon local inspectors. These same inspectors may have additional codes or ordinances to enforce, depending upon the whims of county and city government. A prime example is when the Chicago City Council banned *foie gras* from its restaurants.<sup>35</sup>

Local inspectors may not be well versed with the codes they are inspecting to, or worse, they may act out of ignorance such as when the New York City Department of Health and Mental Hygiene banned reduced-oxygen packaging, 'cook-chill' cooking methods, and temperature-limited cooking methods. All three operations had been practised for more than two decades at the time of the ban with no significant evidence of a public health issue. In New York City, the ban was eventually lifted by instituting, what many in the industry consider, a draconian set of rules. The series of the series o

## Lord, show me the way!

Although it's important for a food producer to directly understand the applicable regulations, government agencies issue guidance documents to aid in the understanding. For example, the regulation regarding mechanically tenderized meat states:

The labels on raw or partially cooked needle- or blade-tenderized beef products destined for household consumers, hotels, restaurants, or similar institutions must contain validated cooking instructions, including the cooking method, that inform consumers that these products need to be cooked to a specified minimum internal temperature, whether the product needs to be held for a specified

time at that temperature or higher before consumption to ensure that potential pathogens are destroyed throughout the product, and a statement that the internal temperature should be measured by a thermometer. These validated cooking instructions may appear anywhere on the label.<sup>38</sup>

The USDA has issued a 31-page long guidance document to help producers interpret this paragraph.<sup>39</sup>

In other cases, the guidance document is designed to provide an overview of a broad swath of regulations. This is the case with What You Need to Know About the FDA Regulation: Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food (21 CFR Part 117): Guidance for Industry, a 47-page long guidance document to help producers understand the FDA's Good Manufacturing Plan regulations.<sup>40</sup>

The USDA, provides labelling guidance with FSIS Compliance Guideline for Label Approval. The FDA's primary labelling guidance is A Food Labeling Guide: Guidance for Industry. The agency also provides many individual guidance documents for specific aspects of the regulations:

- Menu and Vending Machine Labeling
- Away-From-Home Foods
- Food From Genetically Engineered Plants & Atlantic Salmon
- Nutrition Labeling
- Label Claims
- Allergens
- Specific Products and Terms
- Inspections, Compliance, Enforcement, & Recalls
- Warning & Other Letters 42

Labelling is one of the leading areas where companies are found out of compliance with the regulations.

Shall I meet the standard, or should I?

Standards of identity were initially requested by Congress in 1938.<sup>43</sup> The initial law has been amended three times, the latest being 1993. In part, it reads:

Whenever in the judgment of the Secretary such action will promote honesty and fair dealing in the interest of consumers, he shall promulgate regulations fixing and establishing for any food, under its common or usual name so far as practicable, a reasonable definition and standard of identity, a reasonable standard of quality, or reasonable standards of fill of container. No definition and standard of identity and no standard of quality shall be established for fresh or dried fruits, fresh or dried vegetables, or butter, except that definitions and standards of identity may be established for avocados, cantaloupes, citrus fruits, and melons.

The law has resulted in the FDA defining 300 standards in 20 categories and the FSIS establishing standards for the

food products it regulates, which are mostly meat products.<sup>44</sup> The standards were initially set forth in the 1930s 'to protect consumers from contaminated products and economic fraud'. In the 1950s, the standards 'were also used to improve nutrition'.<sup>45</sup>

The manner in which the standards are written allow for a fair amount of leeway on the part of the producer. For example, 9 C.F.R. 381.166 'Breaded Products' simply states: '*Breaded* is a term applicable to any poultry product which is coated with breading or a batter and breading in an amount not to exceed 30 percent of the weight of the finished breaded product'. 46

In the mayonnaise example presented earlier, the Standard for mayonnaise requires that the product must contain:

Egg yolk-containing ingredients. Liquid egg yolks, frozen egg yolks, dried egg yolks, liquid whole eggs, frozen whole eggs, dried whole eggs, or any one or more of the foregoing ingredients listed in this paragraph with liquid egg white or frozen egg white.<sup>47</sup>

Since eggs are not part of a vegan diet, this Standard prohibits a vegan product from being labelled mayonnaise. 48

If a company produces a product for sale in a packaged form or for wholesale distribution that does not meet a Standard, it will be considered 'misbranded' and a Warning Letter will be issued by the agency.<sup>49</sup> A local shop producing a product for their own use or to sell in bulk to the end user is exempt from the Standards.<sup>50</sup>

