Case No. CV 11-55440 NCA (ABCx)

IN THE
UNITED STATES COURT OF APPEALS
FOR THE SECOND CIRCUIT

NATIONAL MEAT PRODUCERS ASSOCIATION,
Plaintiff-Appellee,

v.

COMMISSIONER, NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS AND THE NEW YORK STATE DEPARTMENT OF AGRICULTURE AND MARKETS,
Defendants-Appellants

Appeal from a judgment entered in United States District Court Southern District of New York

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BRIEF FOR APPELLANTS

Team #11

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STATEMENT OF ISSUES

The first issue is whether the Federal Meat Inspection Act (FMIA), 21 U.S.C.S. §§ 601-78 (LexisNexis 2008), preempts the Animal Products Consumer Information Act (APCIA), N.Y. Agric. & Mkts. Law § 1000 (McKinney 2010). The second issue is whether the APCIA discriminates against out-of-state meat processors and imposes an unreasonable burden on interstate commerce in violation of the Commerce Clause. U.S. Const. art. VI, cl. 2.

STATEMENT OF THE CASE

The National Meat Producers Association ("NMPA"), a national trade association of meat producers, brought an action for declaratory judgment and injunctive relief claiming that the Animal Products Consumer Information Act ("APCIA"), N.Y. Agric. & Mkts. Law § 1000, is unconstitutional regarding the application of the law to beef and pork products.

The United States District Court for the Southern District of New York found that the APCIA is not preempted by the FMIA. *National Meat Producers Ass'n v. Commissioner*, No. CV 11-55440 NCA (ABC), at *1 (S.D.N.Y. 2012). However, this matter is now before this Court on appeal from the lower court's grant of the Plaintiff's motion for summary judgment based on the finding that the APCIA violates the Commerce Clause of the United States Constitution.

The District Court determined that the APCIA is in violation of the Commerce Clause as a result of information posted on the website cited in the statute. *National Meat Producers Ass'n*, at *18-21. Specifically, the statute references a website that provides information on the impacts of animal products on health, the environment, and animal cruelty, as well as a list of farms in New York that the state determined are environmentally sustainable and employ humane animal welfare practices. *Id*. at *19. This information is only seen by individuals who choose to access

the website. N.Y. Agric. & Mkts. Law §1000.4.1 None of the information provided is binding upon any individual in any way.

The District Court held that the existence of the list of humane and sustainable farms in New York violates the Commerce Clause under the flawed and unsupported reasoning that there are other alternatives available with which the state of New York could have promoted its interests that would impose less of a burden on interstate commerce. *National Meat Producers Ass'n*, at *21. In arriving at this ruling, the District Court made absolutely no mention of any impact the statute or website might have on interstate commerce. *See id.* at *20-21. Moreover, the District Court provided meager support for the proposition that the availability of alternative mechanisms to promote a state's interest constitutes a per se Commerce Clause violation. *See id.*

STATEMENT OF FACTS

The APCIA requires retailers to display a sign wherever animal products intended for human consumption are offered for sale stating:

> PUBLIC INTEREST WARNING: Many chronic diseases, including heart disease, can largely be preventing and, in many cases, reversed by avoiding the consumption of animal products and eating a whole food, plant based diet. Industrial animal agriculture is also a major source of pollution. Animal handling techniques also lead to animal suffering. The State encourages its citizens to conduct research and make informed choices when purchasing and consuming animal products. For more information, visit www.informedchoice.ny.gov. N.Y. Agric. & Mkts. Law §1000.4.1.

The entire text of the statute is set out in addendum A of this brief.

The FMIA states that "[m]arking, labeling, packaging, or ingredient requirements in addition to, or different than, those made under this chapter may not be imposed by any State." 21 U.S.C.S. § 678. "The term 'labeling' means all labels and other written, printed, or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such

article." *Id*. at § 601(p). In addition, the FMIA "shall not preclude any State or Territory or the District of Columbia from making requirement or taking other action, consistent with this chapter, with respect to any other matters regulated under this chapter." *Id*. at § 678.

The APCIA was enacted in 2010 to "protect the citizens of this state by providing and encouraging the dissemination of information about how animal agriculture and the consumption of animal products negatively affects health, the environment, and imposes unnecessary suffering on animals." N.Y. Agric. & Mkts. Law § 1000.3. In order to address significant budget constraints and financial problems, the New York legislature created multi-topic congressional committees to examine ways in which the state could reduce its costs, with one specifically examining "possible actions the legislature could take to reduce long-term government costs without a significant reduction in state benefits." *National Meat Producers Ass'n*,, at *3. After more than 1,000 hours of expert testimony focused on health care and the environment, the committee drafted more than five hundred recommended measures. *Id*. Twenty of these advocated new regulations on the animal agriculture industry, including one that became the APCIA. *Id*. The committee had cited a number of studies which demonstrated that better educated consumers buy products that are environmentally friendly, healthy, and do not involve animal cruelty. *Id*. While the legislature recognized the time-consuming nature of the larger regulations, it decided to "encourage the reduction of the public's consumption of animal products which would in turn reduce the long-term health care and environmental costs to the State." *Id*. The legislature also added the following language to the placard's text: "Some animal handling and confinement techniques also lead to animal suffering," after hearing a great deal of testimony regarding the cruelty to animals on factory farms and recognizing the humane treatment of animals is an important public interest. *Id*.

"The state sponsored website, www.informedchoice.ny.gov, referenced on the placard and in the New York statute's language, provides detailed information on the health effects of consuming animal products and the impact of animal agriculture on the environment and animal suffering." *Id*. The information published on the New York sponsored website was provided and approved by experts who testified before the Committee and provided a list of farms within New York were determined to be environmentally sustainable and employed humane welfare standards. *Id*.

Many of the medical and environmental experts who testified before the Committee and during the legislative hearings on the APCIA also submitted affidavits in support of the defendants' rely to plaintiff's motion for summary judgment. Summaries of their statements regarding the consumption of animal products on health, the environment, and animal welfare are included in the Appendix.

ARGUMENT

THE TRIAL COURT WAS CORRECT IN FINDING THE FMIA DID NOT PREEMPT THE APCIA. HOWEVER, THERE ARE STILL GENUINE ISSUES OF MATERIAL FACT WITH RESPECT TO WHETHER THE APCIA VIOLATES THE COMMERCE CLAUSE OF THE UNITED STATES CONSTITUION, THEREFORE THE TRIAL COURT ERRED IN AWARDING SUMMARY JUDGMENT.

I. Standard of Appellate Review of a Motion for Summary Judgment

Appellate review of a motion for summary judgment is *de novo*. *Amaker v. Foley*, 274 F.3d 677, 680 (2d Cir. 2001). "[A]t the summary judgment stage the judge's function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *Anderson v. Liberty Lobby, Inc*., 477 U.S. 242, 249 (1986).

"The appellate courts consider the evidence in the light most favorable to the appellant, drawing all reasonable inferences in her favor." *Brennan v. Metro. Opera Ass'n*, 192 F.3d 310, 316 (2nd Cir. 1999) (internal citations omitted). Summary judgment is appropriate *only* "[w]here the record taken as a whole could not lead a rational trier of fact to find for the non-moving party." *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986) ("summary judgment is proper if … there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law").

II. The APCIA is Not Preempted by the FMIA

The United States District Court Southern District of New York properly found that the APCIA was not preempted by the FMIA, after considering the federal legislation's strong and legitimate interest in consumer education and protection. Article VI of the Constitution provides that the "Constitution, and the laws of the United States which shall be made in pursuance thereof; and all treaties made, or which shall be made, under the authority of the United States, shall be the supreme law of the land…" U.S. Const. art. VI, cl. 2. Courts should not posit preemption lightly. *Cal. Fed. Savings & Loan Ass'n. v. Guerra*, 479 U.S. 272, 281 (1987). Only when there is a conflict between federal law and state or local law that cannot be resolved does federal law preempt the state or local law. *Kraft Food N. Am. v. Rockland Cnty. Dep't of Weights and Measures*, 2003 U.S. Dist. LEXIS 2714, at *12 (S.D.N.Y. 2003) (*quoting Hillsborough Cnty. v. Automated Medical Labs, Inc.*, 471 U.S. 707, 712 (1985); *Gibbons v. Ogden*, 22 U.S. 1, 9 (1824)). Further, "[i]n analyzing a state regulation, the Court must 'consider [the] relationship between the state and federal laws as they are interpreted and applied, not merely as they are

written.'" *Kraft Food*, 2003 U.S. Dist. LEXIS 2714 at *13 (*quoting Jones v. Rath Packing Co.*, 430 U.S. 519, 526 (1977)).

There are two potential reasons for finding that a federal statute preempts a state law: express preemption or implied preemption. The Supreme Court has held that in instances of both express and implied preemption, the commanding issue is congressional intent. *See Medtronic Inc. v. Lohr*, 518 U.S. 470, 485 (1996) (*quoting Retail Clerks v. Schermerhorn*, 375 U.S. 96, 103 (1963) ("'The purpose of Congress is the ultimate touchstone' in every preemption case."); *Gade v. National Solid Waste Mgmt. Ass'n*, 505 U.S. 88, 96 (1992) ("The question of whether a certain state action is preempted by federal law is one of Congressional intent."); *Guerra*, 479 U.S. at 280 (1987) (When addressing preemption claims, "our sole task is to ascertain the intent of Congress.").

Before the Court can consider whether the FMIA preempts the APCIA, the Court must first determine whether the placard constitutes labeling under the FMIA.

a. The APCIA Placard Requirement Does Not Constitute "Labeling" Under the FMIA

Under the FMIA, the term "labeling" includes "all labels and other written, printed, or graphic matter (1) upon any article or any of its containers or wrappers, or (2) accompanying such article." 21 U.S.C.S. § 601(p). Further, the FMIA prohibits states from requiring any additional labeling. The APCIA does not require any other material on the meat, its container, or wrapper. While the placard would be placed in proximity to the meat and meat products, it is unclear whether that constitutes an "accompanying" label. Courts held certain signs do not fit within the definition of the FMIA. *See Gershengorin v. Vienna Beef, Ltd.*, 2007 WL 2840476, at *3 (N.D. Ill. 2007) (Signage on Authorized stands is not preempted. "The FMIA does not preempt regulation of signage separate from the marking or labeling on meat packaging itself.");

American Meat Inst. v. Ball, 424 F. Supp. 758, 763 (D. Mich. 1976) (A sign stating accompanying meat products "The following products do not meet Michigan's high meat ingredient standards but do meet the lower federal standards" is not preempted by the Federal Wholesome Meat Act.[1]). Furthermore, there is no controlling case that considers whether a sign promoting consumer education concerning the consumption of animal products is considered a "label" under the FMIA.

