The Food System and the New Food Movement: *Recipes for Law and Policy*

An Overview of Conventional Food System Regulation and what the New Food Movement Means for Law and Policy

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Vanderbilt Law School
Overview

I. Introduction

II. Overview of the conventional food system: tracking food from farms to post-consumer

III. Overview of food system regulation: lots of laws and agencies have a hand on our food

IV. The New Food Movement: Rewiring the System
   a) Themes
   b) Social and policy movements
   c) Legal issues – general and CSAs
The conventional food system is an industrialized, highly-regulated food production, processing, supply, and consumption economy

- Vast footprint
- Highly economically “efficient”
- Highly depersonalized

The “New Food Movement” concept captures many social and policy themes pushing back on the conventional food system/regulation

- Emphasizes local economy, personal networks, ecological efficiency, producer and consumer liberty

The problem is, much of what the New Food Movement wants is expensive and/or illegal
The Food System

What is the conventional food system?
The food system

The supply chain

Production

Processing

Distribution

Retail

Consumption

Images copyright.

TEACHING THE FOOD SYSTEM | A PROJECT OF THE JOHNS HOPKINS CENTER FOR A LIVABLE FUTURE
The food system

Food supply chain: Washington apple

Growing
Apples grow on trees in orchards

Harvesting
Apples are picked by hand

Washing, grading, waxing
A wax coating helps keeps apples crisp

Packing
Apples are sorted and packed into 40 lbs. cartons

Retailing
Apples are sold in a variety of stores

Packaging
The packaging of apples depends on how they have been processed, if at all

Processing
Some apples are canned, made into applesauce or pie filling or added to other products

Distributing
Apples are transported up to thousands of miles in refrigerated trucks

Preparing
Apples can be eaten whole, added to salads, cooked in pies, etc.

Consuming
Apples are eaten

Disposing
Throughout the life cycle, some apples and parts of apples are discarded

Composting
Discarded apples can be composted and used to help more apples grow

Adapted, with permission, from "Discovering the Food System" www.hort.cornell.edu/foodsyst/.
The food system

Food supply chain: U.S. broiler chicken

Soy growing → Soy harvesting → Chick hatchery producing Baby chickens are hatched and processed

Corn growing → Corn harvesting → Poultry feed processing Soy, corn & fish are combined to make poultry feed

Fish harvesting

Poultry producing Over 100,000 chickens are typically raised and fed in a single facility*

This example represents the prevailing industrial model of poultry production in the U.S.

Distribution steps not shown. Adapted from Pelletier N. 2008. See lesson plan for full citation.

FIGURE S-1 Conceptual model of a food supply chain. Elements or actors in this supply chain in one area (e.g., region or country) also have interactions (e.g., international trade) with actors in other areas.
FIGURE 2-2 Flow of food in the U.S. food system.
FIGURE 2-8 Links between the food supply chain and the larger biophysical and social/institutional context.
The Global Food System
FIGURE 2-6 Distribution of value added across subsectors of food supply chain, 1993-2012.
SOURCE: ERS, 2014b.
FIGURE 2-4  Estimated value added to GDP by sectors of U.S. food supply chain, 2005-2012.
NOTE: GDP = gross domestic product.
FIGURE 2-3 Percentage of calories and food expenditures for food consumed at home and away from home.
Food System Regulation

How is the food system regulated?

(based on Food System Seminar presentation by VLS student Travis Gray)
Food regulatory chain

Agriculture

- USDA
  - Food safety: Meat, poultry, processed eggs
  - Subsidies
  - Insurance

- EPA
  - Pesticide use
  - Renewable fuel standards
  - Non-point source pollution?