### That's not our policy, or is it?

Once an agency issues a regulation, which includes much formal or legal language, it may not be readily apparent to the food producer what rules need to be followed. For this reason, the same agency will issue a guidance to aid the producer in complying with the conditions of the regulation.<sup>51</sup>

The USDA's *Food Standards and Labeling Policy Book* provides additional information to the producer regarding specific products and the Agency's attitude towards the labelling of that product.<sup>52</sup> For example, if the producer is fabricating bangers, the following information becomes important if the item's packaging is subject to review.

A sausage-like product prepared with meat and varying amounts of rusk or other cereals. The label must show percentage of rusk (or other cereal) adjacent to product name in prominent lettering. May be labeled British, Scottish or Irish Style.<sup>53</sup>

The USDA also issues policy memos in response to inquiries from individual producers. These are usually in response to questions that arise during product development or production that is not clearly addressed in the applicable regulations. For example, the producer may 'like to know whether the Food Safety and Inspection Service (FSIS) considers free-flowing liquid in the packages of fresh, single- ingredient poultry products to be part of the product's net weight ...'54

The USDA may also issue policy documents within a program it regulates. As part of the School Meals Program, the Agency issued 47 policy documents in 2017. Some were in the form of simple memos whereas others were complete manuals of operation.<sup>55</sup>

The FDA doesn't issue policy documents like the USDA, but many of their guidance documents reflect similar elucidatory information. For example, the *FDA Seafood List* provides the acceptable names 1,882 seafood species. In the list, there are 47 species of shrimp that can be labelled as just shrimp, but there are also four that must be labelled as 'Freshwater Shrimp', one that must be labelled 'Rock Shrimp', and one that must be labelled 'Royal Shrimp'.<sup>56</sup>

The FDA issues publicly available Compliance Policy Guides to its staff regarding the topics addressed in the document. They all share a common note:

FDA's guidance documents, including this guidance, do not establish legally enforceable responsibilities. Instead, guidances describe FDA's current thinking on a topic and should be viewed only as recommendations, unless specific regulatory or statutory requirements are cited. The use of the word *should* in FDA guidances means that something is suggested or recommended, but not required.<sup>57</sup>

## Specifically, what do you mean?

For specific food items, the USDA issues specifications which, unfortunately, are referred to as 'grade standards'. These are different than the standards addressed previously that are enshrined in the Code of Federal Regulations that reference fabricated food items. Grade standards reference fresh food items and are not, for the most part with a couple of major exceptions, published in the Code of Federal Regulations. They become official when published in the Federal Register.

Grade standards form a language whereby grower and buyer can communicate. When a farmer contracts with a buyer for a certain item, they need a common language for negotiation. It is much easier to order 1 ton of 'U.S. Grade 1 Strawberries', then to specify size limits, colour variations, disease limits, and the myriad of other qualities that buyer desires.<sup>59</sup> The USDA lists the following reasons for grade standards.

- Provide the foundation for domestic and international trade
- Promote efficiency in marketing and procurement
- Determine levels of quality and value as a basis for: sales quotes, damage claims, loan values, futures trading, military and other government purchases, and market reporting
- A common language for trading where the commodity cannot be readily displayed or examined by the prospective buyers

- Guide processors to: purchase suitable quality; utilize raw products effectively; and pack products for a diverse domes c and international markets
- A means of stating quality levels to be used on labels for official USDA marks as to quality<sup>60</sup>

The process of creating, modifying, suspending, or terminating a grade standard is codified even though the resulting standard is not codified.<sup>61</sup> Standards are generally initiated by an interested party, such as commodity marketing organization. If the Agency determines that action is required, it will 'publish a notice in the Federal Register describing new or changes to existing standards or to suspend or terminate existing standards'.<sup>62</sup> After a suitable comment period, usually greater than 60 days, the Agency will make a determination and publish its actions.