The placard does not fit within the definition of "labeling" because it was not within the intent of Congress to limit this kind of information sharing between state governments and consumers. The FMIA included a statement of findings in the statute itself, which can help show the intent of the authors. 21 U.S.C.S. § 602. In part, the Findings state:

> It is essential in the public interest that the health and welfare of consumers be protected by assuring that meat and meat food products distributed to them are *wholesome, not adulterated, and properly marked, labeled, and packaged*. Unwholesome, adulterated, or misbranded meat or meat food products impair the effective regulation of meat and meat food products in interstate or foreign commerce, are injurious to the public welfare, destroy markets for wholesome, not adulterated, and properly labeled and packaged meat and meat food products, and result in sundry losses to livestock producers and processors of meat and meat food products, as well as injury to consumers. The unwholesome, adulterated, mislabeled, or deceptively packaged articles can be sold at lower prices and compete unfairly with the wholesome, not adulterated, and properly labeled and packaged articles, to the detriment of consumers and the public generally. *Id*. (Emphasis added).

The placard mandated by the APCIA is not the type of "label" envisioned by Congress when passing the FMIA. *See American Meat Inst.*, 424 F. Supp. at 767 ("In light of the strong and legitimate state interest in consumer education and protection, the underlying purposes of the Federal Wholesome Meat Act, and the presumption of constitutionality of state statutes… The term "labeling" has a meaning derived from the purposes of the legislation and inseparable from the history which gave rise to its definition." (internal citations omitted)). The information on the

[1] The Wholesome Meat Act of 1967 amended the Federal Meat Inspection Act, 21 U.S.C.S. §§ 601-678.

placard does not address the quality of the meat, or whether it is "wholesome, not adulterated, [or] properly marked, labeled, and packaged." Rather, the information merely provides consumers with information about how the consumption of meat products, in general, can have impacts on health, environmental, and animal welfare. There is no potential for these products to "be sold at lower prices" or "compete unfairly" with the properly labeled, wholesome meat products. Therefore, the Court should find that the placard is not a label under the FMIA, and there is no need to continue with the preemption assessment.

However, if the Court were to nevertheless find that the APCIA placard is a "label" under the FMIA, it is still not preempted by the FMIA.

b. APCIA is Not Preempted by the FMIA

The Supreme Court has often said that congressional intent must be clear to find preemption because of a desire, stemming from federalism concerns, to minimize invalidation of state and local laws. *N.Y. State Dep't of Soc. Services v. Dublino*, 413 U.S. 405, 413 (1973) ("Congress… should manifest its intention [to preempt state and local laws] clearly…. The exercise of federal supremacy is not lightly to be presumed.").

> "[B]ecause the States are independent sovereigns in our federal system, we have long presumed that Congress does not cavalierly preempt state-law causes of action. In all preemption cases, and particularly in those in which Congress has legislated in a field which the States have traditionally occupied, we 'start with the assumption that the historic police powers of the States were not to be superseded by the Federal Act unless what was the clear and manifest purpose of Congress.'" *Medtronic*, 518 U.S. at 485 (1996) (*quoting Hillsborough Cty*., 417 U.S. at 715 (1985).

The primary intent of the federal labeling requirements is to protect the health and welfare of consumers from fraudulent or deceptive practices by manufacturers and distributors of meat products. 21 U.S.C.S. § 602. The Congressional Statement of Findings, included in the statute itself, shows both the intent to benefit consumers and the context in which Congress sought to

regulate labeling. *Id*. "The FMIA was first enacted after the publication of Upton Sinclair's *The Jungle*, 'to prevent the shipment of impure, unwholesome, and unfit meat and meat-food products.'" *National Meat Ass'n v. Harris*, 132 S. Ct. 965, 968 (2012) (*citing Pittsburgh Melting Co. v. Totten*, 248 U.S. 1, 4-5 (1918)).

i. The APCIA is Not Expressly Preempted by the FMIA

"Express preemption occurs to the extent that a federal statute expressly directs that state law be ousted to some degree from a certain field." *Sprint Spectrum L.P. v. Mills*, 283 F.3d 404, 415 (2d Cir. 2002) (*citing Jones*, 430 U.S. at 525); *see also Gade*, 505 U.S. at 98. The FMIA includes an express preemption provision that addresses state laws enacted to address similar matters:

> Marking, labeling, packaging, or ingredient requirements in addition to, or different than, those made under this Act may not be imposed by any State or Territory or the District of Columbia with respect to articles prepared at any establishment under inspection in accordance with the requirements under [this Act]... [This Act] shall not preclude any State or Territory or the District of Columbia from making requirement [requirements] or taking other action, consistent with [this Act], with respect to any other matters regulated under [this Act]. 21 U.S.C.S. § 678.

In setting out the labeling requirements under the FMIA, Congress did not intend to control the dissemination of information regarding the effects of eating meat and meat products on consumers' health, information about the effect of animal production on the environment, or animal handling practices. The goal of the New York law is to "protect the citizens of the state by providing and encouraging the dissemination of information about how animal agriculture and the consumption of animal products negatively affects health, the environment, and imposes unnecessary suffering on animals." N.Y. Agric. & Mkts. Law § 1000.3.

While the FMIA allows for concurrent jurisdiction for enforcement, the court in *Kraft Food* held that this "does not allow states to enact their own additional requirements." *Kraft*

Food, 2003 U.S. Dist. LEXIS 2714 at *15. However, this is not applicable to the issues at hand, because the *Kraft Food* court was dealing with weight requirements and labeling. *Id*. at 19. Notably, most of the cases that address FMIA preemption deal specifically with mislabeling and weight restrictions. *See Jones*, 430 U.S. at 531-32 (finding state labeling law requiring accurate net weight expressly preempted where it differed from federal labeling law allowing variations); *Cook Family Foods, Ltd. v. Voss*, 781 F. Supp. 1458, 1465-68 (C.D. Cal. 1991) (state law preempted by FMIA where state field inspectors used different, subjective procedures to test net weight of packaged goods)

The FMIA's preemption clause is more naturally interpreted as regulating the quality of the product and the information provided by the producers and distributors, matters which the New York law is entirely unconcerned with. The New York law does not infringe on the territory reserved for the Federal government by the FMIA's preemption clause. The FMIA does not expressly prevent the states from providing their citizens with information on the effects wholesome, not adulterated, and properly labeled animal products have on their health, environment, or animal welfare.

ii. The APCIA is Not Impliedly Preempted by the FMIA

"Absent express preemption, a state regulation may be implicitly preempted through either field preemption or conflict preemption." *Gade*, 505 U.S. at 98. "[W]here the scheme of a federal regulation is so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it," there is field preemption. *Rice v. Santa Fe Elevator Corp*., 331 U.S. 218, 230 (1947) (internal citations omitted). Alternatively, "[w]here it is impossible for a private party to comply with both state and federal requirements," a statute is preempted by conflict. *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 142-43 (1963).

First, Congress did not intend to preempt the entire field of meat commerce under the FMIA. Field preemption requires clear congressional intent. *Guerra*, 479 U.S. at 281. Field preemption occurs when a federal statute's scope "indicates that Congress intended federal law to occupy a field exclusively." *Freightliner Corp. v. Myrick*, 514 U.S. 280, 287 (1995). The FMIA specifically indicates that it did not intend to preempt the field of meat commerce entirely, state that it "shall not preclude any State… from making requirements or taking other action, consistent with this chapter, with respect to any other matters regulated under this chapter." 21 U.S.C.S. § 678. Furthermore, the FMIA contains a narrow inspection and labeling preemption clause, and "Congress's enactment of a provision defining the pre-emptive reach of a statute implies that matters beyond that reach are not pre-empted." *Cipollone v. Liggett Grp., Inc*., 505 U.S. 504, 517 (1992).

Moreover, the title of the FMIA refers specifically to meat inspection, rather than a more comprehensive scheme of regulating information on meat. The need for uniform requirements for meat packaging, inspection, and labeling regulations is strong, otherwise meat producers would be forced to comply with various operating techniques and packaging producers would be forced to comply with various operating techniques and packaging requirements in every state in which their products are sold. The New York law does not impose such a burden on meat producers. The burden is solely on meat distributors within New York, who sell directly to the public, and even then, there are not different operating techniques with which to comply. The burden of displaying an additional placard where animal products are sold is minimal and can easily be complied with.

Further, the FMIA does not preempt the New York law by conflict, which requires that it would be a "physical impossibility" for a private party to comply with both federal and state law,

or that the law "stand as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Arizona v. United States*, 132 S. Ct. 2492, 2501 (2012) (internal citations omitted). It is certainly not physically impossible to comply with the FMIA and that New York law. Complying with the State law by displaying the necessary placard would not breach any provision in the FMIA nor cause any confusion about differing ingredient standards. The New York law does not stand as an obstacle to realizing the FMIA objective of "assuring that meat and meat food products distributed to [consumers] are wholesome, not adulterated, and properly marked, labeled, and packaged." 21 U.S.C.S. § 602. The New York law merely supplies the public with additional information on different subject matter than that provided in the FMIA mandated labels. By complying with the State law, there is no additional risk that adulterated or mislabeled meat would reach consumers.

Numerous courts have held that FMIA preempts state laws that attempt to regulate information on meat products. None of these cases however, deal with information similar to the mandated language of the New York statute. *See Grocery Mfrs. of Am., Inc. v. Gerace,* 755 F.2d 993, 1003 (2d Cir. 1985) (holding that a state law requiring labeling of "imitation cheese" was preempted by the FMIA because including the term "imitation" on the label of a nutritionally superior product in order to comply with the New York law would render the product misbranded under the federal law thus making it impossible to comply with both the state and federal requirements); *Armour & Co. v. Ball*, 468 F.2d 76, 85 (6th Cir. 1972) (holding a Michigan law was preempted by the FMIA because the Michigan ingredient standards for meat products were different than the federal standards). More importantly, only one Supreme Court case has addressed whether the labeling requirement under the FMIA preempts state law: *Jones v. Rath Packing Co.*, 430 U.S. 519, 525 (1977). *Jones* did not hold that the FMIA preempts all

state law labels on meat products, but the Court specifically limited its preemption holding to the facts. *Id*. at 532 ("We therefore conclude that with respect to [the defendant's] packaged bacon, [the state statutes] are pre-empted by [the FMIA]."). In *Jones*, the state instituted a weight-labeling requirement that required that the average weight of packages in any lot of any commodity should not be less at the time of sale than the net weight standard on the packages. *Id*. at 542. The FMIA, on the other hand, allows for "reasonable variations" between the actual weight and the weight stated on the label. *Id*. at 530. Thus, the state was imposing requirements that conflicted with the FMIA requirements. *Id*. at 543.

