

Journal of Food Law & Policy

Volume 19 | Number 2

Article 1

2023

Journal of Food Law & Policy - Fall 2023

Journal Editors

Follow this and additional works at: <https://scholarworks.uark.edu/jflp>



Part of the [Agriculture Law Commons](#), [Environmental Law Commons](#), and the [Food and Drug Law Commons](#)

Recommended Citation

Editors, J. (2024). Journal of Food Law & Policy - Fall 2023. *Journal of Food Law & Policy*, 19(2). Retrieved from <https://scholarworks.uark.edu/jflp/vol19/iss2/1>

This Entire Issue is brought to you for free and open access by the School of Law at ScholarWorks@UARK. It has been accepted for inclusion in Journal of Food Law & Policy by an authorized editor of ScholarWorks@UARK. For more information, please contact scholar@uark.edu.

Journal of FOOD & LAW POLICY

Volume Nineteen

Number Two

Fall 2023

Articles

RE-REGULATING DIETARY SUPPLEMENTS

Jessie L. Bekker, Alex Flores, & Michael S. Sinha

THE CONTRADICTION NATURE OF U.S. LAWS AND NUTRITION
PROGRAMS AND THEIR EFFECTS ON INFANT FEEDING

Lily Patel

GROWING AGRICULTURE LITERACY'S PRESENCE IN AMERICA'S CLASSROOMS

Emily Stone

Comments

CHEWING THE WELFARE CUD: A DIGESTED ANALYSIS OF A CONSUMER
VERSUS PRODUCER-DEFINED STANDARD OF WELFARE PRACTICES
IN ANIMALS RAISED FOR HUMAN CONSUMPTION

Caitlin C. Robb

FREE FOR ALL: PROPOSING LEGISLATION TO
ELIMINATE FOOD INSECURITY IN ARKANSAS PUBLIC SCHOOLS

A. Mills Bryant

A PUBLICATION OF THE UNIVERSITY OF ARKANSAS SCHOOL OF LAW

Journal of FOOD & LAW POLICY

Volume Nineteen

Number Two

Fall 2023

CONTENTS

ARTICLES

Re-Regulating Dietary Supplements.....*Jessie L. Bekker,
Alex Flores, & Michael S. Sinha* 1

The Contradictory Nature of U.S. Laws
and Nutrition Programs and Their
Effects on Infant Feeding.....*Lily Patel* 18

Growing Agriculture Literacy's
Presence in America's Classrooms.....*Emily Stone* 58

COMMENTS

Chewing the Welfare Cud:
A Digested Analysis of a Consumer
Versus Producer-Defined Standard of
Welfare Practices in Animals Raised
for Human Consumption.....*Caitlin C. Robb* 83

Free For All:
Proposing Legislation to
Eliminate Food Insecurity
in Arkansas Public Schools.....*A. Mills Bryant* 119

Journal of Food Law & Policy
University of Arkansas School of Law
1045 West Maple Street
Fayetteville, AR 72701
Phone: 479-575-2754
Fax: 479-575-3540

foodlaw@uark.edu

The *Journal of Food Law & Policy* is published twice annually by the University of Arkansas School of Law in Fayetteville, Arkansas.

Subscription Information: The *Journal of Food Law & Policy* is available to subscribers for \$34.00 per year. Subscribers may mail a check and contact information to the *Journal* offices. Changes of address should be sent by mail to the address above or to foodlaw@uark.edu. The *Journal* assumes each subscriber desires to renew its subscription unless the subscribers sends notification, in writing, before the subscription expires. Back issues may also be purchased from the *Journal*.

Citation Format: Please cite this issue of the *Journal of Food Law & Policy* as 19 J. FOOD L. & POL'Y 2 (2023).

Disclaimer: The *Journal of Food Law & Policy* is a student-edited University of Arkansas School of Law periodical.

Postmaster: Please send address changes to the *Journal of Food Law & Policy*, University of Arkansas School of Law, 1045 West Maple Street, Fayetteville, AR 72701.