- FDA: unprocessed eggs

- BLM: livestock grazing

- FWS & NOAA: fisheries management

- DoE: biofuel subsidies

- DoL: employment standards and temporary workers
Food regulatory chain

Processing and Manufacturing

- **USDA**
  - inspects slaughterhouses and processed eggs
- **FDA**
  - food safety for all food products not under USDA
- **NOAA and NMFS**
  - Voluntary Seafood Inspection Program

Retail

- **FTC**
  - Consumer protection laws
- **USDA**
  - Meat, poultry, processed egg labeling
  - Certification standards through Agriculture Marketing Service
- **FDA**
  - Labeling for all products not under USDA
Food regulatory chain

Consumers

- HHS
  - Diet and nutrition programs (with USDA)
- USDA
  - Consumer education on meat, poultry, and eggs
  - Food and Nutrition Service
  - SNAP
- EPA
  - Drinking water

Post-Consumer

- State and local gov’t: waste management such as municipal landfills, recycling programs, composting, etc.
- EPA
  - Disposal of toxic substances
  - Landfill regulation
- FDA & USDA: limitations on post-consumer uses due to food safety regulations
Food regulatory chain

Misc./throughout

- CDC
  - Conducts research on food borne illness and tracks food related outbreak

- USPTO
  - Protecting trademarks and patents for food products

- DoT
  - Food shipping and vehicle standards

- DHS
  - Customs enforcement and import control

- DoJ and FTC
  - Enforcing antitrust law within the food system

- EPA
  - Farms are not exempt from ESA
Regulating dinner: shrimp & grits

Idea: take a single dish and evaluate the regulatory system pertaining to the ingredients
<table>
<thead>
<tr>
<th>Agency</th>
<th>Ingredient</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>USDA</td>
<td>Corn</td>
<td>Subsidy, insurance, etc.</td>
</tr>
<tr>
<td></td>
<td>Andouille</td>
<td>Slaughter, processing, label</td>
</tr>
<tr>
<td>FDA</td>
<td>Cheese</td>
<td>Safety, processing, label</td>
</tr>
<tr>
<td></td>
<td>Shrimp</td>
<td>Safety, processing, label</td>
</tr>
<tr>
<td></td>
<td>Butter</td>
<td>Safety, processing, label</td>
</tr>
<tr>
<td>NOAA</td>
<td>Shrimp</td>
<td>Fisheries (if wild, processing inspection)</td>
</tr>
<tr>
<td>NMFS</td>
<td>Shrimp</td>
<td>Fisheries (if wild)</td>
</tr>
<tr>
<td>EPA</td>
<td>ANY</td>
<td>Pesticide use, landfill and toxic waste disposal</td>
</tr>
<tr>
<td>FTC</td>
<td>ANY</td>
<td>Consumer protection</td>
</tr>
<tr>
<td>USPTO</td>
<td>ANY, especially corn</td>
<td>Trademarks for wholesaler; patent for some GMOs</td>
</tr>
<tr>
<td>Local</td>
<td>ANY</td>
<td>Waste and landfill management</td>
</tr>
<tr>
<td>DoL</td>
<td>ANY</td>
<td>Labor and immigrants</td>
</tr>
</tbody>
</table>
ENSURING A SAFE FOOD SUPPLY:
A CONCISE GUIDE TO THE U.S. FOOD REGULATORY SYSTEM

COMPILED BY: IFIC
Your source for reliable, science-based food safety and nutrition information
and consumer insights
QUESTIONS? 202/296-5540 www.foodinsight.org

MAIN AGENCIES RESPONSIBLE FOR FOOD REGULATION

UNITED STATES DEPARTMENT OF AGRICULTURE:
FOOD SAFETY AND INSPECTION SERVICE

Contact: phone 202/720-9113
http://www.fsis.usda.gov

Mission:
- Ensure that the nation’s commercial supply of meat, poultry, and processed egg products is safe, wholesome, and correctly labeled.

Food Regulatory Responsibilities:
- Enforces food safety laws governing domestic and imported raw and processed meat and poultry products, and processed egg products.
- Ensures that meat and poultry are inspected and processed under sanitary conditions.
- Regulates food safety and quality standards.
- Develops and maintains a food safety inspection system.
- Conducts research and development to improve food safety and quality.
- Provides consumer education and outreach programs.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS):
FOOD AND DRUG ADMINISTRATION

Contact: phone 888/INFO-FDA (888/463-8332)
http://www.fda.gov

Food Safety Centers/Offices Missions:
- Center for Food Safety and Applied Nutrition (CFSAN): Ensures food supply is safe, sanitary, wholesome, and honestly labeled.
  http://www.fda.gov/cfsan
- Office of Regulatory Affairs: Protects consumers and enhances public health by maximizing compliance of FDA regulated products and minimizing risk associated with those products.
  http://www.fda.gov/ora