The USDA also issues commodity specifications for a variety of products that the Agency purchases for distribution to federal food and nutrition assistance programs. Commodity specifications are grouped as follows:

- Fruits
- Vegetables
- Juice
- Nuts, Beans, Peas & Lentils
- Beef
- Pork
- Fish
- Other Red Meat Products
- Chicken
- Turkey
- Eggs
- Grain & Oilseed Products
- Dairy Products<sup>63</sup>

Following a similar vein, the Agency's Institutional Meat Purchase Specifications were developed as voluntary consensus specifications for use by large volume purchasers including government agencies, schools, restaurants, hotels, hospitals, penal institutions, and other food service users. The specifications are divided into nine groupings:

- Fresh Beef
- Fresh Lamb and Mutton
- Fresh Veal and Calf
- Fresh Pork
- Fresh Goat
- Cured, Cured and Smoked, Cooked Pork Products
- Cured, Dried and Smoked Beef Products
- Variety Meats and Edible By-Products
- Sausage Products<sup>64</sup>

For the most part, these specifications follow those published by the North American Meat Institute. 65

## How is Congress at stirring the pot?

The most direct way for Congress to exert power over the countries inhabitants is through legislation. Bills affecting agriculture are always controversial because of competing interests, and at least one was found, in part, to be

unconstitutional.<sup>66</sup> Whether a resident is a producer or a consumer, all are affected by each bill—not equally but effected nonetheless.

There have been eleven bills termed 'farm bills':

- Food and Agricultural Act of 1965
- Agricultural Act of 1970
- Agricultural and Consumer Protection Act of 1973
- Food and Agriculture Act of 1977
- Agriculture and Food Act of 1981
- Food Security Act of 1985
- Food, Agriculture, Conservation, and Trade Act of 1990
- Federal Agriculture Improvement and Reform Act of 1996
- Farm Security and Rural Investment Act of 2002
- Food, Conservation, and Energy Act of 2008
- Agricultural Act of 2014

Between 1916 and 1971, there were ten major bills affecting agriculture that were not called 'farm bills':

- Federal Farm Loan Act of 1916
- Agricultural Adjustment Act of 1933
- Frazier-Lemke Farm Bankruptcy Act of 1934
- Bankhead-Jones Farm Tenant Act of 1937
- Agricultural Adjustment Act of 1938
- Agricultural Act of 1948
- Agricultural Act of 1949
- Agricultural Act of 1954
- Agricultural Act of 1956
- Farm Credit Act of 1971<sup>67</sup>

### And how was the last act?

The Farm Bill is a wide-ranging legislative effort to address most federal agricultural policies. It comes up for renewal on a five-year cycle. The most recent version was passed in 2014.<sup>68</sup> The total cost of that massive bill is estimated to be \$950 billion over ten years. Based on Congressional Budget Office estimates, 80 percent of outlay will fund nutrition programs, 8 percent will fund crop insurance programs, 6 percent will fund conservation programs, 5 percent will fund commodity programs, and the remaining 1 percent will fund all other programs, including trade, credit, rural development, research and extension, forestry, energy, horticulture, and miscellaneous programs.<sup>69</sup> The most recent one is officially called the 'Agricultural Act of 2014'.<sup>70</sup>

### How was the grub?

In 1906, Congress passed both the Pure Food and Drug Act and the Federal Meat Inspection Act.<sup>71</sup> The former act was the first law to address truth in labelling and outlaw misbranding and adulteration of food, although initially only for food that was shipped across state lines. The latter law gave the Secretary of Agriculture broad powers to inspect meat and condemn any product found unfit for human consumption.

Since 1906, there have been multiple laws expanding and clarifying the relationship between the federal government and food safety. Also since 1906, the various

agencies responsible for enforcing the laws have been created and reorganized.

Please, let us help you help yourself...

Congressionally mandated commodity marketing organizations (CMO), officially referred to as Research and Promotion Boards, result from Acts of Congress. For example, The National Pork Board was created in the Pork Promotion, Research, and Consumer Information Act of 1985 and was enacted by the USDA as Part 1230-Pork Promotion, Research, and Consumer Information.<sup>72</sup> Currently, there are 22 such organizations:

- American Egg Board
- American Lamb Board
- Cattlemen's Beef Board
- Christmas Tree Promotion Board
- Cotton Board
- Fluid Milk Processors Promotion Program
- Hass Avocado Board
- Highbush Blueberry Council
- Mushroom Council
- National Dairy Promotion & Research Board
- National Honey Board
- National Mango Board
- National Peanut Board
- National Pork Board
- National Processed Raspberry Council
- National Watermelon Promotion Board
- Paper & Packaging Board
- Popcorn Board
- Softwood Lumber Board
- United Sorghum Checkoff Program
- United Soybean Board
- United States Potato Board<sup>73</sup>