Journal of Food Law & Policy

2023-2024 Editorial Board

CAITLIN ROBB
Editor-in-Chief

TORI MOORE
Executive Editor

BRANDON HARTMAN
Articles Editor

SKY TATE
Managing Editor

A. MILLS BRYANT
Lead Note & Comment Editor

ADRIAN HANNAH
Associate Note & Comment Editor

MARY CLAIRE LUZIETTI
Associate Editor

Members

ANALEIGH COATS

KATIE GUHMAN
JOHN THOMPSON

SAMUEL WILSON

Staff Editors

ALEXANDRA DONIHOO
EMILY McDONALD
WESLEY SOWELL

THOMAS HUBBARD
ALLYSON OLIVER
BENJAMIN SPEIGHT

MADELINE MCCULLOCH
DANIEL SEDRICK
CARTER WADE

Faculty Advisor

SUSAN SCHNEIDER

UNIVERSITY OF ARKANSAS
SCHOOL OF LAW
FACULTY AND PROFESSIONAL STAFF

ADMINISTRATION

CYNTHIA E. NANCE, B.S., M.A., J.D.,
*Dean and Nathan G. Gordon
Professor of Law*

TIFFANY R. MURPHY, B.A., J.D.,
*Associate Dean for Academic Affairs and
Professor of Law*

JAMES K. MILLER, B.S., B.A., J.D.,
Senior Associate Dean for Students

JILL WIEBER LENS, B.A., J.D.,
*Associate Dean for Research and Faculty
Development and Professor of Law
Robert A. Leflar Professor of Law*

SPENCER SIMS BOWLING, B.A., J.D.,
Assistant Dean of Admissions

TRACY DEFFEBAGH, B.A.,
Director of Admissions

ERIN FELLER, B.B.A., M.B.A.,
*Director of Development and External
Relations*

GRENEA JOHNSON, B.A., M.S., JD
Director of Community Engagement

EMILY JUAREZ, B.A., J.D.,
Director of Career Services

ASHLEY U. MENENDEZ, B.A., J.D.,
*Director of Externships; Assistant
Professor of Practice*

TORI JORDAN-PERCIFIELD.,
Director of Bar Success

LYNN STEWART, B.S., B.S., C.P.A.,
M.B.A.,
*Director of Budget, Facilities, and
Human Resources*

FACULTY

ROBERT ANDERSON J.D., PH.D.,
PROFESSOR OF LAW

HOWARD W. BRILL, A.B., J.D., LL.M.,
*Vincent Foster University Professor of
Legal Ethics & Professional Responsibility*

BLAIR DRUHAN BULLOCK, B.S, J.D., PH.D.,
Assistant Professor of Law

CARL J. CIRCO, B.A., J.D.,
*Ben J. Altheimer Professor of Legal
Advocacy*

STEPHEN CLOWNEY, B.A., J.D.,
Professor of Law

UCHE EWELUKWA, DIP. L., LL.B., B.L.,
LL.M., LL.M.,
E.J. Ball Professor of Law

AMANDA FISHER, B.A., J.D.,
Assistant Professor of Law

WILLIAM E. FOSTER, B.S., J.D., LL.M.,
*Arkansas Bar Foundation Professor;
Associate Professor of Law*

SHARON E. FOSTER, B.A., J.D., LL.M.,
PH.D.,
Sidney Parker Davis, Jr. Professor of Law

CAROL R. GOFORTH, B.A., J.D.,
*University Professor and Clayton N. Little
University Professor of Law*

SARA R. GOSMAN, B.S., J.D., LL.M.,
Associate Professor of Law

CALEB NATHANAEL GRIFFIN, B.A., J.D.,
Assistant Professor of Law

AMANDA HURST, B.A., J.D.,
Assistant Professor of Law

CHRISTOPHER R. KELLEY, B.A., J.D.,
LL.M.,
Associate Professor of Law

ANN M. KILLENBECK, B.A., M.A., M.ED.,
J.D., PH.D.,
Professor of Law

IDO KILOVATY, B.A., J.D., LL.M., LL.B.,
Associate Professor of Law

AMELIA MCGOWAN, B.A., M.A., J.D.,
*Assistant Clinic Professor;
Director of Immigration Clinic*

KELLY NUCKOLLS, B.A., J.D. LL.M.,
*Visiting Assistant Professor of Law
Assistant Director of LL.M. Program*

G. ALEX NUNN, B.A., J.D., PH.D.,
Assistant Professor of Law

DANIEL RICE, B.A., J.D.,
Assistant Professor of Law

SUSAN A. SCHNEIDER, B.A., J.D., LL.M.,
*Director of the LL.M. Program in
Agricultural & Food Law; William H.
Enfield Professor of Law*

ANNIE B. SMITH, B.A., J.D.,
Associate Professor of Law

DANIELLE WEATHERBY, B.A., J.D.,
Professor of Law

JACOB WORLOW, B.A., J.D.,
*Visiting Professor and Director of the
Criminal Law Clinic*