Food Regulatory Responsibilities:
- Enforces food safety laws governing domestic and imported food, except meat, poultry, and processed egg products.
- Regulates about 80 percent of U.S. food supply, including produce, dairy products, seafood, processed foods, shell eggs, and animal feed and pet food.
- Develops policies and regulations for nutrition labeling and standards for foods, dietary supplements, infant formula and medical foods.
- Approves and regulates food and animal feed additives and affirms their Generally Recognized As Safe status.
- Inspects food production establishments and food warehouses.
- Requires Hazard Analysis and Critical Control Points (HACCP) systems at processing plants for seafood and juice.
- Sets microbial criteria for certain foods.
- Develops Good Manufacturing Practices (GMPs) and Good Agricultural Practices (GAPs) and other production standards.
- Educates consumers about safe food handling practices, cooking, food labeling, and food defense systems.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

Office of Prevention, Pesticides and Toxic Substances (OPPTS)
Contact: phone 733/325-7090 http://www.epa.gov/pesticides/

Mission: To protect human health and the environment.

Food Safety Responsibilities:
- Ensures that pesticides used in food production are safe.
- Establishes tolerances, the maximum amount of pesticide residue that may remain on or in treated crops, animals and animal products.
- Ensures proper use of pest management techniques used on crops.
- Establishes regulations and standards for safe drinking water.

*Hazard Analysis and Critical Control Point (HACCP) systems identify, evaluate and control food safety hazards.*
# Ensuring a Safe Food Supply

**A Concise Guide to the U.S. Food Regulatory System**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Contact</th>
<th>Food Regulatory Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department of Agriculture</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural Research Service (ARS)</td>
<td>202/720-3836 <a href="http://www.ars.usda.gov">www.ars.usda.gov</a></td>
<td>Conducts research to ensure high quality, safe food and other agricultural products, and to assess the nutritional needs of Americans.</td>
</tr>
<tr>
<td>Animal and Plant Health Inspection Service (APHIS)</td>
<td>202/720-2511 <a href="http://www.aphis.usda.gov">www.aphis.usda.gov</a></td>
<td>Determines and implements standards for the care and treatment of animals. Safeguards agriculture and natural resources from risks associated with the entry, establishment, or spread of animal and plant pests and noxious weeds.</td>
</tr>
<tr>
<td>Center for Nutrition Policy and Promotion (CNPP)</td>
<td>703/335-7600 <a href="http://www.cnpp.usda.gov">www.cnpp.usda.gov</a></td>
<td>Develops and promotes dietary guidance that links scientific research to the nutrition needs of consumers. Administers the Dietary Guidelines for Americans, which include food safety recommendations.</td>
</tr>
<tr>
<td>Food and Nutrition Service (FNS)</td>
<td>703/335-2241 <a href="http://www.fns.usda.gov">www.fns.usda.gov</a></td>
<td>Provides children and needy families better access to food and a more healthful diet through food assistance programs and comprehensive nutrition education efforts. Administers National School Lunch Program.</td>
</tr>
<tr>
<td>National Agricultural Library (NAL) USDA/FDA Food Safety Information Center</td>
<td>301/534-5719 <a href="http://www.nal.usda.gov">www.nal.usda.gov</a></td>
<td>Maintains a database of computer software, audiovisuals, posters, games, teachers' guides and other educational materials on preventing foodborne illness. Healso educates, foodservice trainers, and consumers locate educational materials on preventing foodborne illness.</td>
</tr>
<tr>
<td><strong>Other Agencies</strong></td>
<td></td>
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</tr>
<tr>
<td>Centers for Disease Control and Prevention (CDC)</td>
<td>404/639-3554 (800/211-3435) <a href="http://www.cdc.gov">www.cdc.gov</a></td>
<td>Conducts surveillance of foodborne illness and investigates multi-state outbreaks in cooperation with FDA or USDA (depending on the product) and state agencies where the outbreaks have occurred. Conducts National Health and Nutrition Examination Survey (NHANES) on the health and nutrition of the U.S. population.</td>
</tr>
<tr>
<td>Center for Veterinary Medicine (CVM)</td>
<td>240/252-5301 <a href="http://www.fda.gov/cvm">www.fda.gov/cvm</a></td>
<td>Regulates the manufacture and distribution of food additives and drugs that will be given to animals.</td>
</tr>
<tr>
<td>Department of Homeland Security</td>
<td>202/267-8000 <a href="http://www.dhs.gov">www.dhs.gov</a></td>
<td>Coordinates partnerships among federal agencies, state and local leadership, and private industry to protect the nation’s food and agriculture supply from terrorist attacks, major disasters, and other emergencies.</td>
</tr>
<tr>
<td>Federal Trade Commission</td>
<td>202/352-2222 <a href="http://www.ftc.gov">www.ftc.gov</a></td>
<td>Enforces a variety of laws that protect consumers from unfair, deceptive, or fraudulent practices, including deceptive and unsubstantiated advertising.</td>
</tr>
<tr>
<td>National Oceanic and Atmospheric Administration (NOAA), National Marine Fisheries Service (NMFS)</td>
<td>301/713-2334 <a href="http://www.nmfs.noaa.gov">www.nmfs.noaa.gov</a></td>
<td>Provides a voluntary Seafood Inspection Program that inspects and certifies fishing vessels, seafood processing plants, and retail facilities according to federal sanitation standards. Works cooperatively with FDA’s Office of Seafood, and uses FDA criteria to evaluate seafood products and processes.</td>
</tr>
</tbody>
</table>

