The Food Safety Modernization Act’s True Implications for Sustainable Agriculture

Emily Walters

Follow this and additional works at: https://scholarlycommons.law.wlu.edu/jece

Part of the Agriculture Law Commons, Energy and Utilities Law Commons, Environmental Law Commons, and the Natural Resources Law Commons

Recommended Citation

This Note is brought to you for free and open access by the Journal of Energy, Climate, and the Environment at Washington & Lee University School of Law Scholarly Commons. It has been accepted for inclusion in Washington and Lee Journal of Energy, Climate, and the Environment by an authorized editor of Washington & Lee University School of Law Scholarly Commons. For more information, please contact lawref@wlu.edu.
The Food Safety Modernization Act’s True Implications for Sustainable Agriculture

Emily Walters*

Table of Contents

I. Introduction ........................................................................................... 391
II. The Food Safety Modernization Act ................................................... 397
III. Federalism .......................................................................................... 403
IV. Raw Milk ............................................................................................ 407
   A. Federal and State Laws ................................................................... 407
   B. Brief History of Raw Milk .............................................................. 408
V. Solutions .............................................................................................. 419
VI. Conclusion ......................................................................................... 420

I. Introduction

Imagine you are a farmer with a herd of dairy cows. For as long as you can remember your family’s livelihood has depended on milking your cows every day and selling this milk to local consumers. Yet the Food Safety Modernization Act (FSMA) has prompted a movement toward greater government involvement, which prevents many of these farmers from carrying on the long-held family tradition of selling their milk. Previously, federal statutory restrictions over the sale of raw milk purely deferred to state controlled restrictions. The FSMA, however, has

---

* Candidate for J.D., Washington and Lee University School of Law, May 2013; B.A., Furman University, May 2010. The author would especially like to thank Dr. Jill Fraley for her invaluable guidance and insight.


391
significantly broadened the federal government’s ability to regulate food safety by allowing the detention of food that the FDA “reasonably believes is adulterated and presents a threat of serious adverse health consequences or death to humans or animals.” This Act markedly shifts the traditional locus of power from states to the federal government. This would not be problematic if it occurred gradually. However, the FSMA is a broad-sweeping piece of legislation that not only changes the entire nature of food regulation in this country but also significantly intertwines with issues of sustainable land use and agricultural impacts on climate change.

The FSMA, on the surface, could be perceived as a natural outgrowth of state food regulation. Some might say the Act merely helps to centralize the myriad of state food regulations that have developed over the years. In practice, however, this Act replaces the carefully conceived, previous, state-specific regulations because it advances food safety standards that do not include the sale and consumption of raw milk. Under the FSMA, regulators have been able to increase their power to inspect and detain food by using broadly worded provisions within the Act.

Historically, states could tailor laws to their constituents’ needs. The FSMA, in contrast, does not tailor to anyone’s needs. State inspectors are increasingly following federal guidelines set forth in the Act and are losing sight of the long followed, state-specific regulations. Practically speaking,

asserting a tightening of these regulations in some states since 2008) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).


5. See id. (describing how the Act’s wording gives the FDA broader powers).


the Act is stripping away the state-specific food safety regulations in favor of federally-stipulated regulations that are offered in the name of “safety.” This centralization of regulations is particularly problematic for small farmers because, as this note will discuss, there are historical biases against certain food products, such as raw milk. These historical biases are diminished under traditional practices of food safety regulations because state provisions created a balance of perspectives among the states regarding certain questionable foods, with some allowing a certain product into their marketplace and while others do not. The FSMA does not preserve this balance.

Farmers, in an effort to resist the detention of their food product and maintain their livelihood (through the sale of raw milk) while still complying with the FSMA, have revitalized the practice of cow-sharing to facilitate the direct sale of raw milk to consumers. Cow-sharing occurs when consumers enter into a contract (or cow-share agreement) with a farmer to purchase a fractional interest in a cow. The farmer feeds, houses, and provides the labor to milk the animal and store the animal’s product. In exchange, the consumer receives a percentage of the milk from the animal. These shares complied with any pre-FSMA states’ bans over the direct sales of raw milk to consumers because the consumer, rather than buying milk directly from the farmer, was instead, paying for the farmer’s service of caring for his/her interest in the animal. Through this

8. See Satran, supra note 7 (“Many of the regulations mandated by FSMA will be especially costly to small farmers and businesses that don’t have the elaborate food safety control mechanisms of corporations like ConAgra and Kraft. And even conservative estimates put the cost of implementing FSMA, both to the government and to the food industry, in the billions of dollars.”). Thus, even though state regulations are still in effect, there is overwhelming support to implement these federal mandates. See Satran, supra note 7. State inspectors are basing many more reports of food safety violations on this new act rather than on state specific regulations. See Satran, supra note 7.


10. See Beecher, supra note 2 (describing, analogously, varying regulations on raw milk by state).


12. See id. at 68 (explaining the mechanics of cow-share programs).

13. See id. (detailing the farmer’s role in cow-share programs).

14. See id. (discussing the customer benefit from cow-share programs).

15. See id. at 69 (examining how cow-share programs do not violate federal law).
work-around, the farmer is permitted to maintain their livelihood and family tradition while complying with the state law.

Under the FSMA, however, this historical practice of cow-sharing is being called into question. Before the FSMA, some state legislatures did not feel these agreements implicated significant food safety concerns, and thereby amended their state laws to specifically address cow-share agreements.16 Other states, however, largely regarded this practice as a device to bypass the individual state’s right to regulate raw milk consumption for the health and safety of the community and thus did not consider cow-share agreements to be a legal alternative to state regulations.17 Finally, some states remained silent as to the permissibility of cow-share agreements, which gave broad authority to state courts to decide the legality of these agreements.18

Restricting, even by default, traditional agricultural practices generates substantial environmental impacts. Large-scale farming consumes more energy than smaller farms by processing raw foods, packaging these foods for sale, and transporting foods long distances.19 Small-scale farming, in direct contrast, offers raw food with little to no packaging to the consumer who typically lives within a short distance of the farm itself.20 Consolidation of dairy and meat production into larger scale operations contributes to overgrazing and the loss of carbon-capturing landscapes that may be maintained on smaller farms.21 Small to moderate levels of grazing can be neutral or even beneficial, but compacting together large numbers of animals is destructive.22 A lack of locally available milk contributes to the growth and need for concentrated animal feeding operations (CAFOs), which contain thousands of animals on a limited area.23 Such operations

---

16. See id. at 69–70 (describing Colorado’s legislative efforts to allow cow-sharing).
18. See id. (illustrating a lack of legislative clarification on raw milk laws in some states).
19. See Coit, supra note 11, at 51 (discussing the energy-intensive nature of the large-scale farming system in the United States).
20. See id. at 53 (describing the energy-saving potential of localized farming).
21. See generally Denzel Ferguson & Nancy Ferguson, Sacred Cows at the Public Trough (1983) (providing the consequences of overgrazing and ecological impacts, including desertification).
generate numerous environmental impacts beyond ecological changes including, for example, significant concerns of water pollution. In addition, the impacts of CAFOs and overgrazing have been further amplified by the effects of climate change. For example, overgrazing is associated with dust formation, which is “directly relevant to climate change,” causing such problems as additional snow melt and dust storms.

These are just a few of the impacts that both the mass commercialization of agriculture and livestock programs have on the environment. These environmental impacts demonstrate that local farms need to be supported now more than ever to mitigate the environmental consequences of large-scale food production and transportation. However, the FSMA has created an exacerbated regulatory regime that is unclear and inconsistently implemented, which hinders small farmers from supplying ecologically friendly raw, local food to consumers.

Many steps must follow to mitigate the impact the FSMA will have on small-scale farming and its products, such as raw milk. One solution could be for the states to reclaim their role as partners within the federal system of governance. Raw milk advocates remain unconvinced that raw milk is a danger to their health. By taking a more active role, states could represent their local constituent’s desire, despite safety concerns, to imbibe this product, thereby limiting the reach of this statute. The current mode of governance is unsustainable as it stands today because its practical effect could completely undermine the purpose of food safety regulation. Raw milk advocates dismiss what they deem as unreasonable or overly-protective laws. By utilizing state inspectors as federal agents, raw milkers will likely disregard formal raw milk sales and instead go “underground” to procure their raw milk supply. Lawmakers must create a sustainable solution to the government’s seemingly over-protectionist food safety regulations. This solution must serve both the government’s interest in protecting public health and safety, while at the same time recognizing the autonomy and traditions of states and their citizens, which traditionally represent local interests for raw milk.