Congress may also establish regional organizations such as the Avocado Administrative Committee of South Florida, which only addresses production in a specific southern part of Florida, or the Walla Walla Sweet Onion Marketing Committee, which only refers to portions of Umatilla County, Oregon, and Walla Walla County, Washington.<sup>74</sup>

Although mandated by Congress, each organization is self-funded by way of assessments applied to the production of its members. Although membership and the assessment are mandatory, the assessment may be waived for organic producers. The members of each board are nominated by industry and appointed by the Secretary of Agriculture. Oversight of the boards is performed by the USDA's Agricultural Marketing Service.

New CMOs may be proposed by industry by means of a formal proposal procedure. There are eight new organization proposals currently under review.<sup>76</sup>

Additionally, there are national and regional CMOs that are not associated with a government entity, such as the North American Meat Institute and The Salt Institute. Certain states have created their own CMOs, such as The California Raisin Marketing Board, Wisconsin Milk Marketing Board, and the California Milk Advisory Board.

What goes in, must come out

One federal agency that has a peripheral influence on American food production is the Environmental Protection Agency.<sup>77</sup> Having been formed in 1970 during the Nixon administration, the EPA is a relatively new player in the business of food. Most of what the EPA regulates is indirectly connected to food production. Its regulations deal with contamination due animal waste, fertilizer, pesticide, and fuel storage run-off. Most EPA requirements have threshold considerations that exempt most small farms from federal-level regulation.

# It all starts with a single seed

The Federal Seed Act of 1940, amended in 1988 and 1998, regulates the interstate shipment of agricultural and vegetable seeds.<sup>78</sup> The resulting regulation requires that seed be labelled with information that allows buyers to make informed choices.<sup>79</sup> Seed labelling information and advertisements pertaining to the seed must be truthful. Theoretically, the regulation helps promote uniformity among state laws and fair competition within the seed trade. The major sections of the regulations are

- Records for agricultural and vegetable seeds
- Labeling of agricultural seeds
- Labeling of vegetable seeds
- Advertising
- Inspection
- Sampling
- Purity analysis
- Germination testing
- Seed certification

## Git along, little dogies

Although the long-distant cattle drives as depicted in classic movies are a relic of the past, much of the unsettled lands of the United States are still available for the grazing of cattle. The federal government owns about a quarter of the land in the country. Most of that is located in eleven western states where federal ownership exceeds one half of the total land. Although the Taylor Grazing Act of 1934, later amended in 1954, set aside some of this land specifically for grazing, much of it was available without restriction until the Federal Land Policy and Management Act of 1976 required the various responsible government agencies to actively manage public lands. The support of the unsettled in the catterior of the united the various responsible government agencies to actively manage public lands.

The average age of cattle at slaughter is between 30 and 42 months of age. <sup>82</sup> Most or all of that time is spent grazing, often on public lands. It is only for the last few months that the animals spend time being fattened on grain or grass. The poorly regulated system of grazing in the United States is, nonetheless, an important part of this industry. <sup>83</sup>

Still, the required grazing permits are often not obtained by ranchers, and thus the associated fees are not collected. 'Grazing permits or leases convey no right, title, or interest held by the United States in any lands or resources'. 84 The permitting system has occasionally been

resisted by ranchers who feel that the federal government lacks the constitutional authority to own vast tracts of public lands. The courts have universally disagreed with this argument. The fight has resulted in an occasional armed conflict. Conservative politicians in the affected area have taken the side of the ranchers against the courts. The whole issue is still a bit of the wild west.

### Non-federal powers

Within most states, there are both state and county health inspectors. Retail establishments such as markets, food service establishments, institutional food services, and public markets are most likely to be inspected by local inspectors checking basic risk issues such as food temperature, storage methods, rodent and insect infestations, and employee cleanliness. Commercial food processing facilities are more likely to be inspected by state and federal inspectors.

## Water, water everywhere

Control of water for agricultural purposes is mostly regulated at a state level, particularly in arid states where farming relies heavily on off-site water sources. Three-fourths of the country's irrigated acres of farmland are located in seventeen conterminous, western states. The distribution of the water is controlled by each state, but much of the collection dams and waterways were built with federal funds, and parts come under the scope of various federal agencies such as the Army Corps of Engineers and the Bureau of Reclamation.