A consumer has the right to be informed of the effects of the food that he or she ingests. Further, consumers are interested in information regarding the effect of their purchases on their health, the environment, and other living beings. The type of information that is provided on the placard is not directly available to the consumer at the time of purchase. The placard also does not attempt to contain all of the information on the subject matter, but rather encourages consumers to do more research if interested. A consumer has the right to be informed of the effects of the food that he or she ingests. Moreover, consumers are interested in information regarding the effect of their purchases on their health, the environment, and other living beings. The type of information that is provided on the placard is not directly available to the consumer at the time of purchase. The placard also does not attempt to contain all of the information on the subject matter, but rather encourages consumers to do more research if interested. Physicians and nutritionists, as well as state and federal health agencies, emphasize the increasing awareness of the importance of a healthy diet by providing the consumer with essential information about how what they eat affects their long-term health. Environmentalists also advocate the dissemination of information on how consumer choices affect the world in which we live. The same is true for

animal handling techniques. As the lower court held, "[i]t would be a paradox to conclude that this information could not be presented in the marketplace or that the state legislature could not act in the public interest by providing accurate information to the consumer at the time of purchase." *National Meat Producers Ass'n*, at *17.

The meat industry and its lobbying associations are very influential and have taken numerous steps to ensure information about its practices and effects do not reach the public. For example, the meat industry has advocated the introduction of numerous "ag-gag" laws that would prohibit the making of undercover videos, photographs, and sound recordings at farms. *See* Kevin C. Adam, *NOTE: Shooting the Messenger: A Common-Sense Analysis of State "Ag-Gag" Legislation Under the First Amendment*, 45 Suffolk U. L. Rev. 1129, 1131 (2012). These laws would prevent recorded information about the practices of animal handling through the most effective media – video and photographs. *Id*. In addition, the meat industry is so powerful, that the USDA retracted a statement that encouraged employees to abstain from eating meat on Mondays as "a simple way to reduce your environmental impact" after a call from the National Cattlemen's Beef Association. Leslie Hatfield, *Much Ado About Meatless Monday: Why the USDA Retraction Matters*, The Huffington Post (Aug. 1, 2012, 6:09 PM), http://www.huffingtonpost.com/leslie-hatfield/much-ado-about-meatless-m_b_1725019.html.

In light of the strong and legitimate state interest in consumer education and protection, the underlying purposes of the FMIA, and the presumption of constitutionality of state statutes, the Court should find the New York law is not preempted by the FMIA.

III. The APCIA Does Not Violate the Commerce Clause

The Commerce Clause prevents the enforcement of state law that applies to places outside of the state's borders, the application of state law that controls commerce in areas outside

of the state, and inconsistent legislation arising from the projection of the law of one state onto another. *Healy v. Beer Inst.*, 491 U.S. 324, 335-36 (1989). There are three ways in which state legislation may interfere with interstate commerce. First, a statute that facially discriminates against out-of-state entities is generally per se invalid. *Freedom Holdings, Inc. v. Spitzer*, 357 F.3d 205, 216 (2d Cir. 2004). Second, if the statute imposes an incidental burden on interstate commerce, it is subject to the Pike balancing test whereby the statute is valid only if the burden is outweighed by a legitimate state interest. *Id.; Pike v. Bruce Church, Inc.*, 397 U.S. 137, 142 (1970). Finally, a statute will be per se invalid if it has "the practical effect of 'extraterritorial' control of commerce occurring entirely outside the boundaries of the state in question." *Id.* The APCIA is not facially discriminatory or extraterritorial in its impact because the signage requirement only applies to in-state retailers of animal products. Out-of-state producers or animal products are not required to change any aspect of their production or business. As a result, our analysis is confined to the Pike balancing test.

Under the Pike test, if a statute effectuates a legitimate public interest, it will generally be upheld unless the burden imposed on interstate commerce is "clearly excessive" in relation to public benefit. *Pike,* 397 U.S. at 142. The degree of burden that will be tolerated depends upon the nature of the local interest involved in addition to whether that interest could be promoted with less of an impact upon interstate commerce. *Id.*

a. District Court Improperly Applied the Dormant Commerce Clause Standard.

The District Court improperly applied the Pike balancing test because it places far too much weight on one factor with no regard for other important considerations. The District Court cited one sentence from the Pike opinion upon which it built the entirety of its ruling, ("And the extent of the burden that will be tolerated will of course depend on the nature of the local interest

involved, and on whether it could be promoted as well with a lesser impact on interstate activities."), but the District Court failed to address the extent the statute would have in interstate commerce or the nature of the local interests involved. *See National Meat Producers Ass'n,* at *19-21. It can be inferred from the test set forth in *Pike* that availability of alternatives to further a state interest does not make a state statute per se invalid under the Commerce Clause. *See Pike*, 397 U.S. at 142.

The District Court already acknowledged public health, environmental protection, and prevention of animal cruelty as legitimate government interests, so the issue becomes the degree of importance of these interests and the degree of a burden on interstate commerce. The District Court failed to address the degree of importance of local interests in its Commerce Clause analysis and we propose that this Court hold that a reasonable factfinder could find the government's interests far outweigh any possible burden on interstate commerce.

A State's interests are of particular importance when they relate to the sale of foodstuffs. *Hunt v. Wash. State Apple Adver. Comm'n*, 432 U.S. 333, 350 (1977), *superseded by statute*, The Worker Adjustment and Retraining Notification Act, 102 Stat. 890, 29 U.S.C. § 2101 et seq., *as recognized in United Food & Commer. Workers Union Local 751 v. Brown Grp.*, 517 U.S. 544 (1996). Further, states possess a "substantial interest" in protecting its citizens from "confusion and deception" in the marketing of food products. *Id.* at 353. The APCIA is a disclosure requirement aimed at keeping consumers informed about the dangers that consumption of animal products pose to human health, the environment, and farm animals. T. Colin Campbell, PhD, a health expert at the forefront of plant-based nutrition, testified that there is nothing better the government could do for human health than encourage the public to eat fewer animal products. *National Meat Producers Ass'n,* at *5. Dr. Michael Greger testified essentially that consumption

of animal products is responsible for the unprecedented rise in infectious diseases in humans. *Id.* at *7. Human health is obviously an important state interest as it impacts the finances of the state as well as the wellbeing of its citizens, but this testimony goes further to demonstrate that reducing the consumption of animal products would have a substantial impact on improving health. Further testimony highlighted the high cost of confined animal feeding operation and the significant pollution caused by manure. *Id.* at *8-10.

Given the important state interest of protecting human health, the environment, and animals, the expert testimony taken as a whole not only supports the importance of these interests but demonstrates that legislation geared toward reduction on consumption of animal products will be highly effective in serving those interests. While granting summary judgment is inappropriate even when there are conflicting expert reports, the record contains no reports that negate the above-references testimony. *See Town of Southold v. Town of E. Hampton*, 477 F.3d 38, 52 (2d Cir. 2007) ("We have remanded for further discovery or trial where a party has offered a credible expert affidavit alleging a burden on interstate commerce and challenging the proposed benefits of the law."). The District Court restricted its Commerce Clause analysis to one Pike test factor and failed to address any of the expert testimony. It offends notions of justice and reason to analyze one single factor and call it a balancing test.

As the District Court failed to address the degree of importance of the state's interest in protecting public health, the environment, and preventing animal cruelty, there exist genuine issues of material fact with respect to whether the APCIA violates the Commerce Clause and therefore, a granting of summary judgment was improper. This case must be remanded to allow for a proper application of the Pike balancing test.

b. The APCIA Does Not Interfere with Interstate Commerce.

A reasonable jury could find that the APCIA does not interfere with interstate commerce because it sets forth no requirements that have any impact upon commerce in states other than New York. The *minimum* showing under a Pike analysis is disparate impact upon interstate commerce with respect to intrastate commerce. *Freedom Holdings Inc.*, 357 F.3d at 218 (emphasis added); *see also National Elec. Manufacturers Ass'n v. Sorrell*, 272 F.3d 104, 109 (2d Cir. 2001). The legislation at issue must benefit intrastate commerce while simultaneously burdening interstate commerce. *Town of Southold*, 477 F.3d at 47 (2d Cir. 2007) ("The term discrimination in this context means 'differential treatment of in-state and out-of-state economic interests that benefits the former and burdens the latter.'"). A statute cannot withstand a constitutional challenge without a showing of such disparate impact. *See Freedom Holdings Inc.*, 357 F.3d at 218; *see also National Elec. Manufacturers Ass'n*, 272 F.3d at 109 ("Under *Pike*, if no such unequal burden can be shown, a reviewing court need not proceed further."). Moreover, evidence that legislation *could* burden interstate commerce is insufficient. *See Pacific. Nw. Venison Producers v. Smitch*, 20 F.3d 1008, 1015 (9th Cir. 1994) ("[W]hat is required is evidence that these effects are of a type or an extent that could support a determination that they are 'clearly excessive' in relation to the state's interest in the health of its native wildlife.") A party that challenges a state law as violative of the Commerce Clause under the Pike test "bears the threshold burden of demonstrating that it has a disparate impact on interstate commerce." *Town of Southold*, 477 F.3d at 47.

Certain types of impacts are particularly burdensome include disruption of travel and shipping, burdens on commerce of other states, and economic impacts that "fall more heavily" on the economic activity of other states. *Id.* A statute can also interfere with interstate commerce

if it confers a competitive advantage on local business at the expense of out of state competitors. *Id.* at 49. However, this is not the case here, because the APCIA does not mandate any action by out-of-state actors. "[L]egitimate regulations that have none of these [discriminatory] effects arguably are not subject to invalidation under the Commerce Clause." *Pacific Nw. Venison Producers*, 20 F.3d at 1015. A statute requiring labeling cannot pose an extraterritorial burden if the statute is indifferent to products sold outside of the state. *See National Electrical Manufacturers Ass'n*, 272 F.3d at 110 ("NEMA's extraterritoriality claim fails because the statute . . . by its terms, is 'indifferent' to whether lamps sold anywhere else in the United States are labeled or not.").

As the signage requirement only applies to intrastate retailers, the issue is whether the list of New York farms provided on the website poses an incidental burden on interstate commerce. Summary judgment was inappropriate in this case because a reasonable jury could find that the APCIA has no impact on interstate commerce. The District Court utterly failed to demonstrate that the APCIA has any impact on interstate commerce, let alone a highly burdensome impact. The APCIA merely lists a website to which readers can refer if they want more information. This list does nothing to regulate interstate commerce. A statute cannot violate the Commerce Clause if it does nothing to regulate commerce. *See USA Recycling v. City of Babylon*, 66 F.3d 1272, 1282 (2d Cir. 1995) ("[W]e proceed to decide whether each component of Babylon's waste management system constitutes regulation of commerce and, if so, whether such regulation violates the Commerce Clause." (internal citations omitted)). Moreover, the website simply offers suggestions of farms that meet higher standards of sustainability and humane treatment of animals. It does not force citizens or businesses to purchase anything from instate farms. *See id.* (The court found no Commerce Clause violation in concluding that town businesses are not

forced to purchase anything from the Town). All citizens and businesses are free to purchase goods from any farm they choose. As this is a New York state statute, it goes without saying that the majority of citizens would go to farms within New York's borders because it is simply more convenient for them. The APCIA is not a tax, nor does it provide for subsidies for instate farms or retailers who purchase goods from instate farms.