Part I of this note will provide a brief, general overview of the Food Safety Modernization Act. This Act is extensive, however, so unfortunately much must go unsaid. This note will primarily focus on the FDA’s inspection authority over food production facilities. This section will also address the Act’s mandated “Food Safety Plans,” which were created to set certain minimum standards to help guide food safety inspectors. Finally, this section will address the small farms exemption to the FSMA, which was created through the Tester-Hagan Amendment. This Amendment has particular relevance to raw milkers since many of these advocates operate small family farms.

Part II highlights the difficulties a myriad of federal and state rulings presents to federalism jurisprudence. While ample literature exists on the topic of federalism, this section will focus on the specific movement from what many call “dual federalism” to a “cooperative federalism” mode of governance. This section theorizes that the FSMA claims to contribute to cooperative federalism. However, in practice, the Act morphs cooperative federalism into a more centralized government. What results is a lessening of state independence, which not only erodes the representation of state citizens but also perpetuates alleged historical biases against certain food products—in this note, raw milk will be used as an example of such a historically-biased food product. Gaining an appreciation of this shift in federalism jurisprudence is critical to actualizing a workable solution for those who are impacted by the Act’s deterioration of state independence.

Part III will posit that raw milk is a historically-biased food product. This note will use raw milk as an example to better understand the implications of more centralized government. This section addresses the current status of both federal and state raw milk regulations. State regulations are still in place even with the enactment of the FSMA; however, in practice, this Act seems to have simply transposed the former, state-specific restrictions. This is problematic because raw milkers have an unwavering belief in the superiority of consuming local foods, both from a health perspective and from a conscientious awareness for the environment.

27. See FDA, FAQ, supra note 3 (“Food facilities will be required to implement a written preventive control plan, provide for the monitoring of the performance of those controls, and specify the corrective actions the facility will take when necessary.”).


29. See, e.g., Roberta F. Mann, Federal, State, and Local Tax Policies for Climate Change: Coordination or Cross-Purpose?, 15 Lewis & Clark L. Rev. 369, 375–79 (2011) (discussing the contemporary inclination towards coordination in environmental legislation efforts). This coordination seems to parallel concepts of cooperative federalism, which is basically understood as “fully overlapping jurisdictions.” Id. at 375.
What results is a federal law that favors food safety but is seemingly biased against raw milk combined with state laws that recognize a consumer’s interest in procuring local food (specifically raw milk) and a broken regulatory system that leaves both the regulator and the consumer confused and underserved by the law.

Finally, Part IV offers an attempt to allay these issues by introducing a compromise solution that would involve states taking a more active and independent role to help enforce the FSMA. Empowering the states would serve the dual purpose of addressing the federal government’s public health concerns and ensuring that states are properly representing their citizens. The incorporation of both these perspectives will provide consistency to a currently volatile area of the law.

II. The Food Safety Modernization Act

The Food Safety Modernization Act (FSMA) is a sweeping reform to the Food and Drug Administration’s food-borne illness prevention policy. Approximately 48 million Americans are affected by foodborne diseases each year. The FDA is charged with “assuring the safety, effectiveness, and security of . . . our nation’s food supply.” To fulfill its duties, the FDA establishes food storage and handling requirements, creates labeling standards, and inspects our nation’s food suppliers. In actual practice, however, these seemingly preventative systems lack specific mechanisms to ensure prevention, which forces the FDA into a more reactionary mode, responding to crises rather than preventing them.

30. See The New FDA Food Safety Modernization Act (FSMA), FDA, http://www.fda.gov/Food/FoodSafety/FSMA/default.htm (last visited Nov. 9, 2012) (“The FDA Food Safety Modernization Act (FSMA), the most sweeping reform of our food safety laws in more than 70 years, was signed into law by President Obama on January 4, 2011.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).


34. See Food: About FSMA, FDA, http://www.fda.gov/Food/FoodSafety/FSMA/ucm247546.htm (last visited Nov. 9, 2012)
In an effort to refocus the FDA toward preventing foodborne illnesses, Congress passed the FSMA on January 4, 2011.35 This act incorporates five specific mechanisms to help better prevent food borne illnesses.36 (1) Through preventative controls, the FDA is charged with setting “comprehensive, prevention-based controls across the food supply.”37 (2) Through inspection and compliance, the FSMA requires inspections of food sources to create greater accountability.38 (3) Regarding imported food safety, the act creates new tools to ensure imported foods meet U.S. standards.39 (4) To continue to respond to any foodborne illnesses that may arise in the future, the FSMA gives the FDA “mandatory recall authority for all food products[,]”40 however, “the FDA expects that it will only need to invoke this authority infrequently since the food industry largely honors our requests for voluntary recalls.”41 (5) Through enhanced partnerships, the act works to enhance “existing collaboration among all food safety agencies . . . to achieve our public health goals.”42 Overall, this new law puts prevention up front for FDA. “For the first time, the FDA will have a legislative mandate to require comprehensive, science-based preventative controls across the food supply.”43 These controls give the FDA broader authority to prevent intentional contamination.44

The FSMA insures that higher-risk facilities are inspected more frequently than lower-risk facilities because they allegedly pose a greater

35. See id. (“The FDA Food Safety Modernization Act (FSMA) was signed into law by President Obama on January 4, 2011.”).
37. Id.
38. See id. (“The legislation recognizes that inspection is an important means of holding industry accountable for their responsibility to produce safe product.”).
39. See id. (declaring that the FSMA authorizes the FDA to achieve greater oversight of food products being imported into the United States).
40. Id.
41. Id.
42. Id.
44. See id. (stating that the FDA has authority to prevent intentional contamination).
risk of contributing to food borne illnesses. The FDA, however, has yet to establish quantitative standards for inspectors to follow when assessing these high-risk foods. The FSMA also gives the FDA greater access to business records and calls on food suppliers to maintain more extensive records “related to the specific suspect article of food for which FDA reasonably believes is adulterated and presents a threat of serious adverse health consequences or death to humans or animals . . . .” Since the amendments to the FSMA, inspectors can now request even more records from food producers to include “records relating to any article of food that is reasonably likely to be affected in a similar manner . . . [and records] needed to assist the agency in determining whether the circumstances, which gave rise to the records request, exist.” “Reasonable belief” is made “on a case-by-case basis because such decisions are fact specific.” Finally, the FSMA requires certain food testing by accredited laboratories.

Under its revitalized response authority, the FSMA empowers the FDA with a “mandatory recall authority.” Where a party “refuses to or does not voluntarily cease distribution or recall such article within the time and in the manner prescribed by the Secretary . . . the Secretary may, by order require, . . . such persons to immediately cease distribution . . . .” After a mandatory recall, the FDA must provide the parties with an

---

45. FDA, FAQ, supra note 3 (“It calls for all high-risk domestic food facilities to be inspected within five years of the bill’s signing and then at least once every three years after that . . . all other domestic food facilities are to be inspected within seven years of the bill’s signing and then at least once every five years thereafter.”).

46. See id. (“FDA is now working on determining how to define and identify high-risk foods.”). See also Food: FSMA Domestic Facility Risk Categorization (FY 2012), FDA [hereinafter FDA, FSMA Domestic Facility, http://www.fda.gov/Food/FoodSafety/FSMA/ucm295345.htm (“[Utilizing a method], through a software program that assess[es] the characteristics of each facility in the agency’s inventory . . . [and identifies high risk facilities] based on the known safety risks of foods at the industry-wide level and compliance history . . . .”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment). It is important to note that the Domestic Facility Risk Categorization Report anticipates discussions geared toward “addressing the definition and consistency of ‘risk’ and ‘known safety risks’ as those terms are used throughout the FSMA.” Id. Creating more specific definitions for the FSMA will have the practical effect of curbing inspection powers of food production facilities. Additionally it is important to note that specific definitions within the act will not directly address the federalism concerns that are brought up in this note.

47. FDA, FAQ, supra note 3.

48. Id.

49. Id.

50. FDA, FSMA Background, supra note 43 (“The FSMA requires certain food testing to be carried out by accredited laboratories . . . .”).

51. Food Safety Modernization Act, 21 U.S.C. § 350l (2011). Note, however, that even if the party voluntarily decides to recall the food product, this voluntary recall does not preclude the FDA from mandating a recall later if the party does not follow through.