## Conclusion

The preceding has only touched upon the relationship between the all levels of government and food in the United States. While the government has the power to regulate and inspect food producers at all levels, it has no power to directly regulate food at a post purchase or self-production level. While the government extends much effort to regulate the food system, it also expends substantial work to educate both producers and consumers.

## About the author

Peter Hertzmann is an independent scholar with an interest in food technology, science, policy, and history. He has presented papers at the Oxford Symposium on Food and Cookery and the Dublin Gastronomy Symposium. He has spoken at the Research Chefs Association, the Roger Smith Food-Tech Conference, the Culinary Institute of America, the Museum of American Heritage, the Culinary Historians of Northern California, and many other locations. Mr. Hertzmann is a French-trained cook with additional experience in Chinese and Japanese cuisine. He is the author of *Knife Skills Illustrated: A User's Manual*, published by W.W. Norton in 2007. Mr. Hertzmann resides in San Francisco, California.

### Notes

- 1. The lack of consumer knowledge regarding government food agencies is derived from numerous surveys of the public's knowledge about food safety and who they expect to make the food system safe. For example: Jeannie Sneed and others, 'Consumer Food Handling Practices Lead to Cross-contamination', *Food Protection Trends*, 1, 35 (2015), 36-48.
- 'United States Food Law and Regulations: Federal Government Agencies', MSU Libraries Research Guides, <a href="https://libguides.lib.msu.edu/c.php?g=212832">https://libguides.lib.msu.edu/c.php?g=212832</a> [accessed 22 January 2017]
- 3. 5 U.S.C. 101
- 4. 'United States Food Law and Regulations: Federal Government Agencies'
- 'USDA Organization Chart', <a href="https://www.usda.gov/sites/default/files/documents/usda-organization-chart.">https://www.usda.gov/sites/default/files/documents/usda-organization-chart.</a>
  pdf> [accessed January 25, 2018]
- 6. The Federal Safety and Inspection Service (FSIS) evolved from the Division of Chemistry created when the USDA was established in 1862. 'FSIS History', USDA, <a href="https://www.fsis.usda.gov/wps/portal/informational/aboutfsis/history/history">history</a> [accessed January 25, 2018]
- 'HHS Strategic Plan FY 2007-2012', HHS, <a href="https://www.hhs.gov/about/agencies/orgchart/index.html">https://www.hhs.gov/about/agencies/orgchart/index.html</a> [accessed January 25, 2018]
- 8. 'FDA Organization', FDA, <a href="https://www.fda.gov/%20">https://www.fda.gov/%20</a> AboutFDA/CentersOffices/> [accessed January 25, 2018]
- 9. 'About the Office of Human and Animal Food Operations', FDA External Fact Sheet, <a href="https://www.fda.gov/downloads/AboutFDA/CentersOffices/OfficeofGlobalRegulatoryOperationsandPolicy/ORA/UCM558300.pdf">https://www.fda.gov/downloads/AboutFDA/CentersOffices/OfficeofGlobalRegulatoryOperationsandPolicy/ORA/UCM558300.pdf</a>> [accessed January 25, 2018]
- 10. For example, in California the major agency is the California Department of Food and Agriculture, <a href="https://www.cdfa.ca.gov>[accessed January 25, 2018]">https://www.cdfa.ca.gov>[accessed January 25, 2018]</a>
- 11. 'The Role of Official Local Health Agencies', *American Public Health Association*, <a href="https://www.apha.org/">https://www.apha.org/</a> policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/15/14/41/the-role-of-official-local-health-agencies> [accessed January 25, 2018]
- 12. For example, Gretchen Ruethling, 'Chicago Prohibits Foie Gras', *The New York Times*, 27 April 2006, p. A16.
- 13. U.S. Const. amend. X
- 14. 'Federal Regulations Affecting State Activities and Instrumentalities', CRS Annotated Constitution, <a href="https://www.law.cornell.edu/anncon/html/amdt10\_user.html#amdt10\_hd11">hd11</a> [accessed January 25, 2018]
- 'Part 7. California Retail Food Code', <a href="https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20">https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20</a>
  Document%20Library/FDB/FoodSafetyProgram/
  RetailFood/CRFC.pdf> [accessed January 25, 2018]
- 16. U.S. Const. art. VI