Moreover, there is no evidence that the list of suggested farms gives New York farms a competitive advantage over out-of-state farms. The legislation is meant to promote consumption from farms that are sustainable and care for their animals in accordance with humane practices. The targets are farms of a specific type, rather than farms in a specific location.

As a reasonable jury could find that the APCIA does not have any impact on interstate commerce, summary judgment was improper.

c. Even If the APCIA Does Impact Interstate, There is Insufficient Evidence to Find that There Exists a Reasonable Alternative to the APCIA.

A reasonable jury could find that the New York legislature's interest in saving money by improving health, protecting the environment, and preventing cruelty to animals could not be furthered through legislation or other nondiscriminatory measures in an alternate form than the APCIA.

Under the Pike test, once interference with interstate commerce has been established, the burden falls upon the government to demonstrate that the local benefit outweighs the burden on interstate commerce and that there are no reasonable nondiscriminatory alternatives available. *Town of Southold*, 477 F.3d at 47. The District Court suggested three potential alternatives to the APCIA as its reason for striking it down: 1) adding farms outside New York to the online list of sustainable and humane farms, 2) completely removing the list, and 3) enacting other legislation

to protect the health of citizens, the environment, and farm animals which would have no impact in interstate commerce. *National Meat Producers Ass'n*, at *20. There is no evidence that any one of these alternatives is "readily available." *See Hunt*, 432 U.S. at 354.

Enacting new legislation to further the state's goals of improving human health and protecting animals and the environment is certainly not a reasonable option. It would be a far too costly and time-consuming process and is thus a highly unreasonable alternative. The state is already faced with budget constraints and other financial problems, which were among the primary motivating factors of enacting the APCIA. *National Meat Producers Ass'n*, at *3. In the process of enacting the statute, the New York legislature empowered multiple congressional committees to investigate ways of reducing costs. *Id.* This led to over 1,000 hours of expert testimony and the development and proposal of 500 different cost saving measures. *Id.* These efforts are a clear indication that enacting the APCIA was a very expensive and time-consuming process. Enacting new legislation would be similarly draining on the New York's finances and human resources and constitute a massive waste of time and funds. A typical member of a state legislature is likely not well versed in complex matters related to human health and the environment. These issues require input from scientists, physicians, and other expert in the scientific and medical fields. The state is already in a precarious financial state and cannot afford to spend any more time or money on new legislation that would take months or even years to come to fruition.

Moreover, adding farms outside of New York to the online list of sustainable and humane farms would neither be practical nor effective. New York citizens are more likely to patronize New York farms by virtue of the simple fact that it would be more geographically convenient for them. We argued during the summary judgment proceedings that this alternative would increase

costs related to gathering and analyzing on farms outside of New York. The District Court dismissed this argument with no justification but a reasonable factfinder could find this to be impractical as it would indeed require research and investigation to ensure that the farms listed were in compliance with New York's sustainability and humane practices regulations. *See id.* at *20. It was improper for the District Court to dismiss our argument so hastily. *See Town of Southold*, 477 F.3d at 52 ("[I]t is true that the judiciary may not sit as a superlegislature to judge the wisdom of legislative policy determinations." (internal quotations and citations omitted)). In addition, any option that increases costs for the state of New York is arguably unreasonable given the state's current financial circumstances.

Appellee's strongest argument lies in the possibility of completely removing the list of sustainable and human New York Farms. This would be a simple and low cost option. However, we propose that the Court find this to nonetheless be insufficient. Without stating its rationale, the District Court rejected our argument that removing the list would negate the purpose of the statute. The purpose is to provide information to the public and the information would be incomplete without this list. Telling the citizens of New York what they should not do without providing them suggestions of what they should do would leave the statute incomplete and make the legislature appear careless and inattentive. Not only would the information be incomplete without this list, but removing it would damage the legitimacy of the New York legislature and the citizen's confidence in the legislature's ability to put forth effective legislation.

The citizens of New York elect the members of the legislature and trust them to develop and enact legislation that serves their best interests. A federal court cannot overturn legislation put forth by a group of officials elected by the people without sufficient justification.

CONCLUSION

An award of summary judgment was improper and the case must be remanded for further investigation into whether there exists a reasonable nondiscriminatory alternative to the APCIA.

Respectfully submitted,

/s/

Team #11
Attorneys for Defendant-Appellants

January 11, 2013

ADDENDUM A – N.Y. Agric. & Mkts. Law § 1000

N.Y. Agric. & Mkts. Law & 1000

SECTION 1. SHORT TITLE

This Act may be cited as the ‘‘Animal Products Consumer Information Act’’.

SECTION 2: DEFINITION

“Animal products” refers to meat, fish, diary, and eggs.

SECTION 3: STATEMENT OF PURPOSE

This Act is designed to protect the citizens of this state by providing and encouraging the dissemination of information about how animal agriculture and the consumption of animal products negatively affects health, the environment, and imposes unnecessary suffering on animals.

SECTION 4: LABELLING REQUIREMENT

(1) The following language must be prominently displayed wherever animal products intended for human consumption are offered for sale: “PUBLIC INTEREST WARNING: Many chronic diseases, including heart disease, can largely be prevented and, in many cases, reversed by avoiding the consumption of animal products and eating a whole food, plant based diet. Industrial animal agriculture is also a major source of pollution. Animal handling techniques also lead to animal suffering. The State encourages its citizens to conduct research and make informed choices when purchasing and consuming animal products. For more information, visit www.informedchoice.ny.gov.”

(2) The identification shall consist of a sign not less than 18 by 24 inches and printed in letters not less than 1 1/2 inches high. All letters in the sign shall be in red on a yellow background.

(3) When offered for sale from a retail sales display, vending machine, or bulk container, the required placard shall be clearly visible to a customer viewing the animal products.

(4) When offered for sale in a food service establishment or other public eating place, the required information must be on a placard as described above, clearly visible to all customers, or printed on a menu in type and lettering similar to, and as prominent as, that normally used to designate the serving of other food items.

SECTION 4: PENALTY.

The punishment for a violation of section 4 is a fine of $1,000 per day.

ADDENDUM B - Impact of Consumption of Animal Products on Health[2]

The majority of health and nutrition experts concluded that a reduction in the consumption of animal products would result in the prevention and, in many cases reversal of, heart disease, cancers, type 2 diabetes, stroke, and hypertension. Four of these diseases are in the top seven causes of death in the United States each year (with heart disease at #1 and cancer at #2). The experts also described how animal agriculture is linked to the increased number of infectious diseases. The experts explained how a reduction in these diseases would lead to a reduction in the costs of health care, both for individuals and for the State of New York.

T. Colin Campbell PhD, an expert in nutrition and the author of The China Study, testified before the New York committees and provided an affidavit in support of defendants' reply to plaintiff's motion for summary judgment. The following quotations are pulled from Dr. Campbell's affidavit:

> There is nothing better the government could do that would prevent more pain and suffering in this country than telling Americans unequivocally to eat less animal products, less highly-refined plant products and more whole, plant based foods. It is a message soundly based on the breadth and depth of scientific evidence, and the government could make this clear, as it did with cigarettes. Cigarettes kill, and so do these bad foods….Expert panels have said it, the surgeon general has said it and academic scientists have said it. More people die because of the way they eat than by tobacco use, accidents or any other lifestyle or environmental factor.

Dr. Campbell directed

> the most comprehensive study of diet, lifestyle and disease ever done with humans in the history of biomedical research. It was a massive undertaking jointly arranged through Cornell University, Oxford University and the Chinese Academy of Preventive Medicine…[T]his project produced more than 8,000 statistically significant associations between various dietary factors and disease! What made this project especially remarkable is that, among the many associations that are relevant to diet and disease, so many pointed to the same finding: people who ate the most animal-based food got the most chronic disease. Even relatively small intakes of animal-based food were associated with adverse effects. People who ate the most plant-based foods were the healthiest and tended to avoid chronic disease…. These findings… show that heart disease, diabetes and obesity can be reversed by a healthy diet. Other research shows that various cancers, autoimmune diseases, bone health, kidney health, vision and brain disorders in old age (like cognitive dysfunction and Alzheimer's) are convincingly influenced by diet. Most importantly, the diet that has time and again been shown to reverse and/or prevent these diseases is the same whole foods, plant based diet that I had found to promote optimal health in my laboratory research.

[2] The following text comes directly from the lower court's decision. *National Meat Producers Ass'n v. Commissioner*, No. CV 11-55440 NCA (ABC), *4-8 (S.D.N.Y. 2012) (internal citations omitted).

An expert from the Union of Concerned Scientists testified before the New York committees and provided an affidavit in support of defendants' reply to plaintiff's motion for summary judgment. The following quotations are pulled from this expert's affidavit:

> Estimates have suggested that considerably greater amounts of antibiotics are used for livestock production than for the treatment of human disease in the United States. The massive use of antibiotics in CAFOs, especially for nontherapeutic purposes such as growth promotion, contributes to the development of antibiotic-resistant pathogens that are more difficult to treat.
>
> Many of the bacteria found on livestock (such as Salmonella, Escherichia coli, and Campylobacter) can cause food-borne diseases in humans. Furthermore, recent evidence strongly suggests that some methicillin-resistant Staphylococcus aureus (MRSA) and uropathogenic E. coli infections may also be caused by animal sources. These pathogens collectively cause tens of millions of infections and many thousands of hospitalizations and deaths every year.
>
> The costs associated with Salmonella alone have been estimated at about $2.5 billion per year— about 88 percent of which is related to premature deaths. Because an appreciable degree of antibiotic resistance in animal-associated pathogens is likely due to the overuse of antibiotics in CAFOs, the resulting costs are likely to be high.

Dr. Michael Greger, an expert in public health and nutrition, testified before the New York committees and provided an affidavit in support of defendants' reply to plaintiff's motion for summary judgment. The following quotations are pulled from Dr. Greger's affidavit:

> We've seen an unprecedented rise in infectious diseases in recent decades, 75 percent of which are "zoonotic," meaning they come from animals. About 300 new animal-to-human diseases have emerged in the last 60 years.
>
> This summer, the International Livestock Research Institute released a report estimating that zoonotic diseases cause 2.5 billion cases of human illness each year and 2.7 million human deaths worldwide. Most of these illnesses and deaths are caused by diseases spread from farm animals.
>
> Meanwhile, we've seen a dramatic spike in pork and poultry production. Tens to hundreds of thousands of caged animals under a single roof allow for zoonotic diseases to emerge, amplify and spread. Of all the emerging threats, the greatest concern is influenza, the only known virus with the potential to infect millions of people within months.
>
> New chicken and pig flu viruses have emerged at an alarming rate in recent decades. The latest swine flu virus, dubbed H3N2v, claimed its first human victim last month in Ohio. Up until the 1990s, only about a dozen human cases of swine flu infection had ever been reported. In the last year alone, in contrast, H3N2v has infected 300 people, sending 15 to the hospital and one to the morgue. The H1N1 virus that emerged from pigs in 2009 infected an estimated 60 million Americans, resulting in 12,000 deaths, according to the Centers for Disease Control and Prevention.