52. Id.
informal hearing. The FSMA also empowers the FDA with a more lenient administrative detention policy, which gives it more latitude to move suspect foods. In October of 2011, the FDA issued a document to provide industry guidance over “[w]hat [y]ou [n]eed to [k]now [a]bout [a]dministrative [d]etention of [f]oods.” The stated purpose of the FDA’s detention ability is to allow the FDA to “hold adulterated or misbranded food . . . [to] prevent it from reaching the marketplace . . . .” The FDA is permitted to detain food for a “reasonable period, not to exceed 20 calendar days,” however the FDA may retain it for ten additional days if a seizure or injunction order is being requested. If perishable food is detained, after seven days the food must be handled in a way as to not adversely affect the quality of the food. Additionally, the FDA can suspend registration of facilities “if it determines that the food poses a reasonable probability of serious adverse health consequences or death” and can require that producers of deemed “high-risk foods” keep additional records. The FSMA also enhances the FDA’s ability to ensure imported foods meet U.S. standards in an effort to insure they are safe for American consumption. This includes greater third-party certification requirements and import accountability.

The FSMA’s “formal system of collaboration with other government agencies, both domestic and foreign” is the most important aspect of this law for federalism jurisprudence. This portion permits the FDA to rely on local and state inspections to help meet the food-safety...
inspection mandate.\textsuperscript{63} As it will become apparent later in this note, this federal-state cooperation undermines the popularly utilized cooperative federalist mode of governance by creating a more centralized system of governance, which threatens a state’s representation of its citizens.

Before turning to the federalism implications from this Act, however, it is important to understand the timing and scope of this Act to fully appreciate the impact this Act has had on federalism jurisprudence. The next few paragraphs will show that the (1) implemented time-tables and (2) narrowing of detention authority are an attempt by the federal government to curb its authority and to be more accountable to the general public. The Act’s strict time-table calls on the FDA to implement certain guidelines for permissible hazard levels, to submit reports and to undertake various tasks to effectuate a preventative-centered strategy against food-borne illnesses.\textsuperscript{64} In order to “prepare the more than 50 rules, guidance documents, reports and studies within these strict time frames,” the senior leadership of the Foods Program within the FDA designated several implementation teams that report on and track progress toward each of the Act’s stated time-tables.\textsuperscript{65} While each of the FSMA’s stated time-tables only ran through the beginning of 2012, the FDA is continuing to issue rules and accepting public comments related to the FSMA.\textsuperscript{66}

In an effort to help narrow the FDA’s detention authority, which creates greater accountability to the general public, the act requires food producers to produce written preventative control plans.\textsuperscript{67} These plans are

\textsuperscript{63} See id. (“The FSMA provides FDA with a new multi-year grant mechanism to facilitate investment in State capacity to more efficiently achieve national food safety goals.”).


\textsuperscript{66} See Dockets Open for Comment: Dockets Related to the FDA Food Safety Modernization Act (FSMA), FDA, http://www.fda.gov/downloads/Food/FoodSafety/FSMA/ucm261689.htm (last visited Nov. 9, 2012) (providing the public with information on dockets that are open for comment and closed, as well as insight into the FDA’s Rulemaking Process) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).

\textsuperscript{67} See FDA, FAQ, supra note 3 (detailing the major elements of the law one of which is preventative control plans); see also Food Bill Aims To Improve Safety, FDA [hereinafter FDA, Food Bill Improves Safety], http://www.fda.gov/downloads/ForConsumers/ConsumerUpdates/UCM238166.pdf (last visited Nov. 10, 2012) (“Under the provisions of FSMA, companies will be required to develop and implement written food safety plans [and] FDA will have the authority to better
meant to create scientific standards that food producers can adhere to in order to help avoid the detention of their food. To set these scientific standards, food producers will likely utilize the “Hazard Analysis and Critical Control Point” methodology (HACCP), which sets “Critical Control Points.” Numerical “points” are set, and inspectors test the food supply via microbial, physical, or chemical testing, however, inspectors can also use their visual observations of food storage conditions. By having each food producer utilize HACCP, each industry can establish its own bacterial counts present in the foods that it believes are reasonably safe for the public to consume. The Dairy Industry, for example, has a “Dairy Grade A Voluntary HACCP,” which specifically lists standards for all pasteurized milk. Note that this document fails to set scientific limits for unpasteurized, or raw, milk, despite the fact that there is not a federal ban on the direct sale of raw milk to consumers.

One final check on the federal government’s authority within this act is the Tester-Hagan Amendment, which creates a small farms exemption from the new FSMA requirements based on the assumption that these new requirements would be “too expensive and burdensome for small scale growers.” This Amendment defines “small farms” as farms that have annual gross revenue of less than $500,000 over three years and sell a majority of their products directly to consumers.

respond and require recalls when food safety problems occur, and . . . better ensure that imported foods are as safe for consumers as foods produced in the U.S.”

68. See FDA, Food Bill Improves Safety, supra note 67 (“The legislation . . . includes [one of] the following major provisions: FDA must establish science-based standards for the safe production and harvesting of fruits and vegetables.”).


71. See id. (“Guidelines should be applied as appropriate to each segment of the food industry under consideration.”).


TRUE IMPLICATIONS FOR SUSTAINABLE AGRICULTURE

for this bill largely because, to him, “foodborne illnesses don't come from family agriculture;” these regulations should target large-scale producers that have less direct contact with the food they distribute to American families. Overall, while it is important to note this Act’s specific restrictions on the federal government’s authority to regulate food safety, the incorporation of a federal/state collaboration among inspectors, in practice, turns independent state agents into federal agents, thereby confusing a system that is set up to defer to state regulations because it becomes unclear who these inspectors ultimately serve: their respective state’s citizens or the federal government. Utilizing state agents in this way erodes the state’s independence in regulating the safety of food for its own citizens. Loss of this independence takes away an important check and balance on the federal government's power that is typically present in our democracy. The loss of this foundational restriction, it seems, outweighs the specific restrictions created within the Act itself. This calls into question whether the state is remaining loyal to its own citizenry or if it is dividing its loyalty between its citizen and the federal government. This next section will address this federalism issue within the FSMA by first providing a general overview of federalism jurisprudence and then applying these principles specifically to the FSMA.

III. Federalism

Historically, environmental issues were solely within state’s providence. In the 1970s a series of environmental regulations were enacted as an attempt to amalgamate perceived state deficiencies “to check or reverse environmental degradation.” This added level of authority has substantially complicated environmental law over the years because it confuses which authority actually has the ability to set binding environmental standards and, once enacted, who can enforce the enacted environmental standards. Recently, as demonstrated through the FSMA, it


76. See Stewart, Pyramids of Sacrifice, supra note 6, at 1196 (“Over the past decade, responsibility for setting environmental policy has increasingly shifted from state and local authorities to the federal government.”).

77. See Stewart, Pyramids of Sacrifice, supra note 6, at 1196.

78. See Stewart, Pyramids of Sacrifice, supra note 6, at 1196 (“The federal government, however, is dependent upon state and local authorities to implement these policies because of the nation's size and geographic diversity, the close interrelation between environmental controls and local land use decisions, and federal officials limited
seems the federal government has taken a more proactive role in both defining and enforcing permissible standards. As a result, the field of environmental federalism has been working to generate solutions to deal with the federalism issues that arise from complicating the relationship of these two traditionally competing sovereign authorities.

Generally federalism theory is defined as a relationship between entities that resembles a “partnership, established and regulated by covenant, whose internal relationships reflect the special kind of sharing that must prevail among the partners, based on a mutual recognition of the integrity of each partner and the attempt to foster a special unity among them.” True federalism, therefore, is a partnership arrangement where all actors enjoy equal status and input.

Up until the New Deal, the federal government’s relationship with the states was, what many describe, a “Dual Federalism” mode of governance. Under this structure, the federal and state governments “exercise exclusive control over non-overlapping regions of authority . . . and the federal courts play an important and distinctive role in guiding the boundaries of state and federal terrain.”

Early in the twentieth century, however, this approach lost favor because “it became too difficult to define implementation and enforcement resources.” There is an inherent federalism concern rooted in environmental law, therefore, because the federal government serves a dual role in the environmental context as a regulator and the regulated and, additionally, many environmental issues affect entire regions, irrespective of governmentally drawn boundaries. See generally Robert V. Percival, Environmental Federalism: Historical Roots and Contemporary Models, 54 MD. L. REV. 1141 (1995).

It is important to note that state governments could be relinquishing their autonomy to the federal government for good reason. For example, many states today are facing severe budget cuts. Deferring to the federal government could mean greater potential for funding for state governments. See Brian Galle & Kirk J. Stark, Beyond Bailouts: Federal Tools for Preventing State Budget Crises, 87 IND. L.J. 599, 599 (2012) (“[S]tates have often turned to the federal government for fiscal assistance . . . to address fiscal imbalances.”). Other alternative explanations for this restructuring of federalism may exist, however, explanation of those alternative reasons is more properly addressed elsewhere.