- 17. For example, Article 81 of the NYC Health Code: Food Preparation and Food Establishments, New York: Department of Health and Mental Hygiene, 2017.
- 'Overview-Rule of Law', United States Courts, <a href="http://www.uscourts.gov/educational-resources/educational-activities/overview-rule-law">http://www.uscourts.gov/educational-resources/educational-activities/overview-rule-law</a> [accessed January 25, 2018]
- 19. 'How Laws Are Made and How to Research Them', USA.Gov, <a href="https://www.usa.gov/how-laws-are-made">https://www.usa.gov/how-laws-are-made</a> [accessed January 25, 2018]
- 20. 'United States Code', Office of the Law Revision Counsel of the United States House of Representatives, <a href="http://uscode.house.gov">http://uscode.house.gov</a> [accessed January 25, 2018]
- 21. 'About Code of Federal Regulations', *U.S. Government Publishing Office*, <a href="https://www.gpo.gov/help/about\_code\_of\_federal\_regulations.htm">https://www.gpo.gov/help/about\_code\_of\_federal\_regulations.htm</a> [accessed January 25, 2018]
- 22.7 U.S.C. 6501 et seq.
- 23.7 C.F.R. 205
- 24. 21 C.F.R. 100-190
- 25. 21 C.F.R. 169.140
- 26.7 C.F.R. 27-399.
- 27. 7 C.F.R. 1-26, 400-4299
- 28.9 C.F.R. 300-500
- 29. For example, 'Part 7. California Retail Food Code'
- 30. 'code, n.1.', *OED Online*, Oxford University Press. [accessed January 25, 2018]
- 31. *Food Code*, (College Park MD: U.S. Department of Public Health, 2013).
- 32. Food Code, pp. xiii-xxiii.
- 33. Food Code, p. vi.
- 34. 'Part 7. California Retail Food Code', chapter 11.5, 114365, p. 88-92.
- 35. Gretchen Ruethling.
- 36. Dana Bowen, 'With City Inspectors in Kitchen, Chefs Can't Cook in a Vacuum', *The New York Times*, 9 March 2006 <a href="http://www.nytimes.com/2006/03/09/nyregion/with-city-inspectors-in-kitchen-chefs-cant-cook-in-a-vacuum.html">http://www.nytimes.com/2006/03/09/nyregion/with-city-inspectors-in-kitchen-chefs-cant-cook-in-a-vacuum.html</a> [accessed January 25, 2018]
- 37. Article 81 of the NYC Health Code: Food Preparation and Food Establishments.
- 38. 9 C.F.R 317.2(e)(3)(iii)
- 39. 'FSIS Compliance Guideline for Validating Cooking Instructions for Mechanically Tenderized Beef Products 2015', Federal Safety and Inspection Service, 2015.
- 40. 'What You Need to Know About the FDA Regulation: Current Good Manufacturing Practice, Hazard Analysis, and Risk-Based Preventive Controls for Human Food (21 CFR Part 117): Guidance for Industry', Center for Food Safety and Applied Nutrition, 2016 <a href="https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM526507.pdf">https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM526507.pdf</a>> [accessed January 25, 2018]
- 41. 'A Food Labeling Guide', Center for Food Safety and Applied Nutrition, 2013 <a href="https://www.fda.gov/downloads/Food/GuidanceRegulation/UCM265446">https://www.fda.gov/downloads/Food/GuidanceRegulation/UCM265446</a>. pdf> [accessed January 25, 2018]