Both H3N2v and the pandemic H1N1 share genetic origins with the “triple reassortant” strain that spread throughout the U.S. pork industry in 1999, a virus that combined genes from bird, pig, and human strains. Our first discovered hybrid strain – a human-pig mutant – was found in August 1998 in an industrial pig operation in Newton Grove, N.C. It may be no coincidence that the new strain was found in a region with the single highest pig population in the nation, or that it was found in a “sow stall” operation, in which thousands of pregnant sows were confined in crates barely larger than their bodies. (The stress of life-long confinement is thought to make animals more susceptible to infection).

Bird flu followed a similar trajectory, from rare cases to a multitude of new chicken flu viruses now causing sporadic human outbreaks around the world. The greatest concern is that with increasing numbers of circulating pig and chicken flu viruses capable of infecting humans, a virus with the human transmissibility of H1N1 could combine with a virus with the human lethality of H5N1, a bird flu virus that has killed 359 of its 608 known human victims. Imagine the implications of 60 million Americans coming down with flu with a 60 percent mortality rate. . . .

For years, the public health community has warned about the risks of intensive livestock confinement. In 2003, the American Public Health Association called for a moratorium on concentrated animal feeding operations. In 2008, the Pew Commission on Industrial Farm Animal Production, which included a former U.S. Secretary of Agriculture, concluded that industrialized animal agriculture posed “unacceptable" risks to public health. A key recommendation was the phasing out of extreme confinement practices such as gestation crates, which “induce high levels of stress in the animals and threaten their health,” the commissioners wrote, “which in turn may threaten human health."

ADDENDUM C - Impact of Animal Agriculture on the Environment[3]

A number of environmental experts testified before the New York committees and offered affidavits in support of defendants' reply to plaintiff's motion for summary judgment. All of the environmental experts concluded that concentrated animal feeding operations ("CAFOs," also known as "factory farms") in the United States have a negative effect on the environment. An expert from the Union of Concerned Scientists offered the following information on the impact of animal agriculture on the environment in an affidavit in support of defendants' reply to plaintiff's motion for summary judgment:

> Until recently, food animal production was integrated with crop production in a balanced way that was generally beneficial to farmers and society as a whole. But livestock production has undergone a transformation in which a small number of very large CAFOs (confined animal feeding operations) predominate. These CAFOs have imposed significant—but largely unaccounted for—costs on taxpayers and communities throughout the United States.
>
> CAFOs are characterized by large numbers of animals crowded into a confined space—an unnatural and unhealthy condition that concentrates too much manure in too small an area. Many of the costly problems caused by CAFOs can be attributed to the storage and disposal of this manure and the overuse of antibiotics in livestock to stave off disease…
>
> Water pollution from manure.
>
> Disposal of CAFO manure on an insufficient amount of land results in the runoff and leaching of waste into surface and groundwater, which has contaminated drinking water in many rural areas, and the volatilization of ammonia (i.e., the transfer of this substance from manure into the atmosphere). Several manure lagoons have also experienced catastrophic failures, sending tens of millions of gallons of raw manure into streams and estuaries and killing millions of fish. Smaller but more numerous spills cause substantial losses as well.
>
> Remediation of the leaching under dairy and hog CAFOs in New York has been projected to cost taxpayers $56 million—and New York is not one of the country's top dairy or hog producing states. Based on these data, a rough estimate of the total cost of cleaning up the soil under U.S. hog and dairy CAFOs could approach $4.1 billion.
>
> The two primary pollutants from manure, nitrogen and phosphorus, can cause eutrophication (the proliferation and subsequent death of aquatic plant life that robs freshwater and marine environments of the oxygen that fish and many other aquatic organisms need to survive). For example, runoff and leaching from animal sources including CAFOs is believed to contribute about 15 percent of the nutrient pollution that reaches the Gulf of Mexico, where a large "dead zone"—

[3] The following text comes directly from the lower court's decision. *National Meat Producers Ass'n v. Commissioner*, No. CV 11-55440 NCA (ABC), *8-11 (S.D.N.Y. 2012) (internal citations omitted).

> devoid of fish and commercially important seafood such as shrimp—has developed. CAFO manure also contributes to similar dead zones in the Chesapeake Bay (another important source of fish and shellfish) and other important estuaries along the East Coast. The Chesapeake Bay's blue crab industry, which had a dockside value of about $52 million in 2002, has declined drastically in recent years along with other important catches such as striped bass, partly due to the decline in water quality caused in part by CAFOs. Although it is difficult to account for all of the social benefits (such as fisheries and drinking water) lost due to CAFO pollution, it is reasonable to assume the losses are substantial.

A representative of the New York Department of Environmental Conservation provided an affidavit in support of defendants' reply to plaintiff's motion for summary judgment stating

> [e]xcessive nutrients and eutrophication are identified as a major source in 23% of all water bodies assessed as impaired in New York State. In another 29% of impaired water, nutrients and eutrophication are contributing sources (though not the most significant sources). In addition, for 54% of the waters with less severe minor impacts or threats nutrients and eutrophication are noted as major contributing sources of impact.

An expert from the Union of Concerned Scientists offered the following information on air pollution from manure in an affidavit in support of defendants' reply to plaintiff's motion for summary judgment:

> Airborne ammonia is a respiratory irritant and can combine with other air pollutants to form fine particulate matter that can cause respiratory disease. And because ammonia is also re-deposited onto the ground, mostly within the region from which it originates, ammonia nitrogen deposited on soils that have evolved under low-nitrogen conditions may reduce biodiversity and find its way into water sources. Ammonium ion deposition also contributes to the acidification of some forest soils.
>
> Animal agriculture is the major contributor of ammonia to the atmosphere, and the substantial majority of this ammonia likely comes from confinement operations, since manure deposited by livestock on pasture contributes proportionately much less ammonia to the atmosphere than manure from CAFOs. Up to 70 percent of the nitrogen in CAFO manure can be lost to the atmosphere depending on manure storage and field application measures. Over the past several decades, the amount of airborne ammonia deposition in many areas of the United States with large numbers of CAFOs has been rising dramatically, and may often exceed the capacity of forests and other environments to utilize it without harm.

A representative from the Food and Agriculture Organization (FAO) of the United Nations (UN) offered the following statement about the effect of animal agriculture on global warming in an affidavit in support of defendants' reply to plaintiff's motion for summary judgment: animal agriculture is a major emitter of all three important greenhouse gases: carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). Meat, egg, and milk production are responsible for an estimated 18%, or nearly one-fifth, of human-induced greenhouses gases. In

addition, the experts projected that climate changing impacts of the farm animal sector will be significant for decades to come.

ADDENDUM D - Unnecessary Suffering of Animals[4]

Excerpts of Dr. Bernard Rollin's Affidavit in Support of Defendants' Reply to Plaintiff's Motion for Summary Judgment

THE BEEF INDUSTRY

Branding

The animal welfare problem with branding is, of course, that it creates a third-degree burn on the animals. This burn is not only painful; it is a significant stressor that can cause weight loss, or shrink, due to animals going off feed. Furthermore, as ownership of animals is transferred, animals may be repeatedly branded – as many as four or more times…

Castration

Castration presents another welfare problem, for it is accomplished with no anesthesia or analgesia. Castration is done for tenderness of meat and for manageability of the animals, castrates being easier to handle than bulls.

[I] asked [a group of ranchers] to comment on the claim, common in scientific ideology, that the animals did not feel pain, or did not really feel pain, during these procedures, specifically focusing on castration. One rancher responded in a manner that drew cheers from his peers. Drawing his pocketknife, he asked me, 'How'd you like yours cut off with this?"

Although most range castration is done with a knife, there are a variety of other methods. None, however, is painless, and none can be viewed as an absolutely humane alternative to the knife. These methods include the use of Burdizzos, or emasculators, which are essentially pincers or pliers that crush or sever the spermatic cord and the blood vessels that supply the testicle. The lack of blood supply to the testicles leads to their deterioration. A similar mechanism underlies the use of the elastrator, which stretches a rubber ring over the testes, thereby shutting off blood supply and creating necrosis, eventuating in the sloughing off of the testicles… The most rational and elegant solution to the issue of castration is simply not castrating.

Dehorning

The presence of horns on commercial cattle is considered a problem because horns inevitably lead to damaged hides and bruising of cattle under range and feedlot conditions, especially during transportation. Cattle with horns also require more space in trucks and in feed bunks. Furthermore, some horned cattle become aggressive and bully other cattle away from feed and shelter. Though both horned and hornless cattle establish a dominance hierarchy, the problem is exacerbated by the presence of horns. Packers usually dock horned cattle.

Horns have been managed in a variety of ways, and it is obviously best to deal with them when the calf is young and the horn bud or button is very small. Probably the least invasive and traumatic method for removing horns is chemical, which should be done as early as possible in

[4] The following text comes directly from the lower court's decision, we have only included the information related to the cattle and swine industries, as the FMIA deals with these specifically. *National Meat Producers Ass'n v. Commissioner*, No. CV 11-55440 NCA (ABC), Addendum *3-15 (S.D.N.Y. 2012) (internal citations omitted).

the calf's life. The caustic chemical, applied to the horn button, prevents further growth of the horn. Since the chemical is caustic, however, it can be irritating to the calves.

A second method, also feasible only when the calf is relatively young (under 5 months of age) is the use of a hot rod iron to burn the horn button. This procedure is not painless, since the interior of the horn in innervated.

A third strategy involves using devices such as the dehorning spoon tube, which gouge or lever the horn out of the skull. The older the animal, the more developed the horn and the more traumatic the operation. In an animal that is relatively mature, such horn removal is, in the worlds of one veterinarian, "a bloody mess." When performed with clippers or saws, the procedure is again bloody and traumatic. Most dehorning is done by stockmen, not veterinarians and local anesthesia is virtually never used, except by certain veterinarians who insist on it after a certain age in calves. Generally, the procedure is done under physical restraint.

Dehorning inevitably causes some pain and distress to the animals, ranging from irritation if chemicals are used to significant pain and trauma if mature animals are dehorned. Dehorning is sufficiently traumatic to have negative economic implications. A 1958 study from South Dakota showed that, when yearling steers were dehorned, two weeks were needed for them to catch up to their weight at dehorning; because of shrink arising from the trauma, the dehorned steers never caught up in weight to their horned counterparts. The significance of this statistic was underlined by a 1968 study of more than half a million cattle in twenty-four states, which showed that the average age of cattle at the time of dehorning was 5.2 months, old enough for the procedure to be traumatic.