See Richard J. Lazarus, The Nature of Environmental Law and the U.S. Supreme Court, in STRATEGIES FOR ENVIRONMENTAL SUCCESS IN AN UNCERTAIN JUDICIAL CLIMATE 9, 14 (Michael Allan Wolf ed., 2005) (“Environmental controversies during the past several decades have produced a series of conflicts between federal and state governmental authorities concerning their respective spheres of law making authority and autonomy.”).


the boundaries of separate and exclusive regulatory spheres for the state and national governments.” This was largely due to Supreme Court decisions that both loosened the bounds of federal commerce power but, concurrently, broadened state regulatory authority “under the preemption and Dormant Commerce Clause doctrines.”

The United States today has morphed into what many call a “cooperative federalist” system. Cooperative federalism recognizes that the central power should not be a true partner with the states—it should work with the states, but ultimately the goal of the central power should prevail. This approach differs from dual federalism because there is a certain “centralization default” under cooperative federalism where even when a state legislates on a particular issue, deference will be given to the federal government. Despite this deference to the central authority under cooperative federalism, the federal government still tries to work with states to tailor centralized regulations to local concerns. This citizen input ensures that centrally imposed standards will be both followed and respected. States under a true cooperative federalism system are partially

86. Id. at 139.
87. See Roberta F. Mann, Federal, State, and Local Tax Policies for Climate Change: Coordination or Cross-Purpose?, 15 LEWIS & CLARK L. REV. 369, 375–79 (2011) (discussing today’s preference for coordination in environmental legislation). This coordination seems to parallel concepts of cooperative federalism, which is basically understood as “fully overlapping jurisdictions.” Id. at 375.
88. See FEELY & RUBIN, FEDERALISM, supra note 82, at 12–16 (defining federalism and describing the interaction between the central power and its subdivisions).
89. See David S. Schwartz, Correcting Federalism Mistakes in Statutory Interpretation: The Supreme Court and the Federal Arbitration Act, 67 LAW & CONTEMP. PROBS. 5, 23 (2004) (“[Where Congress enacted legislation], unless it expressly saved state law, it was deemed to have occupied the field, and no state regulation on the same subject would be permitted.”).
90. See JOHN FEREJOHN & BARRY WEINGAST, THE NEW FEDERALISM: CAN THE STATES BE TRUSTED viii (1997) (noting that Congress has frequently used federal money to fund state projects and induce states to aid in federal projects). Local tailoring efforts, however, are not always successful. A commonly cited problem with centralized authority is its tendency to over rely on “nationally uniform standards of control.” See Stewart, Pyramids of Sacrifice, supra note 6, at 1219. Cooperative federalism, therefore, is not a perfect model, but is a compromise that prefers central authority but allows states to diverge from this standard when necessary to address local issues. See Stewart, Pyramids of Sacrifice, supra note 6, at 1220. For example, cooperative federalism ensures a particular national standard will not impair local functions. See Stewart, Pyramids of Sacrifice, supra note 6, at 1220–21. Furthermore, cooperative federalism encourages local participation in molding federal legislation. Stewart, Pyramids of Sacrifice, supra note 6, at 1220–21.
91. See Stewart, Pyramids of Sacrifice, supra note 6, at 1221–22 (explaining that there is greater citizen backlash where a “national elite’s vision of a better society” is imposed upon an unwilling or uninterested local population).
subject to federal whims; however, states under this mode of governance ultimately remain autonomous by retaining the ultimate power to enact and enforce federal standards to the extent they feel is necessary for their particular locale.92

The recently enacted FSMA, on its face, seems to reinforce this model of cooperative federalism because it empowers the FDA to work alongside the state governments to inspect and prevent foodborne illnesses.93 Under closer inspection, however, this Act fails to embody the true spirit of cooperative federalism, and instead divests greater authority than ever in the central government by carving away powers that were traditionally within the sole realm of state authority. The FSMA’s cooperation with state inspectors appears to maintain the minimal level of state autonomy usually enjoyed in a cooperative federalist society, but this comingling of resources instead blends state food safety standards with federal food safety standards. This mix forces state inspectors that are now simultaneously working for the federal government to enforce two different set of standards at the same time. This is practically impossible because the two sets of standards conflict, which has the practical effect of state standards taking the back-burner to federal standards, causing the once highly-tailored nature of food standards to be seemingly lost after the passage of the FSMA.

The FSMA’s centralization of authority for food safety inspections becomes even more problematic because of a historical bias against some food products.94 Raw milk is an example of a food that receives particularly cautious treatment by the federal government (and to some degree by state governments).95 As explained below, it is not scientifically justified to categorically consider raw milk to be “unsafe.” Before the FSMA, the relative safeness of raw milk was left up to each state.96 The passage of the FSMA required farmers to adhere to two sets of laws: (1) state laws that predated the FSMA, which prescribed one set of standards, and (2) federal laws, set forth in the FSMA, which usually conflicted with the previously

92. See Feeley & Rubin, Federalism, supra note 82, at 16 (“A defining feature of federalism is that it grant partial autonomy to geographical subdivisions, or subunits.”).
93. See FDA, FAQ, supra note 3 (“[The] FSMA does provide for FDA and USDA and other federal and state/local food safety agencies to work together more closely.”).
94. See FDA, FAQ, supra note 3 (listing traditionally “high risk foods” as a separate and distinct category).
95. See Grade “A” Pasteurized Milk Ordinance, supra note 72, at iii (“[Noting a long history of milk sanitation due, in part, to milk’s] potential to serve as a vehicle of disease transmission and has, in the past, been associated with disease outbreaks of major proportions.”).
96. See State-by-State Review, supra note 17 (detailing through a map the states’ varying determinations of safeness) While even pre-FSMA the federal government banned the interstate transportation of raw milk, states were still given the autonomy to determine its permissibility within their own borders. See State-by-State Review, supra note 17.
imposed state standards. Even more troublesome is the fact that federal baseline standards are not yet published by the FDA, which provides little guidance for farmers that wish to adhere to the dual standards.

Naturally there is an outcry among food producers to this seemingly unbridled and non-specific grant of authority to the central government. This outcry has led many farmers back toward the practice of cow-sharing, which many state governments and federal inspectors find questionable, either due to their perception of raw milk as a whole, or because the nature of the agreement seems to operate as a work-around to the law.

This note will next examine the implications a greater centralized government will have on food products that allegedly suffer from historical biases by looking at raw milk as an example of one of these products.

IV. Raw Milk

A. Federal and State Laws

Even before the passage of the FSMA it was illegal to transport raw milk for consumption interstate. Each state has enacted numerous restrictions on sales intrastate. There are three different types of restrictions on the intrastate sale of raw milk: sales allowable on farm only, sales allowable for pet food only, and an outright prohibition.

97. See FDA, FAQ, supra note 3 (explaining that the FSMA will both enact comprehensive federal measures as well as strengthen existing state, local, and tribal measures).
98. See FDA, FSMA Domestic Facility, supra note 46 (lacking any federal baseline standards).
99. See State-by-State Review, supra note 17 (demonstrating that the states maintain varying laws concerning herd sharing).
101. See State-by-State Review, supra note 17 (providing a color-coded map specifying the status of raw milk regulations in each state).
102. See State-by-State Review, supra note 17 (finding on-farm sales are legal in fifteen states, which are Oregon, Texas, Utah, Oklahoma, Kansas, Nebraska, South Dakota, Minnesota, Illinois, Mississippi, Arkansas, Mississippi, New York, Vermont, and Massachusetts).
against the sale of raw milk. Some states remain silent on the legality of raw milk sales, yet have spoken to and allow cow-share agreements by statute. Other states remain completely silent to both the legality of raw milk sales and cow-share agreements. Retail sales of raw milk are only permitted in ten states.

B. Brief History of Raw Milk

While milk is an important feature of many American diets today, cow’s milk was not always a staple in the human diet. During the Industrial Revolution, many people moved to the city for greater economic opportunities, leaving their agrarian lifestyle behind. The cramped quarters of city life, however, meant the abandonment of personal cow ownership. Many families, because they had become accustomed to cow’s milk on their farm, demanded this milk despite their new-found city lifestyle.


106. See State-by-State Review, supra note 17 (showing that four states are silent with regards to raw milk regulations: Wyoming, Michigan, Indiana, Kentucky, Alabama, and Virginia).