**State Regulatory Agencies**

These entities – including state departments of health and agriculture – work with FDA, USDA, and other federal agencies to implement food safety standards for all foods produced within state borders. The laws and standards they enforce are encouraged to coincide with either federal laws or uniform model codes such as those created by the Association of Food and Drug Officials. State agencies inspect restaurants, grocery stores and other retail food establishments, as well as dairy farms and milk processing plants, grain mills, and food manufacturing plants within local jurisdictions. In addition, they can halt the sale (embargo) of unsafe food products made or distributed within state borders. Food products that cross state lines (interstate shipment) are subject to federal jurisdiction.
## Ensuring a Safe Food Supply: A Concise Guide to the U.S. Food Regulatory System

### Issue Responsibility by Federal Agency

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<thead>
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<th>Issue</th>
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<tr>
<td>Animal and zoonotic diseases/pests</td>
<td>APHIS</td>
</tr>
<tr>
<td>Animal feed additives</td>
<td>CVM</td>
</tr>
<tr>
<td>Fish and seafood products (except shellfish)</td>
<td>CFSA, NOAA, NMFS</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>APHIS, CFSA, EPA</td>
</tr>
<tr>
<td>Eggs (processed): regulation and inspection</td>
<td>FSIS</td>
</tr>
<tr>
<td>Eggs (shell): regulation and inspection</td>
<td>CFSA</td>
</tr>
<tr>
<td>Food and color additives, ingredients</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Food labeling</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Food recalls</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Food security/defense</td>
<td>USDA, CFSA, DHS</td>
</tr>
<tr>
<td>Foodborne illness education</td>
<td>FSIS, CFSA, CDC</td>
</tr>
<tr>
<td>Foodborne illness outbreaks/surveillance</td>
<td>CDC</td>
</tr>
<tr>
<td>HACCP</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Imported food</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Inspection of food animals</td>
<td>FSIS</td>
</tr>
<tr>
<td>Inspection of food processing plants</td>
<td>CFSA</td>
</tr>
<tr>
<td>Inspection of meat and poultry slaughter facilities and processing plants</td>
<td>FSIS</td>
</tr>
<tr>
<td>Irradiation</td>
<td>CFSA</td>
</tr>
<tr>
<td>Microbial standards</td>
<td>FSIS, CFSA</td>
</tr>
<tr>
<td>National Organic Program</td>
<td>AMS</td>
</tr>
<tr>
<td>Packaging requirements</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Pesticides (enforces tolerances established by EPA)</td>
<td>CFSA, FSIS</td>
</tr>
<tr>
<td>Pesticides (establishes tolerances)</td>
<td>EPA</td>
</tr>
<tr>
<td>Pesticides (regulates development, distribution, promotion, handling, storage, use, disposal)</td>
<td>EPA</td>
</tr>
<tr>
<td>Safe food handling practices</td>
<td>CFSA, FSIS, CDC</td>
</tr>
<tr>
<td>School meal programs</td>
<td>FNS</td>
</tr>
<tr>
<td>Veterinary (animal) drugs</td>
<td>CVM</td>
</tr>
</tbody>
</table>