- 42. 'Labeling & Nutrition Guidance Documents & Regulatory Information', U.S. Food & Drug Administration <a href="https://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/guidancedocumentsregulatoryinformation/labelingnutrition/default.htm">https://www.fda.gov/food/guidanceregulatoryinformation/guidancedocumentsregulatoryinformation/labelingnutrition/default.htm</a> [accessed January 25, 2018]
- 43. 21 U.S.C. 341
- 44. 21 C.F.R. 130-69; 9 C.F.R. 319
- 45. 'Standard of Identity, Petitions, Food Additives, Food Product Claims, and Organic Food', *North Dakota State University* <a href="https://www.ag.ndsu.edu/foodlaw/">https://www.ag.ndsu.edu/foodlaw/</a> processingsector/standardofidentity> [accessed January 26, 2018]
- 46.9 C.F.R. 381.166
- 47. 21 C.F.R. 169.140(c)
- 48. 'Hampton Creek Foods %12/15', U.S. Food & Drug Administration <a href="https://www.fda.gov/ICECI/EnforcementActions/WarningLetters/ucm458824">httm> [accessed January 26, 2018]</a>
- 49. 'Inspections, Compliance, Enforcement, and Criminal Investigations', U.S. Food & Drug Administration <a href="https://www.fda.gov/ICECI/EnforcementActions/WarningLetters/ucm278624.htm">https://www.fda.gov/ICECI/EnforcementActions/WarningLetters/ucm278624.htm</a> [accessed January 26, 2018]
- 50. A Guide to Federal Food Labeling Requirements for Meat, Poultry, and Egg Products, ed. by R. Post and others (Washington, DC: Hogan & Hartson, LLP, 2007).
- 51. 'Labeling & Nutrition Guidance Documents & Regulatory Information'
- 52. Food Standards and Labeling Policy Book (Washington DC; United States Department of Agriculture, 2005)
- 53. Food Standards and Labeling Policy Book, n.p.
- 54. 'FSIS Letter to Steven B. Steinborn, Hogan & Hartson, L.L.P. (Mar 24, 2006)' <a href="https://www.fsis.usda.gov/wps/wcm/connect/fc36d1ad-fb83-4305-88e8-64fcf1591f95/Net\_Weight\_Steinborn.pdf?MOD=AJPERES">https://www.fsis.usda.gov/wps/wcm/connect/fc36d1ad-fb83-4305-88e8-64fcf1591f95/Net\_Weight\_Steinborn.pdf?MOD=AJPERES</a> [accessed January 26, 2018]
- 55. 'School Meals', *United States Department of Agriculture* <a href="https://www.fns.usda.gov/school-meals/policy/all">https://www.fns.usda.gov/school-meals/policy/all</a> [accessed January 26, 2018]
- 56. 'The Seafood List', U.S. Food & Drug Administration <a href="https://www.accessdata.fda.gov/scripts/fdcc/?set=seafoodlist">https://www.accessdata.fda.gov/scripts/fdcc/?set=seafoodlist</a> [accessed January 26, 2018]
- 57. For example 'Guidance for Industry: Enforcement Policy Concerning Certain Prior Notice Requirements', U.S. Food & Drug Administration <a href="https://www.fda.gov/RegulatoryInformation/Guidances/ucm261080.htm">https://www.fda.gov/RegulatoryInformation/Guidances/ucm261080.htm</a> [accessed January 26, 2018]
- 58. 'Grades and Standards', *United States Department of Agriculture* <a href="https://www.ams.usda.gov/grades-standards">https://www.ams.usda.gov/grades-standards</a> [accessed January 26, 2018]
- 59. United States Standards for Grades of Strawberries (Washington, DC: USDA Agricultural Marketing Service, 2006).
- 60. U.S. Grade Standards for Fruits, Vegetables, Nuts, and Other Specialty Products (Washington, DC: USDA Specialty Crops Inspection Division, 2016).
- 61.7 C.F.R 36