108. It is important to note that, while some scholars claim cows have been milked for thousands of years, we cannot assume this was to satisfy a necessary component of the human diet. Cows must be milked for their own health; any consumption of this milk by humans was not necessary. See Mark Bittman, Got Milk? You Don’t Need It, N.Y. TIMES OPINIONATOR, (July 7, 2012, 3:56 PM), http://opinionator.blogs.nytimes.com/2012/07/07/got-milk-you-dont-need-it/ (stating that a lot of the nutritional benefits usually associated with milk can be derived from other sources) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment). Claiming that milk has been part of a human diet for thousands of years, therefore, is misleading because it leads the reader to assume it was incorporated out of dietary need, not just availability. See Damian C. Adams et al., Déjà Moo: Is the Return to Public Sale of Raw Milk Udder Nonsense?, 13 DRAKE J. AGRIC. L. 305, 307 (claiming naively that, “Milk has been important to the human diet since domesticated cows were first milked 11,000 years ago.”).

109. See MENDELSON, supra note 9, at 32 (discussing the new patterns of land ownership that accompanied the Industrial Revolution).

110. See RON SCHMID, THE UNTOLD STORY OF MILK 56 (2009) (“The vast majority of households were those of working people in small dwellings, or even in tenement houses of four or five stories.”).

111. See id. at 27 (“The cow had a pervasive influence on America’s history and culture.”).
This urban demand, however, could not be completely matched by supply. Farmers attempted to match demand by changing their farming tactics, causing milking conditions to change; milk then started to come from “dozens or hundreds of cows herded into crowded, filthy milking sheds next to breweries or distilleries, where dairyists thriftily bought up the wastes for fodder.” Where supply was not able to keep up with the demand, milk would be watered down creating “swill milk.” These unnatural practices correlated with an increase in diseases in urban areas. Substandard, unnatural dairy conditions led, to what is today known as, the raw-milk movement. Raw milk activists who strongly disagreed with “swill milk” practices advocated for alternative ways to bring fresh, unadulterated milk to the cities.

Poor milk management combined with an appreciation for the intersections of chemistry and biology prompted doctors in the mid-1800s to claim that milk, above every other “food of equal importance,” was not

112. See id. at 32 (“As cities grew, readily available pasturage shrank, while demand for milk . . . rapidly increased.”).
113. MENDELSON, supra note 9, at 33. See SCHMID, supra note 110, at 33 (“Most of the cattle stand in rows of from seven to ten across the building, head to head and tail to tail alternately . . . [l]et the visitor go into the midst of the pens . . . as the writer has done, and inhale but one breath of polluted air, and an inexpressible impression of heart-sickening disgust will be produced, which time will never efface.”).
114. See MENDELSON, supra note 9, at 33–34 (“This opportunistic dovetailing of interests sickened or killed huge numbers invoked horrified outcries from public-health advocates who saw the watery, bluish, ill-tasting “swill milk” doing the same to people.”); see also P.J. Atkins, Sophistication Detected: Or, the Adulteration of the Milk Supply, 1850–1914, 16 SOC. HIST. 317, 319 (1991) (“[Finding food fraud was a practice not only occurring in America, but spanned across the Atlantic to London, where] to hide the ‘thin’ or ‘bluish’ appearance of milk modified in [some] way, some dairymen restored its natural look by the addition of various substances.”).
115. See SCHMID, supra note 110, at 40 (“European cities too were afflicted with bad milk and its consequences, but their milk appears to have been not as bad as that of American cities, and the Europeans generally used less milk . . . slop milk’s [also referred to as swill milk] influences are not exaggerated, and . . . [it’s appropriate to class it] among the most fruitful causes of suffering, disease, and death.”); see also Daniel Block, Saving Milk Through Masculinity: Public Health Officers and Pure Milk, 1880–1930, 13 FOOD & FOODWAYS 115, 118–19 (2005) (“[Stating that activists of the time implied there was a connection between the morality of the dairy owners, their treatment of the cows, and the purity of the milk they produced.”).
116. See Block, supra note 115, at 118 (“The American pure milk movement began in the mid-1800s with the work of Robert Hartley. Hartley was a New York social reformer who was horrified by the “swill dairies” that had been developed all over his city . . . .”).
117. See Block, supra note 115, at 118 (noting that reformers worked to bring recognition to “swill dairies” and their practices, which led to swill milk being outlawed in most large cities in the United States).
as amenable to digestive systems. Yet disease, seemingly related to milk, spurred scientists to attempt to make milk safer.119

This is surprising because harmful bacteria are not inherently present in raw milk.120 Bacteria occur when the product is handled in an unsanitary manner, usually when it is commingled with a contaminated source.121 Such commingling and contamination was more likely when, in order to get to the city, milk had to travel much farther from the farm.122 Long travel times from the farm to the city caused decomposition of milk before it reached consumers.123 At first, to slow decomposition during milk’s journey to the city, scientists suggested introducing chemicals.124 Such chemicals convinced the public that their milk was fresher when it arrived.125 Slowing decomposition did not, however, address problems of bacterial contamination.126

Louis Pasteur and Robert Koch developed a process, now known as pasteurization, which would kill harmful bacteria before the milk was transported.127 The theory behind pasteurization was that it heats the product beyond a certain temperature to kill dangerous bacteria.128 The first pasteurization process involved heating a vat of raw milk to about 145

118. See MENDELSON, supra note 9, at 34 (“Doctors did notice that milk seemed to disagree with more people than any other food of equal importance.”).
119. See MENDELSON, supra note 9, at 34 (“Milk-borne epidemics remained a more serious concern.”).
120. See SCHMID, supra note 110, at 263–71 (discussing the safety of raw milk itself, the many bacteria’s that make it safe, and how the handling of milk, where it is processed, and the pasteurization methods used, can lead to milk being unsafe).
121. See Block, supra note 115, at 115 (finding that city dwellers were forced to rely on inspections by government authorities). For example, a scarlet fever epidemic in Chicago is attributable to milk traveling to two cities that had outbreaks of scarlet fever, before the milk arrived in Chicago. See Block, supra note 115, at 129 (finding “contamination by bacteria, often occurred to milk on its way to the city,” dispelling the popular notion that contamination is due to either raw milk itself or by the handling of the farmer).
122. See Atkins, supra note 114, at 335 (“For the train journey and period of marketing, the addition of chemicals became common to slow down the process of decomposition . . . [t]hese did not kill harmful bacteria, but merely persuaded people, falsely, that the milk they were buying was reasonably fresh.”).
123. See Atkins, supra note 114, at 335 (“In the second half of the nineteenth century the deterioration of milk must have been common during its long rail journeys to London, especially in hot summer weather, and the milk trade was hard put to find a solution.”).
124. See Atkins, supra note 114, at 335 (“For the train journey and period of marketing, the addition of chemicals became common to slow down the process of decomposition.”).
125. See Atkins, supra note 114, at 335 (“These did not kill harmful bacteria but merely persuaded people, falsely, that the milk they were buying was reasonably fresh.”).
126. See supra note 121 and accompanying text.
127. See MENDELSON, supra note 9, at 34 (“Public understanding of contagions had improved greatly with the work of the microbiologists Louis Pasteur and Robert Koch . . . [t]hese factors would have been important in any era.”).
128. See infra note 130 and accompanying text.
degrees. 129 This initial production process became mandatory by 1920 throughout most of the United States. 130 Authorities were primarily concerned with the safety of the milk supply rather than maintaining the natural quality of the supply. 131

A second, less time-intensive type of pasteurization, known as “high-temperature/short-time” (HTST) pasteurization, was developed in the 1930s. 132 And in the 1970s, a two second “ultra-pasteurization” process was developed, heating the milk to twice the temperature of the original pasteurization process. 133 Both of these types of production negatively affected many small farmers because they could not afford the equipment necessary for pasteurization; as a result, many went out of business. 134

Today, many Americans view true milk as the pasteurized product found on store shelves. 135 Regulators have successfully utilized culture to maintain support for pasteurization. 136 As a result, the general public seems to view pasteurized milk as natural rather than a product of human production. 137 For example, the most well-known milk campaign is run by the California Milk Processor Board, a group most commonly known for

129. See Mendelson, supra note 9, at 35 (“The pasteurization process that became the most common after about 1900 involved running the milk into a vat . . . but eventually most dairy plants opted for a temperature of about 145°F and a heating period of about thirty minutes, followed by prompt chilling.”).

130. See Mendelson, supra note 9, at 35 (“Between 1900 and 1920 pasteurization, usually by this formula, became mandatory in most parts of the country.”); see also 35A Am. Jur. 2d Food § 40 (2012) (“For the protection of the public health, the states’ police power may be used to require that all milk for human consumption be pasteurized and may prescribe the conditions under which pasteurization is accomplished.”).