### Additional Resources

**Contact IFIC for more information**

- **International Food Information Council Foundation**  
  Phone: 202/286-6540  

- **Gateway to Government Food Safety Information**  

- **Partnership for Food Safety Education**  
  Phone: 202/265-0851  

- **Council for Agricultural Science and Technology (CAST)**  
  Phone: 515/329-2126  

- **Children's Food and Beverage Advertising Initiative** (Better Business Bureau)  

- **Congressional Resources**  
  **Senate Committee on Agriculture, Nutrition & Forestry**  
  Phone: 202/224-3035  

- **Senate Committee on Appropriations**  
  Phone: 202/224-7383  

- **Senate Committee on Health, Education, Labor and Pensions**  
  Phone: 202/224-6375  

**IFIC**

IFIC International Food Information Council

Based in Washington, D.C., the International Food Information Council (IFIC) is an educational arm of the IFIC Foundation, communicating science-based information on food safety and nutrition to health and nutrition professionals, educators, journalists, government officials, and others. It is supported by the broad-based food, beverage, and agricultural industries. They have established partnerships with a wide range of professional organizations, academic institutions, and government agencies to develop and disseminate science-based information. [www.foodinsight.org](http://www.foodinsight.org)
The New Food Movement
A Challenge for Conventional Food System Regulation

www.dirtyandthirty.com
## Major Theme

### Conventional – Transactional Model
- Food supply chain as series of transactions
- Industry consolidation and vast transport network eliminates relationships
- Consumer has little knowledge of food source
- Consumer has no relationships across the system

### NFM – Relationship Model
- Food supply chain is “shortened”
- Local food sourcing concentrates transport network and tightens relationships
- Consumer has more knowledge of food source
- Consumer can establish relationships within the local network
Social/Policy Movements

- School lunch reform
- Animal welfare
- Anti-GMO
- Organic
- Obesity
- Local Food
- Food sovereignty
- Urban agriculture
- Farm Bill reform
- Cage free/Free range
- CSAs and farmers markets
- Food safety reform
- Farmland preservation
- Food deserts/swamps
- Farm to table/school
- Farm worker rights
- Environmental protection
- Nutrition labeling
- Marketing to children
- Stop fast food and sugary drinks
- No antibiotics
- Trade & globalization
Legal Issues - General

- Urban agriculture - zoning restrictions
- Commercial kitchen regulations
- Direct to consumer sales restrictions
- Labeling claims and requirements
- Raw milk (herdshare legal in TN)
- Intellectual Property
- Certification systems
- Food safety requirements
Farmer's Markets and CSAs

CSAs - Rewiring Source-to-Consumer

The food system

Food supply chain: Washington apple

Growing
Apples grow on trees in orchards

Harvesting
Apples are picked by hand

Washing, grading, waxing
A wax coating helps keep apples crisp

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Farmer’s Markets and CSAs

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The packaging of apples depends on how they have been processed, if at all

Processing
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Composting
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Legal Issues for CSAs

- **Business entity decision**
  - Risks of sole proprietorships/general partnership

- **Shared risks and contracting**
  - Risks of oral agreements and handshakes
  - Defining pickup procedures, crop mix, ups and downs

- **Interns and worker shares**
  - Dep’t of Labor has strict intern rules
  - Food, meals, lodging complications
  - Work-shares as possible employment

- **Personal injury, insurance, and risk exposure**
  - Injuries to interns and work-share workers

- **Food Safety Modernization Act**
  - Small farm exemptions not automatic for CSAs
  - FSMA exemption does not preempt tort law liability