Cattle Handling

The handling of cattle at all levels of the industry, from cow-calf to slaughter, has major implications for both animal welfare and for profit. Poor handling can result in significant stress, pain, and injury, leading to animal suffering and distress.

Several historical reasons exist for poor handling. One is cultural – there is a long precedent of "cowboying" the animals among some ranchers, though most producers know that "gentling" is the best. Such rough and rowdy handling, roping, and wrestling of animals is, for some ranch workers, the very soul of working cattle. One expert in ranch management told me of a consulting job he had done for a large Montana ranch, where he was asked to observe ranch activities and make recommendations for cutting costs and making operations more efficient. At the end of two weeks of scrutiny, the consultant called in the ranch owner and told him that the largest single source of inefficiency was cowboying the animals. For example, in roping a sick or injured calf, one should strive for gentleness and minimal excitement, yet some ranch hands did precisely the opposite, ride hell-for-leather and roping the animal at high speed. "Hell," replied the owner, "if I couldn't cowboy the animals, I wouldn't want to be in the business."

Thus, part of poor handling is attitudinal. This macho, domination attitude, can be found throughout animal agriculture and, in the cattle business, in feedlots, salebarns, cattle transport, and packing houses, not only in cow-calf operations.... For example, in sale barns, one frequently sees employees – cowboy "wannabes" – beating and prodding animals unnecessarily with hotshots.

A second source of poor handling is lack of knowledge of cattle behavior. Many people in the cattle business have no idea of flight distance, balance points, reasons for balking or

stampeding, and other fundaments of animal behavior...

A third source of poor handling is poor equipment or improper use of extant equipment. Poor equipment is often attributable to a lack of knowledge of animal behavior – for example, many loading chutes are designed in a manner counterproductive to their purpose.

Transportation

The welfare problems associated with transportation pervade the entire process. Loading and unloading are often accomplished with unnecessary roughness, hotshotting, and hallyhoo, which is frightening and stressful to the animals and can cause bruising. The actual transit conditions can expose the animals to extremes of temperature, depending on the season. The ride is generally rough, especially on rural roads, subjecting the animals to loss of balance, bruising, stress, shrink, difficulty of subsequent weight gain, and fear. Most of the animals are unaccustomed to being transported, and the very novelty of the experience is a significant stressor, especially in light of evidence that novelty of environment is more stressful to cattle than electric shock. It is not uncommon to see animals on a higher truck deck defecating and urinating on lower animals. Not only is this probably a stressor, since animals tend to avoid one another's excrement; it is a mobile advertisement against the beef industry. I recall my son, at age six, viewing such a scene with horror and saying, “That's not right!” – surely a universal reaction.

Downer Cattle

The marketing of sick, crippled, or “downer,” nonambulatory cattle is a major welfare problem in the cattle business... There are few sights more outrageous than watching a crippled or downer animal being dragged off a truck by a tractor....

Downer animals should be moved on some mechanical conveyance when they arrive at their destination. Many downer animals are cows culled from dairies. Others are sick or injured animals who have not recovered or responded to medical treatment, or emaciated animals. Still others are male Holstein calves newly born. Producers should be fined for shipping such animals, as is done in portions of Canada. As one rancher told me, “We should eat our mistakes.” Suffering animals should be euthanized immediately at the farm, or, if they have gone down during transport, as soon as they arrive at their destination.

Slaughter

The most pressing problems associated with slaughter grow out of the absence of preslaughter stunning in Muslim (halal) and kosher (schechita) slaughter. In both these areas, stunning is forbidden by current interpretation of religious law. Despite the fact that some countries ban such slaughter, it persists in the United States.

Dr. Rollin discussed a study of animals' loss of sense between animals that were stunned and those that were killed by throat-cutting in ritual slaughter. The study indicated “what is plain to common sense is correct: being stunned is preferable to not being stunned. (We are here assuming that consciousness during bleeding out is not pleasant.)”

Adding insult to injury, some kosher slaughter plants continue to shackle and hoist conscious animals for efficiency in processing, despite the fact that such activity seems to violate

both the letter and and spirit of the religious law underlying kosher slaughter.

Gomer Bulls

Ranchers need to know when cows are in heat. Because bulls have an obvious vested interest in heat detection, using them to detect heat is a time-honored approach. In order to keep the detector bulls from impregnating the heat cows, the bulls are surgically altered in a variety of ways. The penis may be redirected to one side, creating so-called sidewinders. The penis may be amputated, retracted and fixed, or surgically adhered to the lower abdominal wall. Fistulation of the preputial cavity following closure of the preputial orfice, installation of mechanical preputial blocking devices, and the placement of an artificial thrombus in the corpus cavernosum penis are also used. When the altered bull mounts the cow, a marking device hung from his chin marks the cow in heat. All these methods produce some pain and much distress growing out of frustration, though the methods that redirect the position of the penis still allow the animal to ejaculate as a consequence of frottage. American men, when informed of these sorts of alterations, see them as the worst possible abuse.

There are alternatives for detecting heat that do not cause welfare problems, such as patches that are applied to cows, visual inspection, and use of cows or steers given testosterone, but most cattle owners believe bulls are the least fallible.

Feedlot Problems

In the feeder portion of the industry, many of the problems mentioned earlier can surface in an amplified way. Late castration, branding, and dehorning of animals in the feedlot create major welfare issues, as well as economic setbacks. Proper handling and equipment is also a relevant concern.

There are also welfare problems unique to feedlots. One major issue is feedlot design. Poorly designed drainage systems compromise both welfare and productivity. Relatively little easily accessible information is available on designing and managing feed yards to accommodate young bulls. Design of chutes, ramps, and loading docks can be improved.... Research into elimination of liver abscesses caused by feeding “hot,” high-concentrate, low roughage diets would benefit both animals and producers. Closer attention to the health of individual animals would improve both welfare and economic returns.

Feedlots are the most animal-friendly of confinement systems, since they allow the animals significant room to move as well as social opportunities. Research could make them more animal-friendly. Shelter from wind, dust, sun, and snow would benefit animals and producers, as would sprinkling to cool animals and keep down dust.

THE SWINE INDUSTRY

Historically, the pig was the first farm mammal to be subjected to extremely intensive housing and management, a trend that has greatly accelerated. Over 90 percent of pigs are raised in some kind of confinement. At the same time, swine are almost universally considered the most intelligent of farm animals, possessed of a good deal of curiousity, learning ability, and a complex behavioral repertoire, and are thus “easily bored,” as Ronald Kilgour puts it. The complexity of pig behavior raises a host of issues relevant to rearing these animals under austere

confinement conditions. Such conditions give rise to a significant range of behavioral anomalies in confined pigs...

Swine Behavior

...[In their natural habitat], it was found that pigs built a series of communal nests in a cooperative way. These nests displayed certain common features, including walls to protect the animals against prevailing winds and a wide view that allowed the pigs to see what was approaching. These nests were far from the feeding sites. Before retiring to the nests, the animals brought additional nesting material for the walls and rearranged the nest. On arising in the morning, the animals walked at least 7 meters before urinating and defecating. Defecation occurred on paths so that excreta ran between bushes. Pigs learned to mark tress in allelomimetic fashion. The pigs formed complex social bonds between certain animals, and new animals introduced to the area took a long time to be assimilated. Some formed special relationships – for example, a pair of sows would join together for several days after farrowing, and forage and sleep together. Members of a litter of the same sex tended to stay together and to pay attention to one another's exploratory behavior. Young males also attended to the behavior of older males. Juveniles of both sexes exhibited manipulative play. In autumn, 51 percent of the day was devoted to rooting.

Pregnant sows would choose a nest site several hours before giving birth, a significant distance from the communal nest (6 kilometers in one case). Nests were built, sometimes even with log walls. The sow would not allow other pigs to intrude for several days but might eventually allow another sow with a litter, with which she had previously established a bond, to share the nest, through no cross-suckling was ever noted. Piglets began exploring the new environment at about 5 days of age and weaned themselves at somewhere between 12 and 15 weeks. Sows came into estrus and conceived while lactating. One of Wood-Gush's comments is telling: “Generally the behavior of … pigs, born and reared in an intensive system, once they had the appropriate environment, resembled that of the European wild boar.” In other words, there is good reason to believe that domestic swine are not far removed from their nondomestic counterparts....

Confinement of Sows

Virtually every expert with whom I have discussed the swine industry sees the confinement of dry sows as its major welfare problem.... In the United States, sows … are kept in gestation stalls while they are pregnant, for the vast majority of their productive lives, three to five years. The stall is approximately 2 feet wide, 7 feet long, and 3.3 feet high. This extreme confinement allows a great many sows to be house in an environmentally controlled situation, fed and cared for by a minimal and unskilled labor force, and maintained with minimal feed, for energy is not wasted on thermoregulation or movement. Such a system allows maximal production efficiency. It further allows people who may not be “pig smart,” as one expert puts it, to work in a facility where the system compensates for lack of stockmanship. On the other hand, management makes the difference between a viable confinement system and a total mess.

...[A]nimals who have evolved with bones and muscles need the opportunity to use them. As seen in our capsule discussion of swine behavior, pigs under extensive conditions spend a good deal of time moving about. If a system does not allow such an animal even the room to turn

around, it is reasonable to view it as thwarting some very fundamental needs or tendencies, needs that have both a physical and cognitive component, thus leading to negative welfare. Animals that like to move and are built to move are surely affected negatively if they cannot do so.

Closely connected with the inability to move is the element of monotony, lack of stimulation, or … boredom. Given the complexity of behavior and intelligence natural to the sow, the absence of possibilities in the gestation stall, and the emergence of stereotypes, it defies good sense to suppose that the animal is not bored.

Farrowing Crates

Farrowing crates were devised to prevent sows from crushing piglets, a common phenomenon under extensive conditions. Generally, a sow spends about a month in a farrowing crate, from directly before parturition until weaning of the piglets. Since the point of farrowing crates is to restrict the movement of sows so they cannot turn around, and since the farrowing crates are about the same sin as gestation stalls, the same welfare problems relating to restricted movement we have discussed vis-a-vis gestation stalls arise here. Farrowing crates have also been correlated with some pig diseases, including dystocia, agalactia, and wasting disease.

Because farrowing crates demonstrably provide a way for diminishing crushing of piglets, they could perhaps be justified to the social ethic if the sow were not confined at other times...

The farrowing crate raises other welfare problems besides restricted movement. Most important, perhaps, is the frustration of normal maternal behavior, an extremely powerful instinct. Sows will continue to try to make nests, even in farrowing crates. Kilgour comments: "By frustrating and stressing the sow and disallowing her maternal responses, overall productivity may not show an improvement...." Stookey echoes this sentiment: "The fact that nest building is so innate and that the sow continues to build the nest even in the absence of any material, suggests that the behavior has tremendous biological significance. No doubt survival of wild pigs is dependent upon a nest at farrowing."