131. See Block, supra note 115, at 121 (“[T]he treatment of cows increasingly dealt with the raw facts of milking and milk protection, rather than cows’ emotional health and potential ties to milk quality.”).

132. See Mendelson, supra note 9, at 35 (“In the 1930s many plants began switching to another method involving not separate batches but a continuous pipe feed of milk—“high-temperature/short-time,” or HTST, pasteurization.”).

133. See Mendelson, supra note 9, at 35 (“Since about 1970, the even more drastic continuous-feed “ultrahigh-temperature” pasteurization—UHT or “ultra pasteurization” for short—at or above 280°F for about two seconds has been gaining ground.”).

134. See Mendelson, supra note 9, at 35 (“Whatever the public-health benefits, these pushes toward modernization drove small and marginal farmers out of business if they could not afford the necessary capital investments.”).

135. See Donna M. Byrne, Raw Milk in Context, 26 J. Envtl. L. & Litig. 109, 111 (2011) (“Until one of my students chose to write a paper about ‘raw milk,’ I had never even thought about the possibility that non-pasteurized milk might still be available.”).

136. See id. at 127 (noting that pasteurization gained support due to a movement to certify dairies that followed good sanitation practices, which opened the door for regulators, because they could deliver a promise of safe milk to consumers).

137. See id. at 128 (concluding that because sanitary, well-monitored, and inspected production of milk has become the norm, individuals view pasteurized milk as the natural choice, as opposed to the natural milk, which is made a clear second option).
the “Got Milk?” ad campaign.\textsuperscript{138} The “Got Milk?” website shows five glass bottles of milk.\textsuperscript{139} The website visitor is prompted to “Find the Real Milk” by choosing which bottle looks the most like “milk.”\textsuperscript{140} However, there are a number of plant-based forms of milk, such as coconut milk, hazelnut milk, almond milk, and soymilk.\textsuperscript{141} Beyond listing these options as not “true milk,” various phrases appear above the bottles in an attempt to show where the website visitor went wrong.\textsuperscript{142} Above almond milk, for example, the group wrote “Pretty funky color.”\textsuperscript{143} Yet, cow’s milk is not naturally a bleach white color, but rather varies based on what that cow ate that day.\textsuperscript{144} Above the “Hazelnut Milk” the phrase “What’s that stuff on the bottom? Yikes.” appears.\textsuperscript{145} Yet raw, unpasteurized milk settles once bottled, and the cream rises to the top.\textsuperscript{146} These messages that milk should be paper white and that the separation of milk should not occur are patently incorrect. Yet they represent the everyman’s perception of what real milk should look like today.\textsuperscript{147}

The cultural perceptions noted above are supported by proponents of pasteurization; pasteurization advocates argue that pasteurization must continue to keep harmful bacteria at bay.\textsuperscript{148} The Center for Disease Control specifically states “raw milk contains bacteria, and some of them can be harmful. So if you’re thinking about consuming raw milk because you

\begin{itemize}
\item \textsuperscript{140} See id. (prompting the user to discern which of the five options provided is cow’s).
\item \textsuperscript{141} See id. (noting the various ingredients in these plant based “milk” products).
\item \textsuperscript{142} See id. (using statements such as, “are you coconuts?” for coconut milk, “Milk not from a cow? Udderly ridiculous” for hazelnut milk, and “no get milk from a nut” for almond milk).
\item \textsuperscript{143} See id. (varying the statements the user may come across).
\item \textsuperscript{144} See William Campbell Douglass, The Raw Truth About Milk 117 (2007) (“You may now purchase, from your neighborhood grocer, pasteurized, homogenized dipotassium and calcium phosphate, with hydrogenated vegetable fat, sodium caseinate, sugar (of course), artificial flavoring . . . .”).
\item \textsuperscript{145} See Find the Real Milk, supra note 139 (describing the caption above the milk bottle for “hazelnut milk”).
\item \textsuperscript{146} See Find the Real Milk, supra note 139 (referring to signs above the milk bottles).
\item \textsuperscript{147} See Find the Real Milk, supra note 139 (including one phrase about coconut milk “spooky how real it looks,” summing up the general perception that cows milk is naturally white).
\item \textsuperscript{148} See Mendelson, supra note 9, at 54 (“On the other side, adherents of pasteurization are bent on warning the public that without it we can expect the unhindered spread of milk-borne pathogens that used to kill people en masse but are eliminated in the pasteurizing process.”).
\end{itemize}
believe that it is a good source of beneficial bacteria, you need to know that it isn’t and you may instead get sick from the harmful bacteria.” 149 This is misleading, however, because, as this note stated earlier, harmful bacteria comes from unsanitary handling practices, not from the product itself. 150 The CDC implicitly acknowledges this elsewhere on its website by stating that illnesses that still occur from milk stem from “germs introduced . . . after the pasteurization process.” 151

Despite the culturally created preference for pasteurized milk, raw milk advocates resist this process because they believe natural milk has benefits the consumer should be able to obtain if he or she chooses to because of our free market economy. 152 First, raw milk advocates argue that pasteurization destroys the nutritional value of natural milk. 153 Secondly, they believe natural milk tastes better than its pasteurized counterpart, 154 and boasts a string of health benefits beyond its nutritional value, such as allergy reduction. 155 Finally, advocates argue that the statistics stating the dangers of raw milk are distorted; these same statistics, when viewed in a broader context, actually should not be a cause for alarm. 156 Each of these arguments is developed in more detail in the following sections.

Advocates for raw milk find that the nutritional qualities of pasteurized milk are deficient because pasteurization degrades vitamins naturally present in milk, such as Vitamins A, C, D, E, K, B1, B2, Niacin, B6, Biotin, Folic acid, and B12. 157 Secondly, raw milk advocates claim

150. See supra note 120 and accompanying text.
151. CDC, Raw Milk Q&A, supra note 149; see also Byrne, supra note 135, at 112 (discussing raw milk contamination possibilities).
152. See MENDELSON, supra note 9, at 54–58 (debating the merits of consuming raw milk, in comparison to pasteurized milk, and the desire that the public be informed of the benefits of raw milk).
153. See MENDELSON, supra note 9, at 54 (“Most of those who want consumers to have unfettered access to raw milk insist that pasteurization destroys nutritional value.”).
154. See MENDELSON, supra note 9, at 54 (“Sometimes they also assert that raw milk tastes better, period.”).
155. See Byrne, supra note 135, at 116 (“Raw milk drinkers may be less prone to childhood asthma and allergies . . . the study concluded that the consumption of farm milk [(raw milk)] may offer protection against asthma and allergy.”).
156. See MENDELSON, supra note 9, at 113–14 (“To put these numbers in context, illnesses associated with raw milk represent a very small percentage of total food-related outbreaks, so it is somewhat surprising that raw milk draws so much attention . . . [a]t 160 illnesses per year for every 6 million people . . . that comes out to about 1 out of every 5000 people.”).
pasteurization destroys beneficial bacteria naturally found in milk, such as lactic acid, which aids digestion by helping to break down proteins in the intestines. 158 Finally, pasteurization damages enzymes naturally present in raw milk that also aid in the digestion of food. 159

Natural milk frequently is described as tasting superior likely for two reasons: (1) raw milk is procured closer to the source and therefore is fresher than the product found on the grocery store shelf, and (2) the “basic milk structure is intact.” 160 Beyond taste, raw milk advocates claim that consuming raw milk has cured a number of ailments, such as allergies, eczema, and arthritis. 161

In addition, proponents of raw milk explain that statistics, if construed in a broader sense, could actually be used to prove the safety of raw milk. 162 While there were “187 hospitalizations and 2 deaths” of the 1614 reported individual illnesses, in the broader context “[b]etween 3 million and 9 million people drink raw milk, [yet] over ten years, there were [only] approximately 1600 illnesses.” 163 Recent government studies have agreed, concluding that “the raw milk risk [is] extremely small compared to risk[s] of other foods.” 164


158. See id. (noting that under the section “Enzymes in Raw Milk,” that enzymes are important for breaking down “starches, fats and proteins into chunks the body can use.”).

159. See infra note 161 and accompanying text.

160. See MENDELSON, supra note 9, at 55 (“The creamier “mouthfeel” and fresher flavor of whole milk at a well-run Jersey cow dairy farm (and by the way, plenty of Holstein-Friesian farms) reflect not just actual freshness but the fact that the basic milk structure is intact.”).