- 62.7 C.F.R 36.3
- 63. 'Product Specifications & Requirements', *United States Department of Agriculture* <a href="https://www.ams.usda.gov/selling-food/product-specs">https://www.ams.usda.gov/selling-food/product-specs</a> [accessed January 26, 2018]
- 64. 'Institutional Meat Purchase Specifications, *USDA Agricultural Marketing Service* <a href="https://www.ams.usda.gov/grades-standards/imps">https://www.ams.usda.gov/grades-standards/imps</a> [accessed January 26, 2018]
- 65. *The Meat Buyer's Guide*, 8th edn (Washington DC: North American Meat Institute, 2014).
- 66. Wikipedia contributors, 'Agricultural Adjustment Act', Wikipedia, The Free Encyclopedia, 8 January 2018, 11:10 UTC, <a href="https://en.wikipedia.org/w/index.php?title=Agricultural\_Adjustment\_Act&oldid=819262434">https://en.wikipedia.org/w/index.php?title=Agricultural\_Adjustment\_Act&oldid=819262434</a> [accessed 26 January 2018]
- 67. Wikipedia contributors, 'United States farm bill', Wikipedia, The Free Encyclopedia, 25 January 2018, 00:33 UTC, <a href="https://en.wikipedia.org/w/index.php?title=United\_States\_farm\_bill&oldid=822203541">https://en.wikipedia.org/w/index.php?title=United\_States\_farm\_bill&oldid=822203541</a>> [accessed 26 January 2018]
- 68. H.R. 2642; Pub. L. 113-79
- 69. Siobhan Wallace, 'The 2014 Farm Bill', *The Farm Bill* <a href="http://www.thefarmbill.com">http://www.thefarmbill.com</a> [accessed January 26, 2018]
- 70. 'H.R.2642 Agricultural Act of 2014', *U.S. Congress* <a href="https://www.congress.gov/bill/113th-congress/">https://www.congress.gov/bill/113th-congress/</a> house-bill/2642> [accessed January 26, 2018]
- 71. Pub. L. 59-384, 34 Stat 768; Pub. L. 59-242, 34 Stat. 1256
- 72.7 U.S.C. 4801-4819; 7 CFR 1230
- 73. 'Research & Promotion Programs', USDA Agricultural Marketing Service <a href="https://www.ams.usda.gov/rules-regulations/research-promotion">https://www.ams.usda.gov/rules-regulations/research-promotion</a> [accessed January 26, 2018]
- 74. 7 C.F.R. 915; 7 C.F.R. 956
- 75. 'Research & Promotion Programs'
- 76. 'Proposed Organic Research & Promotion Program', USDA Agricultural Marketing Service <a href="https://www.ams.usda.gov/rules-regulations/research-promotion/proposals/organic">https://www.ams.usda.gov/rules-regulations/research-promotion/proposals/organic</a> [accessed January 26, 2018]

- 77. 'Agriculture: Laws and Regulations that Apply to Your Agricultural Operation by Farm Activity', *United States Environmental Protection Agency* <a href="https://www.epa.gov/agriculture/agriculture-laws-and-regulations-apply-your-agricultural-operation-farm-activity">https://www.epa.gov/agriculture/agriculture-laws-and-regulations-apply-your-agricultural-operation-farm-activity</a> [accessed January 26, 2018]
- 78.7 U.S.C. 1551-1611
- 79.7 C.F.R. 201
- 80. 'Texas Longhorns: A Short History', *World History Group* <a href="http://www.historynet.com/texas-longhorns-a-short-history.htm">http://www.historynet.com/texas-longhorns-a-short-history.htm</a> [accessed January 26, 2018]
- 81. H.R. 6462 Taylor Grazing Act of 1934, Pub. L. 73-482; H.R. 10094, Pub. L. 74-827, 49 Stat. 1976; H.R. 6186, Pub. L. 83-375, 68 Stat. 151
- 82. 'Slaughter Cattle Grades and Standards', *USDA Agricultural Marketing Service* <a href="https://www.ams.usda.gov/grades-standards/slaughter-cattle-grades-and-standards">https://www.ams.usda.gov/grades-standards/slaughter-cattle-grades-and-standards</a> [accessed January 27, 2018]
- 83. Debra L. Donahue, 'Western Grazing: The Capture of Grass, Ground, and Government', *Environmental Law*, 35 (2005), 721-806 (pp. 737-45)
- 84. 43 C.F.R. 4130.2(c)
- 85. Wikipedia contributors, 'Bundy standoff', *Wikipedia, The Free Encyclopedia*, 22 January 2018, 21:36 UTC, <a href="https://en.wikipedia.org/w/index.php?title=Bundy\_standoff&oldid=821828151">https://en.wikipedia.org/w/index.php?title=Bundy\_standoff&oldid=821828151</a>> [accessed 27 January 2018]
- 86. For example 'History of the Water Boards', *California Environmental Protection Agency* <a href="https://www.waterboards.ca.gov/about\_us/water\_boards\_structure/history.shtml">https://www.waterboards.ca.gov/about\_us/water\_boards\_structure/history.shtml</a> [accessed January 27, 2018]
- 87. 'Water Questions & Answers: Which states irrigated the most?', *U.S. Geological Survey* <a href="https://water.usgs.gov/edu/qa-usage-stateirr.html">https://water.usgs.gov/edu/qa-usage-stateirr.html</a> [accessed January 27, 2018]
- 88. 'How Are Dams Regulated?', Association of State Dam Safety Officials <a href="https://damsafety.org/how-are-dams-regulated">https://damsafety.org/how-are-dams-regulated</a> [accessed January 27, 2018]