Other Sow Welfare Problems

Confinement rearing of sows leads to additional welfare problems beyond those growing out of boredom, frustration, isolation, and inability to move.

Sows kept in confinement appear to have more reproductive problems, such as delay of estrus and failure of the animals to become pregnant after mating.... there was a higher incidence of mastitis, metritis, agalactia, prolonged farrowing time, and sow morbidity at farrowing in sows housed in confinement than in sows housed in group pens. It is plausible to suggest that these negative effects are a result of prolonged stress...

Confined sows are more subject than unconfined sows to foot and leg problem, including the fracturing.... Pig farmers who have experience with both free and confined sow operations have told me that fracturing is far less common in sows that are allowed to move. Since activity is known to increase bone strength, it may well be that the immobility of confined sows renders them susceptible to leg breakage... leg injuries, lameness, and infections are related to types of flooring. Generally, slatted floors lead to more injuries than unslatted floors.

Urinary tract disease appears to be more common in confined sows, probably because the animals lie in their excrement and because they drink less and urinate less, so that urine is more

concentrated and bacteria act longer in the urinary tract. It is reasonable therefore to attribute these problems to lack of activity....

Finally.... the combination of total confinement, automation, and the large scale of swine operations makes for minimal inspection of individual animals, sows or finishers. Thus disease and injury may be undetected until they are quite advanced, especially in sows. Further, as we saw, the minimal labor force in many operations makes treatment difficult or impossible. Unquestionably, automation tends to be inimical to stockmanship or careful husbandry...

Piglet Welfare

A number of significant welfare problems are associated with piglets in swine production. Between day 1 and day 10 after birth, piglets are subjected to a battery of invasive procedures: vaccination, ear-notching for identification (in some cases), teeth-clipping, tail-docking, and castration of males.

Vaccination in and of itself is probably not an issues. Ear-notching, however, is surely painful, and alternatives to it exist....

Teeth-clipping and tail-docking are management procedures. Incisor, or "needle," teeth are clipped in order to prevent laceration of sow udders and abrasion of the faces of other piglets during competition for teats. The Universities Federation of Animal Welfare (UFAW) handbook, Management and Welfare of Farm Animals, argues, reasonably, that teeth-clipping should not be a routine procedure but rather should be done on an "as needed" basis, that is, where there is early evidence of damage from the teeth. Given the lack of surveillance of individual animals in large intensive operations, however, the degree of scrutiny demanded by this alternative is implausible; it is simply more economical to clip routinely....

Docking of tails, a procedure that grew out of intensive systems, is done to prevent tail-biting, which generally increases once begun and spreads to biting other parts of the body. A victim of tail-biting gradually ceases to be reactive to being bitten, in a kind of learned helplessness. Infection often ensues and can become systemic.

Pigs have always had a tendency to tail-bite. Under extensive conditions, pigs have the space to get away from one another – it is only in confinement that tail-biting became a serious problem. The response of the producer has been to amputate the distal half of the sail, a surgical solution to a humanly induced problem arising from keeping the animals in a pathogenic environment....

I do not consider surgical solutions to humanly caused animal problems morally acceptable. One ought to change the environment to a healthier one, not to mutilate the animal.... [T]ail-biting can be prevented by changes in husbandry. Animals that tend to tail-bite can be grouped together, as they do not generally show this behavior when they are so grouped. Uncomfortable atmospheric factors need to be eliminated, such as high levels of ammonia, CO2, or humidity or low barometric pressure. Stocking density should be kept down. Better husbandry, provision of straw, and the opportunity to root all decrease tail-biting.... It thus appears that boredom is relevant to tail-biting. Like other stereotypies, then, tail-biting provides a clue to conditions that need improvement. To my knowledge, no one has tried painting tails with unpleasant-tasting material to curtail biting.... Even if it worked, however, the impulse leading to the behavior would remain – one would he treating symptoms.

Castration of piglets is clearly painful. As in beef cattle, castration is performed to diminish aggression and to prevent the development of adult male sexual pheromones, which

give pork the “boar taint” most pork consumers dislike. Most producers agree that intact males grow better, faster, and more efficiently and produce leaner meat and more meat. It can be argued that, given the age (5-6 months) at which most males attain market weight (about 250 lb), few of the animals have reached sexual maturity. Thus the need for castration, which is expensive and painful, is obviated, especially since a pheromone test is available to detect boar-tainted carcasses. In Europe, uncastrated males are the rule. The main obstacle to eliminating castration seems to be packer resistance, based on fear of consumer rejections of boar meat and lack of packer confidence in the pheromone-test....

A major issue in piglet welfare arises out of early weaning. Although pigs left to their own devices will wean at 12 to 15 weeks of age, industry practice weans piglets at 3 to 4 weeks of age.... [S]uch early weaning must have considerable effects on the piglets, leading to poor welfare.... We know now that early weaning leads to aberrant behavior, including compulsive belly nosing and sucking, which is presumably an attempt to suck and find milk. Anal massage is a similar deviant behavior. Piglets showing this behavior chase and inflict injuries on other piglets. Other aberrant oral behavior, such as suck on walls and bars, may also be a result of early weaning. A recent study should that relocation of piglets to a nursery may be a major stressor augmenting early weaning....

Grower-Finishers

...When pigs leave the nursery (at about 6 weeks of age), they go into a grower-finisher pen in groups of 15 to 20. One facility I visited placed them in a pen 8 feet by 25 feet. They remain together for the next five or so months until reaching market weight.... At the early stages of finishing, the pen seems to provide adequate space, but by the time the pigs attain market weight, they appear to be quite crowded.

[Pigs kept inside also develop] problems with respiratory disease.... 35 to 60 percent of all pigs raised in confinement buildings are affected with mycoplasmic pneumonia to the point where weight gain is adversely affected. In numerous pig facilities, workers must wear respirators; obviously, such a situation is harmful to human and animal welfare.... Another problem appears to be fighting, which is both short in duration and low in intensity. Pigs are kept in limited lighting to avoid aggression yet will work to obtain light....

Amount of space per pig is important. Equally important is quality of space. Space in grower-finisher pens should take account of the need or desire of pigs to separate lunging and lying facilities, for eating without harassment by others, and for ways of avoiding attack....

Foot and leg problems associated with problematic flooring are another area of concern. Slippery floors an cause lameness, abrasions, strains, and foot injuries. Slats may lead to trapped and broken claws. Some preference work on flooring has been done, but as Fraser points out, it should be followed by studies of welfare and injury on the various types of floors....

Handling and Transport

Being highly intelligent and sensitive animals, pigs are very responsive to stressors.... In research and on farms, those handling pigs often rely on “macho muscling” methods, which produce significant stress.... Transportation is a major stressor for an animal kept in confinement all its life and suddenly moved outside, loaded, and transported.... Mixing of pigs during transport is also a significant stressor, as is poor, rough driving.... Ignoring the stresses of

loading, handling, and transport can lead to bruising, carcass blemishes, PSE (Pale Soft Exudative) syndrome, and malignant hyperthermia syndrome, all of which harm both producers and animals.

THE DAIRY INDUSTRY

….One of the most dramatic changes in dairies, directly relevant to public perception of the industry, is the rise of large, intensive dairy operations, with up to three thousand cattle maintained in relatively small acreages. The small dairy farmer, with names for his cows, is a vanishing breed, as land costs, labor costs, and capital investment costs increase....

One area which feeds the idea of callousness at large dairies is the treatment of surplus calves.... [S]uch calves often receive no colostrum, and are shipped as young as one day old, before they can even ambulate properly.... Although the raising of so-called white veal is a spinoff of the fair industry, this subject is discussed in the next chapter....

Calf Welfare

Some of the major potential hot spots for the industry come from the treatment of calves. Most female calves are used as replacements for dairy cows. Various practices associated with raising such calves have been criticized on welfare grounds. One such issue is the early separation of calf from mother. Common sense suggests that such a separation is stressful to both animals, since cattle under extensive conditions can suckle for some seven months... the average person sees removing a baby from its mother as paradigmatically abusive, even cruel.

…Some dairy farmers leave the calf with the mother for up to three days to allow the calf to suckle, to permit a mother-offspring relationship to form, and to render the cow's milk free of colostrum and thus able to be sold. In contrast, others separate the calf immediately and deliver the colostrum through a nipple-pail or bottle.

Although it may seem more humane to allow the cow and calf the longer period to bond, one can argue that separation of the calf after three days, rather than at birth, causes greater trauma. According to Albright:

> When the calf is left with the cow three days or more, it is often more difficult to separate the pair. Excessive bawling, fussing, and breaking down fences occur when maternal urges are then denied, and the cow will fret excessively when separated from the calf, resulting in decreased milk production.

…Another welfare issue concerns the housing of calves. In the United States, it is most common to raise calves for about three months in individual pens or hutches to which the calf may be tethered. Although such hutches are an improvement over crates, since animals in fenced-in hutches can move freely, they are still offensive to many people, who dislike the restricted space and isolation from other animals.

Welfare Issues of Cows

Housing Systems

The dairy industry in the United States employs a wide variety of housing systems for dairy cattle, ranging from highly extensive, very traditional pasture systems to stanchion or tie-stall housing to free-stall housing. Positive and negative features relevant to welfare are associated with all systems, but some seem more problematic than others. The system of great concern is probably tie stalls, where the animals are tied in one place for long periods of time. Tie stalls are used almost exclusively in the Midwest and Northeast. Although the apparent historical motivation for tie stalls was concern for the well-being of the cattle as well as reduction of labor, with tie stalls allowing for ease of observation and inspection of the cows, the fact that the animals are unable to move and unable to engage in normal behavior, notably grooming, makes tie stalls a plausible and inevitable target for social concern.

Whereas a range cow walks more than 6,000 meters a day, a cow in a tie stall is clearly prevented from such exercise. In addition, the cow's social nature is frustrated by such housing systems. Getting up and lying down can also be a problem in poorly designed stalls. Many tie-stall operators let the cows out onto pasture or dry lots for one to five hours a day when weather permits but keep them inside during bad weather.

Many dairy cattle, especially in the West, are kept in dry-lot conditions, in outdoor dirt pens in groups. The cow can express her social nature and can exercise. The problems with dry lots are similar to problems with feedlots: lack of shade, lack of shelter from wind and snow, poor drainage, and general lack of protection from climatic extremes. Some farmers do provide shade and cooling with sprinklers. In general, cattle withstand cold stress better than heat stress.