162. See Byrne, supra note 135, at 113 (“Illnesses associated with raw milk represent a very small percentage of total food-related outbreaks.”).

163. Byrne, supra note 135, at 113–14 (“[Putting these numbers in context] illnesses associated with raw milk represent a very small percentage of total food-related outbreaks, so it is somewhat surprising that raw milk draws so much attention.”); see MENDELSON, supra note 9, at 34 (finding that despite health implications, both from the food’s reaction with the human’s natural system and from the poor sanitation practices, “milk cures” were frequently diagnosed where patients would attempt to restore their system by drinking over a gallon of milk every day).

Along with the health benefits associated with consuming raw milk, raw milk consumers generally prefer this product because they support the principals behind small-scale farming since it is a more environmentally friendly means to procure food. Local food takes less energy to produce because there is less processing, packaging, and transportation involved. According to the United States Department of Agriculture, “[g]enerally, the States with the most agricultural production use the most energy and therefore have the highest CO2 emissions.” Processing milk is an agricultural production that utilizes machines that depend on fossil fuels to milk the cows, pasteurize, and package the milk for sale. Local foods sold directly at a farm or at a farmer’s market tend to be packaged less than its grocery-store counterpart; sometimes they are even put into a reusable container, which is inherently more environmentally friendly because it

165. See Coit, supra note 11, at 48 (describing environmental reasons (besides health benefits) why consumers actively choose to support local foods, such as: the connection between consumers and agricultural producers, environmental impacts and energy consumption, and social and political support for local farmers).

166. See Coit, supra note 11, at 48 (“At the farm level, fossil fuels are consumed in the form of chemical inputs such as fertilizers, herbicides, and pesticides.”). “The machinery that farmers utilize in crop production, such as tractors and plows, also consumes fossil fuel.” See Coit, supra note 11, at 48. “Once the crops are grown, most are then transformed into food products through various methods of processing.” See Coit, supra note 11, at 48. “In fact, it is estimated that over 75% of food products are subjected to some form of processing before consumption.” See Coit, supra note 11, at 48. “The majority of food purchased at a grocery store has been processed in some way, including some produce.” See Coit, supra note 11, at 48. “The amount of energy used to process food is between one-quarter to one-third of the total energy used in the food system.” See Coit, supra note 11, at 48.

167. See Coit, supra note 11, at 48 (“Packaging alone accounts for approximately 15% of the total energy used in the food system.”).

168. See Coit, supra note 11, at 53 (“It is estimated that a one pound package of prewashed lettuce contains eighty calories of food energy, in comparison to the 4,600 calories of fossil fuel energy required to get that same lettuce from California to the East Coast.”).

169. U.S. Agriculture and Forestry Greenhouse Gas Inventory: 1990–2005, U.S. Dep’t of Agric. 1, 81 (Aug. 2008), http://www.usda.gov/oce/climate_change/AFGG_Inventory/5_AgriculturalEnergyUse.pdf (on file with the Washington and Lee Journal of Energy, Climate, and the Environment). It is important to note that production facilities can acquire energy that does not emit CO2 through alternative energy sources; however practical, this possibility tends to be the exception rather than the rule.

170. See Lauren Kaplin, Energy (In)efficiency of the Local Food Movement: Food for Thought, 23 Fordham Envtl. L. Rev. 139, 158–59 (2012) (“Moreover, conventional farms tend to be highly mechanized, using large equipment that is dependent on fossil fuels . . . [s]ome studies have thus found that choosing organic products will reduce a consumer’s carbon footprint.”). It is also important to note that most commercial, pasteurized milk for sale is offered in a plastic container rather than a glass container that could be reused. See Coit, supra note 11, at 52 (“Packaging alone accounts for approximately 15% of the total energy used in the food system.”).
allows the customer to reuse the container for subsequent visits. Finally, small-scale farming typically travels less miles to its eventual consumer, which reduces energy consumption. If food producers were using long distance transportation to deliver their goods to customers just one time, energy consumption would be less of a concern; however, food producers use long distance transportation frequently to deliver their goods. This frequency obviously exponentially increases energy consumption beyond the food processing and food packaging stages. This point is particularly salient to providers of perishable food because perishable food needs to be delivered more frequently than a product with a longer shelf life.

Small-scale farms are also more environmentally friendly to ecosystems as a whole. As stated earlier, large-scale farms typically compact animals into a small area to achieve the largess of its production. This is problematic to ecosystems for a couple of reasons: (1) it leads to over-grazing and (2) it creates significant concerns of water pollution. Controlled livestock grazing helps stimulate plant life, in part, because hoof treading increases mineral cycling and maintains an adequate rate of nutrient flow creating a healthy ecosystem. CAFOs, however, harm the soil and vegetation and therefore, are a greater detriment to their

171. See Coit, supra note 11, at 52–54 (noting that, normally, farm market produce is not boxed, packaged, or sealed in plastic wrap). See also supra note 170 and accompanying text.

172. See Coit, supra note 11, at 54 (“Since transportation is heavily dependent on oil-based fuels and local foods are transported over much shorter distances, local food purchasing may provide a less energy-intensive alternative.”).

173. See Kaplin, supra note 170, at 160 (describing how in the U.S., most domestic food products are transported by truck or rail which consumes less energy and produces fewer emissions than air transport). However, even though truck or railroads are used in the US, “the distance of travel may be less important than the frequency and energy efficiency of the mode of transport.” See Kaplin, supra note 170, at 160.

174. See Kaplin, supra note 170, at 151 (noting that in a supply-chain analysis, transportation and wholesales/retail are stages beyond processing and packaging to be considered when examining energy flows).

175. See Kaplin, supra note 170, at 158 (“Processed foods may have longer shelf lives, reducing the energy requirement for storage or shipment frequency.”).

176. See David E. Gumpert, The Raw Milk Revolution: Behind America’s Emerging Battle Over Food Rights xxiv (2009) [hereinafter Gumpert, The Raw Milk Revolution] (describing how large factory-farms uses techniques such as “heavy use of fertilizers and pesticides to raise crops”).

177. See id. (describing how most farms today oriented towards factory-farming use “confined spaces for raising dairy cows, pigs, and chickens”).

178. See Brown & Farrar, supra note 24, at 2–3 (addressing the regulation of water pollution created from concentrated animal feeding operations).

179. See Stimpert, supra note 22, at 519 (stating that “[a]lthough treading by livestock can have undesirable effects such as soil compaction, it can also have desirable effects,” such as “increasing mineral cycling” and aiding in nutrient cycling).
surrounding ecosystem. 180 Climate change only amplifies the already detrimental effect large-scale farming is having on the environment.181

Cow-share agreements have been revitalized as a legal solution to the urban consumer’s problem of access to raw milk.182 A cow-share agreement occurs when a farmer sells a fraction of one of his or her cows to a prospective consumer.183 The consumer then pays the farmer to house, feed, and care for their interest in the cow.184 By contract, the consumer is entitled to the percentage of milk their cow produces.185 It is important to emphasize that cow share agreements were not created to evade the law but rather are a historical solution to a modern problem.186 Opponents of the raw milk movement, however, disagree.187 Inspectors of food facilities reflect this skepticism in their determinations to detain certain food products;188 detentions exercised by state inspectors have noticeably increased after the passage of the FSMA,189 yet inspectors give little explanation for the increased enforcement.190 In fact, an FDA sponsored symposium on this particular issue was scheduled, but then suddenly cancelled at the last minute.191 Opponents of the increased government

180. See Donahue, supra note 26, at 260 (indicating that a comprehensive climate change policy must address livestock).
181. See O’Brien, supra note 25, at 10,634 (arguing for the increasing importance of overgrazing problems in the Southwest in the context of climate change).
182. See Drew Falkenstein, Cow Share Agreements: Fooling Nobody, FOOD SAFETY NEWS (Nov. 12, 2009), http://www.foodsafetynews.com/2009/11/skirting-the-law-with-cow-share-agreements/ (“[Noting that cow share agreements permit access to raw milk even if] (1) the state where that individual lived did not permit the sale or distribution of raw milk, or (2) the individual was not a dairy licensed to distribute or sell raw milk.”) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).
183. See id. (illustrating that in a cow-share agreement a buyer purchases from a seller a number of shares in a specifically described herd of cows).
184. See id. (explaining that a cow-share agreement contained a monthly maintenance fee required to be paid by the buyer).
185. See id. (describing how along with buyer’s rights of herd visitation, buyer also receives raw milk).
187. See id. (“Arguing that [their] sole purpose from inception was to avoid the illegalities of their otherwise forbidden action.”).
188. See id. (discussing the Wisconsin dairy farm raids).
189. See Gumpert, The Raw Milk Revolution, supra note 176, at 37 (describing the sudden assault on raw milk by federal agencies involving raids and enforcement).
190. See Gumpert, The Raw Milk Revolution, supra note 176, at 37 (citing the FDA’s explanation for a food detention saying it was not “a debatable issue”).
191. See Gumpert, The Raw Milk Revolution, supra note 176, at 37 (describing how a dozen FDA officials “pulled out of a special symposium on the alleged dangers of raw milk” on Friday before the Tuesday event).
enforcement draw parallels between agency raids (popular vernacular to describe food detention under the FSMA) and war because even without strong evidence linking raw milk to disease, the FDA continues to “fight as aggressively as ever.”