ROBERT & VIVIAN YOUNG LAW LIBRARY

DANIEL BELL, B.A., J.D., M.S.L.S.,
*Faculty Services and Outreach Librarian;
Interim Director of Information Technology
Services*

CATHERINE P. CHICK, B.A., M.L.S.,
Reference Librarian

DOMINICK J. GRILLO, B.A., J.D., M.S.L.S.,
Electronic Services Librarian

STEVEN R. PROBST, B.A., J.D., M.S.L.I.S.,
*Head of Public Services; Interim Director
of Young Law Library*

MONIKA SZAKASITS, B.A., J.D., M.S.L.I.S.,
Associate Director

COLLEEN WILLIAMS, B.A., J.D., M.L.I.S.,
Associate Librarian

*The University of Arkansas School of Law is a member of the Association of American Law Schools
and is accredited by the American Bar Association.*

*American Bar Association Council of the Section of Legal Education and Admissions to the Bar,
American Bar Association, 321 N. Clark Street, 21st Floor, Chicago, IL 60654, 312.988.6738,
legaled@americanbar.org*

Re-Regulating Dietary Supplements

Jessie L. Bekker,^{*} Alex Flores,^{**} & Michael S. Sinha^{***}

In 1994, Congress introduced the Dietary Supplement Health and Education Act (DSHEA) to create a regulatory framework for the dietary supplement industry. Since the passage of DSHEA nearly thirty years ago, US adults have steadily increased their annual consumption of dietary supplements. The once \$4 billion industry comprising approximately 4,000 products has swelled to a \$40 billion trade with anywhere from 50,000 to 80,000 dietary supplements available over-the-counter.

Despite the increased market size of dietary supplements, the Food and Drug Administration's (FDA) pre-market authority to regulate the introduction of dietary supplements into the stream of commerce has remained subdued. Under DSHEA, the FDA has limited authority to review dietary supplements before entering the market. Unlike pharmaceuticals, which must be proven safe and effective prior to approval and marketing, dietary supplements can be sold to consumers without such reassurances. Instead, the FDA's authority is generally limited to post-market enforcement under DSHEA. In fact, the FDA lacks the express authority to remove dietary supplements from the market unless it can establish that the products are unsafe, adulterated, mislabeled, or misbranded.

Given the morbidity and mortality associated with adulterated dietary supplements and the challenges in addressing the latest fads before they cause harm, Congress must give the FDA the power it needs to be proactive. The FDA requires tools to regulate the dietary supplement industry and remove harmful dietary supplements from the market. We call on Congress to amend DSHEA

^{*} Jessie L. Bekker, JD, MHA is a 2022 graduate of Saint Louis University School of Law and College for Public Health and Social Justice. She currently works as a health care attorney at Burr & Forman LLP in Birmingham, Alabama.

^{**} Alex Flores is a third-year law student at Saint Louis University School of Law, concentrating in Health Law.

^{***} Michael S. Sinha, MD, JD, MPH is Assistant Professor of Law in the Center for Health Law Studies at Saint Louis University School of Law.

The authors would like to thank students in the Fall 2022 FDA Law and Policy class at Saint Louis University School of Law for valuable feedback on earlier versions of this project.

to grant the FDA the express statutory authority to (1) regulate dietary supplements prior to entering the market; (2) require manufacturers to submit Supplement Labels to the FDA for pre-market review; (3) require that supplements undergo both pre-market composition testing and post-market randomized composition testing; (4) strengthen agency authority to remove adulterated dietary supplements from the market; and (5) establish an excise tax on dietary supplements.

I. Introduction

On a box covered in pink emblems, Dr. Reade Slim Sense read: “Clinically proven fat burner for healthy and safe weight loss.”¹ Despite touting “100% natural, non-GMO ingredients,” Dr. Reade Slim Sense came under Food and Drug Administration (FDA) scrutiny in July 2022, when the agency issued a public notification warning consumers that it confirmed, through laboratory analysis, the dietary supplement contained a drug ingredient linked to “psychiatric disturbances,” “impairments in attention or memory,” and at least one type of cancer.² The supplement stayed on the market, and by January 2023, the FDA issued a warning letter to distributor Adam’s Secret about Dr. Reade and other supplements sold on the distributor’s website, which contained drug ingredients.³ But even then, the FDA lacked the power to immediately pull these hidden drugs from shelves. In its warning letter, the FDA told the distributor, “It is *your responsibility* to ensure that your firm complies with all requirements of federal law, including FDA regulations.”⁴