Free stalls have gained in popularity since their invention in 1960. In such systems, the cows can be in their own bedded stalls and move freely into concrete or earth yards where they receive food and water. Poor flooring in these systems can lead to foot and leg problems. Given a choice, dairy cattle prefer other flooring over concrete.... Poor hygiene in the stalls can also cause mastitis and is an issue that should be addressed.

One problem with all these systems is that they fail to allow for grazing on pasture, an activity for which cattle have evolved and which, if permitted, they will spend eight to ten hours a day doing. (Indeed, one can argue that the domestication of cattle resulted precisely from their ability to convert forage into food consumable by humans.) Swedish legislation aimed at respecting the rights of animals following from their biological natures has stressed the need for cattle to graze and indeed granted cattle the right to graze in perpetuity. It is likely that public opinion in the United States similarly favors the grazing of cattle; few pastoral images are as powerful and pervasive as that of cows on pasture.

Some farmers pasture dry cows, but the keeping of milking cows on pasture has diminished, except in areas of the Southeast where climate and rainfall favor lush growth....

Castration, Dehorning, and Branding

As in beef cattle, dehorning is a problem, as is castration of hull calves; both issues have already been discussed. Most operators do not brand dairy cattle.

Tail-docking

Docking of tails in dairy cows has gained in popularity in the United States and Canada. It is alleged that tail-docking reduces mastitis and somatic cell counts (SCC). The docking is

often accomplished by elastrators, described in the discussion of beef cattle castration. Allegedly, the procedure is painless and keeps the cow from flinging manure.

Conversations with dairy specialists, dairy veterinarians, and a lactation physiologist have convinced me that there is absolutely no scientific basis for claims about the benefits of tail-docking. Problems with mastitis are largely a function of hygiene, arising when animals are regularly down in unclean stalls. Removing the tail is another example of attempting to handle a problem of human management by mutilating the animal – as in "devocalization of dogs, declawing of cats, and docking tails in piglets. In this situation, however, unlike the others, the procedure does not even solve the problem. Indeed, removing the tail causes suffering to the cow, since it can no longer deal with flies!

Not only is docking the tail, in fact, not curative; it can exacerbate the problem. The use of elastrators, contrary to the belief of some farmers, is quite painful. The procedure can also cause infection, death, and decreased milk production. In purely prudential risk-benefit terms, then, it is irrational to choose to dock the tails, and since there is no potential benefit from the procedure, the farmer is not rationally warranted in taking any risk whatsoever. The same point, of course, holds for surgical docking of the tail. Indeed, there is reason to believe that docking the tails is likely to increase the very problem that the farmer is trying to eliminate, namely, high somatic cell counts. Kilgour and others have reported that stress elevates SCC in dairy cattle, and the use of the elastrator and the subsequent pain and distress it causes the animal certainly represent a stressor, as does any ensuing infection. Furthermore, since stress results in immunosuppression, an animal experiencing the docking procedure is surely more prone than ever to mastitis, since its immune system is being compromised....

Mastitis and Lameness

…[L]ameness and mastitis are the two major welfare problems in dairy cattle and there is a positive correlation between the incidence of these diseases. Lameness has in turn been tied to high-protein and high-concentrate diets. Lameness can be reduced by hoof trimming and foot baths and by attention to flooring... A good deal of lameness is a result of laminitis.... Many of these problems can currently be handled with good husbandry and "cow smart" labor – the challenge, as in all modern agriculture, is to make the systems "idiot-proof...."

Downer Animals

The dairy industry is probably the primary source of "downer" animals, discussed earlier.... While increasing numbers of dairymen are beginning to realize that nothing is more erosive to the "contented cow" image of the dairy industry than transporting and then dragging a downer cow with a tractor or a loader to the kill floor, other elements of the industry have turned a blind eye to the problem. Most dairy downers are probably a result of calcium-phosporus imbalance leading to milk fever (hypocalcemia). Animals that are down should be killed on the farm and not transported...

The Human Environment

Much knowledge has accumulated, based on both practical experience and science, regarding human interaction with dairy cattle. This variable is fundamental both to milk

production and to cow well-being. Cattle are creatures of habit, and disrpuption of habits can be highly stressful. Indeed, Kilgour has shown that introduction into a new environment is more stressful for cattle than electric shock. Good stockmen respect this aspect of cow handling....

THE VEAL INDUSTRY

White veal production is to animal agriculture as the Draize test (where cosmetics or shampoos are put into rabbits' eyes to test for irritancy) is to animal research. Both are perceived by the public as examples of these activities at their worst. Like placing potential irritants into rabbits' eyes and scoring the resultant lesions for the sake of generating new cosmetics, what is seen as "torturing" calves to produce an expensive product consumed by a small portion of the population is unacceptable to the social ethic. I would guess that the average person sees white veal as a decadent product, analogous to the pate de foie gras produced by force-feeding geese whose feet have been nailed to a board....

My own experiences with public attitudes toward veal provide, I believe, a typical reflection of opinion. I travel and lecture extensively and mingle with a wide cross-section of the population, from ranchers to urbanites, from blue collar workers to college presidents. It is noteworthy that, across these populations, it is ethically correct – and mainstream – to assert that one does not eat veal, on humane grounds. Refusing to eat veal is not fringe or flaky; it is acceptable, exactly on par with refusing to wear fur. John Gibbons, [President Bill Clinton's]... science advisor, declared publicly that he does not eat veal for ethical reasons. A high USDA official told me that he, and about half his peers, similarly will not eat veal. The vast majority of western ranchers I talk to also disavow veal on ethical grounds.

Some years ago, I had a striking experience that underscores this point. I had been asked by the Colorado commissioner of agriculture to participate in a seminar on the issues of animal rights and animal welfare for the leaders of Colorado agriculture. Among the speakers was a drug company executive representing the Animal Industry Foundation, a group devoted to opposing the animal rights movement. He began his presentation by showing a short video called "The Other Side of the Fence," produced by the ASPCA. The video is highly critical of white veal production, arguing that just as human babies have needs, so do calves. Though we try to meet the needs of babies, we do not in the case of calves used for veal. His stated purpose in showing the tape was to demonstrate the sophisticated level of propaganda directed by animal groups against animal agriculture, in order to galvanize the audience into opposing such activity. A few hours later, I sat at lunch with the head of the Colorado Farm Bureau and the president of the Colorado Cattleman's Association. I asked them for their reactions to the film. The Cattleman's Association president replied as follows: "Well, it brought tears to my eyes. There is no cause to raise animals that way. If people want veal, we can kill some calves. We don't have to torture them. If I had to raise animals that way, I'd get the hell out of the business." The others at the table concurred.

This was not an isolated incident. I have yet to address a group of cattle ranchers who find the production of white veal acceptable. Indeed, if I were to transcribe the remarks generally made by the ranchers about veal into a typescript, one would probably assume from the text one was reading the opinions of extreme animal rightists! (I actually have such a transcript, based on a seminar I gave in Worland, Wyoming).

One could argue that the strong antipathy toward white veal production in the general public is a function of emotionalism, sentimentality, the "Bambi syndrome," the fact that calves

have “big soulful eyes,” and the like. But such a claim can surely not be made about ranchers. In their case, the distaste for veal production is a result of their understanding of the cattle telos, and their belief that nothing could be further from accommodating that telos than the raising of white veal….

Welfare Problems in Current Systems

Behavioral Deprivation

In an exhaustive paper published in Applied Animal Behavior Science in 1988. T.H. Friend and G.R. Dellmeier discuss the behavioral deprivation associated with current systems of veal production. They point out that “research has identified positive correlation between the degree of behavioral deprivation and physiological responses indicative of chronic stress, increased disease incidence and behavioral anomalies.” In their discussion of housing systems, they take as their point of departure the ethogram for cattle, that is, the comprehensive behavioral catalog for the species (Table 6.1).

Table 6.1 Major bovine ethogram components affected by calf housing and management systems

General postural behavior	Social behavior
Ingestive behavior	Explorative behavior
Locomotion/kinesis	Reproductive behavior
Sleeping/resting	Eliminative behavior
Body maintenance/grooming	Circadian/diurnal rhythms

By appealing to this table, one can assess the limitations of various systems…. [V]eal crates are an extreme example of maximum close individual confinement with significant curtailment of a variety of natural behaviors. Most of the behaviors listed on Table 6.1 are restricted, if not totally prevented, by this method. For example, such calves exhibit increased motivation for locomotion and social behavior and have a greater incidence of impaired locomotor ability…. [C]alves are housed in small enclosures where they cannot turn around and cannot groom the hind portion of their bodies, which calves normally do several times a day. This leads to significant frustration. Consequently, the calves groom excessively those parts of the body that they can reach, which in turn results in hairballs in the rumen.

Lying behavior is important for cattle. In crates, calves cannot assume certain standardly adopted lying postures, another deprivation that serves as a source of frustration. Not surprisingly, then, calves show a good deal of stereotypical behavior, a sign, as we discussed, of poor welfare….these behavioral indicators are buttressed by measures of both long- and short-term physiological stress responses.

Friend also stresses the thwarting of social behavior and play. He reminds us that social interaction is known to be a source of both physical and physiological comfort and that play,

which in calves is largely social, is a "sensitive indicator of overall general psychological as well as physical wellbeing." A similar point is true of exploration.

Friend argues a point applicable to all confinement agriculture, an observation also made by M.W. Fox. A sense of control – or even prediction – is essential to all animals….Confinement robs animals of control, which in turn diminishes their ability to cope with stressors. A confined animal has no control and cannot cope; it cannot scratch an itch, stretch a leg, chase a fly, or run from a perceived threat. This situation could result in a form of learned helplessness, a morally unacceptable stat in animals extensively studied by M.E.P. Seligman and others as a model for human depression. If we are in effect creating learned helplessness in veal calves, this is a prima facie reason to condemn such a system.

Diet

Two major dietary welfare problems are associated with the raising of white veal. First, because veal calves are "milk fed", that is, fed only milk or milk replacer and no roughage, the rumen and its microflora develop unnaturally, often resulting in abomasal ulcers and predisposing the animal to enteritis and indigestion from hairballs….According to Fraser and Broom, calves should be fed adequate roughage from the second week of life, a diet that would also help eliminate some behavioral anomalies growing out of the animals' failure to achieve oral satisfaction.

Second, in order to obtain white veal, producers must strictly limit the iron intake of the calves. The redness of beef is a function of haem compounds, which contain iron. Myoglobin is the haem compound in muscle; hemoglobin is the compound in blood. Webster has pointed out that one cannot produce white veal without feeding a diet that will certainly produce anemia in some calves….

An additional dietary problem generated by confinement rearing grows out of the system of feeding. Usually, the animals are fed twice a day from a bucket. This frustrates their normal sucking behavior and leads to behavioral anomalies. Furthermore, the animals tend to consume much more milk at the two feedings than they would consume at any of the four to ten feedings they would have if nursing, which in turn can cause digestive problems.

Flooring

Slatted floors are uncomfortable and severely restrict behavior.