While many farmers are in a difficult position today because of the current state of the laws governing food regulation, farmers who live in states whose statutes are silent regarding the legality of cow-share agreements are in the most difficult position; it is difficult for these farmers to know whether they should still engage in cow-share agreements to sell their raw milk product and, if they choose engage in such a practice, these farmers do not know whether such an agreement would be legally enforceable. Since silent states have no state precedent that can guide the federally appointed state inspectors, and because federally appointed inspectors answer to the FDA, detention decisions are, practically speaking, completely up to the whims of the FDA.

The FDA, as discussed before, has a seeming bias against the sale of raw milk. This bias has manifested itself in the decisions by these post-FSMA inspectors. Post-FSMA inspectors are, more frequently than ever, exercising their detention authority. What is even more shocking is that this extreme post-FSMA inspector action does not even stop with the detention of the food product—which would be, in this case, raw milk. The inspectors go further than ever before to curtail a farmer’s cow-share

193. See Falkenstein, supra note 182 (“Some states explicitly prohibit cow share agreements . . . others do not express an opinion on the subject in state statues . . . and it is precisely this relative silence on the subject of cow shares that creates the problem.”).
194. See Gumpert, The Raw Milk Revolution, supra note 176, at 54 (“Despite decentralization, Washington’s influence has grown in the area of public health . . . [s]o the FDA’s influence was an important factor overlaying each of these (raid) situations.”).
195. See FDA and CDC Bias Against Raw Milk—No Facts Provided in Recent Reminder about Raw Milk Consumption, Real Milk Articles (March 12, 2007) http://www.realmilk.com/press-release-12mar07.html (noting that the “FDA and CDC have provided not a single reference to support the claim of widespread illness from raw milk during the seven-year period” in which they implicate raw milk as the cause of hospitalization and outbreaks) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).
196. See Gumpert, The Raw Milk Revolution, supra note 176, at 10 (describing how some may are outraged over what some refer to as “Gestapo tactics in confiscating products and conducting search warrants of a home and business”).
197. Liz Reitzig, Farmer Faces Possible 3-year Prison Term for Feeding Community, (Feb. 24, 2013), http://rawmilkfreedomriders.wordpress.com/press/farmerfacesprison/ (stating that the Wisconsin Department of Agricultural Trade and Consumer Protection, empowered by the FDA, arrested dairy farmer Vernon Hershberger for running his private buying club, stating that his buying club was essentially a retail food establishment and, as such, needed proper licenses) (on file with the Washington and Lee Journal of Energy, Climate, and the Environment).
agreement practice to even restrict what milk a farmer can consume from his/her own animal.\textsuperscript{198}

\textit{V. Solutions}

The unpredictable and seemingly unreasonable detention of food products is unsustainable and needs to change in the near future. Most farmers believe that they should have a legal right to exploit the products of their labor.\textsuperscript{199} Because this product is a result of their intimate labor, farmers contend that they should have a fundamental right to the food produced by their labor; their labor and livelihood seems intrinsic to their own life, liberty, and property.\textsuperscript{200}

While there is no recognized fundamental right to farm in the constitution (or as more popularly asserted, a right to contract and execute cow-sharing agreements), the legal profession should work to execute a solution to ensure these individuals' voices are heard, and their livelihood is respected. A large part of the solution would come from the reinvigoration of cooperative federalism practices. This would recognize greater state autonomy and would push away from centralization practices. Given the historical skepticism regarding the safety of raw milk, it is more important than ever for the states to represent their locality's respective desire for raw milk.\textsuperscript{201}

This right to consume raw milk could be asserted by individuals against their states as a state commerce clause challenge in the future.

\begin{quote}
198. Farm-To-Consumer-Legal-Defense-Fund v. Wisc. Dep't. Agric., Trade & Consumer Prot., No. 09-CV-6313, at 4 (Wis. Cir. Sept. 9, 2011), available at http://thecompletepatient.com/sites/default/files/WIorder-clarification9-11.pdf (providing a statement in the order by Wisconsin Judge Fiedler that "no, Plaintiffs do not have a fundamental right to consume the milk from their own cow."). While the judge is correct that there is no constitutional right to consume your own milk, it is alarming that a statement like this, which attempts to curtail the right to freely use a person's property, blatantly appears in an order.

199. See Gumpert, \textit{ supra} note 186 (highlighting how Wisconsin dairy farmer Vernon Hershberger stated that "[i]t is shameful . . . to prevent us from producing and distributing our health-giving raw milk and other farm products to our members").


201. See GUMPERT, \textit{THE RAW MILK REVOLUTION}, \textit{ supra} note 176, at 118 ("[The] tendency of the government to categorize illnesses as coming from raw milk when the evidence wasn’t so clear.").
\end{quote}
Depending on how evidence develops over time, individuals could start questioning whether these milk regulations are a reasonable exercise of the states’ police power; 202 the Tenth Amendment currently serves as a bulwark, allowing states almost unlimited power to regulate food products to promote public health. 203 As technology develops, however, scientists may discover that raw milk is, in fact, not as great of a danger as previously believed. When this technology emerges, it will be less reasonable for the state to impose highly protectionist regulations under the guise of protecting the public because there will no longer be a meaningful danger. At this point, there will be no legal reason to deny consumers the discretion to choose which products to consume. If there are, in fact, no substantial health risks, it might be reasonable for the consumer to assert that a fundamental right to choose their food supply. Similar to other fundamental lifestyle choices, the state would need to respect the individual’s choice, even if it disagrees with the individual’s decision. 204 While science has not yet proven state regulations unreasonable, perhaps one day this challenge of a state’s exercise of its police power will be viable. This eventual challenge, however, assumes that states will maintain distinct views from the federal government regarding raw milk; under the FSMA, this assumption is looking less likely by the day. 205

VI. Conclusion

States should attempt to reclaim their role as partners with the federal government rather than merely acting as agents for the FDA. This is important because local preferences, such as a preference to support sustainable agriculture by buying local, raw food directly from the farm, cannot be adequately addressed by a truly centralized government. 206

202. Naturally raw milk regulations are different from other regulations over products that are consumed because states are not imposing an overarching ban on a product, but rather are enforcing a specialized method of production before the product may be sold to consumers. Imposing the large expense of the equipment for pasteurization and for the energy pasteurization uses is only justified by science that suggests that unprocessed, raw milk is an overwhelming danger to society.

203. See Nashville C. & St. L. Ry. v. Walters, 294 U.S. 405, 415 (1935) (“The police power is subject to the constitutional limitation that it may not be exerted arbitrarily or unreasonably.”).

204. See Roe v. Wade, 410 U.S. 113, 163–65 (1973) (determining a woman has the right to obtain an abortion up to the point of viability despite the state’s many arguments in opposition).

205. See Adams, supra note 108 at 315 (noting as of 2008 twenty-two states and the District of Columbia “essentially ban raw milk”).

206. See Jean-Paul Faguet, Decentralization and Popular Democracy: Governance From Below in Bolivia 162 (2012) (“Under centralization, those who hold authority over local matters are not elected by local citizens but rather selected by higher-level authorities, regardless of whether they are physically located locally or in the capital.”).
Cooperative federalism developed to avoid a casual disregard of local concerns by federal authorities. 207 Reverting to a centralized mode of governance cuts against American representative governance by augmenting the role of federal legislators and undercutting local considerations usually accounted for by state representatives. The importance that states reclaim their role in our federal government is amplified by looking at historically disfavored food products, such as raw milk. States must reclaim their roles as partners with the federal government in order to adequately represent their local constituents once again.

"Immediate accountability for their performance is thus upward to the central government officials who have power over their salaries, careers, and broader professional prospects." Id. “Accountability does not run downward to the citizens who consume the public good and services they are meant to produce except at one or more removes, in the sense that central government officials are ultimately beholden to national electorates.” Id.