Nearly 58% of American adults report using dietary supplements, and the percentage of consumers increases with age.⁵ Since 1994, the once \$4 billion industry comprising approximately 4,000 unique products has swelled to a \$40 billion trade with anywhere from 50,000 to 80,000 dietary supplements available over-

¹ *Pub. Notification: Dr. Reade Slim Sense contains hidden drug ingredient*, FOOD & DRUG ADMIN. (July 15, 2022), <https://www.fda.gov/drugs/medication-health-fraud/public-notification-dr-reade-slim-sense-contains-hidden-drug-ingredient>.

² *Id.*

³ *See Warning Letter: HIS Enter. Inc dba Adam’s Secret USA, LLC*, FOOD & DRUG ADMIN. (Jan. 10, 2023), <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/his-enterprise-inc-dba-adams-secret-usa-llc-646494-01102023>.

⁴ *Id.* (emphasis added).

⁵ *See MISHRA SURUCHI ET AL., DIETARY SUPPLEMENT USE AMONG ADULTS: UNITED STATES, 2017-2018 399* (2021), <https://www.cdc.gov/nchs/products/databriefs/db399.htm#print>.

the-counter in drug stores, groceries, and gas stations.⁶ Often, supplements are touted as all-natural additions to support a healthy lifestyle. Seemingly harmless vitamins, minerals, and herbs are marketed to provide essential nutrients, boost the immune system, prevent chronic diseases, treat illnesses, and even lower the risk of developing cancer.⁷ But in other cases, patients select products that could be detrimental to their health.⁸ Notably, warnings from the FDA and independent researchers state that many supplements, sold under the guise of promoting weight loss and sexual enhancement, contain unapproved pharmaceutical ingredients, from laxatives to antidepressants to the male enhancement drug sildenafil [Viagra].⁹

Today's legal framework does not support a system in which the FDA, tasked with regulating dietary supplements, can assure their safety. The FDA is taking steps to reign in the multi-billion-dollar industry, but under the Dietary Supplement Health and Education Act of 1994 (DSHEA)—the law granting the FDA authority to regulate dietary supplements—the FDA's authority is practically limited to post-market review of supplement safety. In a game of whack-a-mole, the FDA primarily relies on voluntary consumer and provider reports of severe adverse effects of a particular dietary supplement to learn of the potentially detrimental effects of a dietary ingredient or the pharmaceutical adulteration of a supplement.¹⁰

⁶ See *Statement from FDA Commissioner Scott Gottlieb, M.D., on The Agency's New Efforts to Strengthen Regulation of Dietary Supplements by Modernizing and Reforming FDA's Oversight*, FOOD & DRUG ADMIN. (Feb. 11, 2019), <https://www.fda.gov/news-events/press-announcements/statement-fda-commissioner-scott-gottlieb-md-agencys-new-efforts-strengthen-regulation-dietary>.

⁷ See *id.*

⁸ See generally *Dietary Supplements: What You Need to Know*, NAT'L INST. OF HEALTH OFF. DIETARY SUPPLEMENTS, <https://ods.od.nih.gov/factsheets/WYNTK-Consumer/> (last updated Sept. 3, 2020).

⁹ See Jenna Tucker et al., *Unapproved Pharmaceutical Ingredients Included in Dietary Supplements Associated With US Food and Drug Administration Warnings*, JAMA NETWORK, Oct. 12, 2018, at 4-5; see also *Public Notification: CHU Dietary Supplement Product Contains Hidden Drug Ingredients*, FOOD & DRUG ADMIN. (Oct. 9, 2019), <https://www.fda.gov/drugs/medication-health-fraud/public-notification-chu-dietary-supplement-product-contains-hidden-drug-ingredients>.

¹⁰ See *CFSAN Adverse Event Reporting System (CAERS)*, FOOD & DRUG ADMIN., <https://www.fda.gov/food/compliance-enforcement-food/cfsan-adverse-event-reporting-system-caers> (last visited Sept. 8, 2023).

By the FDA's own admission, its post-market measures do not keep unsafe products out of consumers' hands.¹¹ In its proposed FY2024 budget, the FDA suggested modernizing DSHEA "to provide for a transparent marketplace, help facilitate a risk-based regulation of dietary supplements, and clarify FDA's authorities related to products marketed as 'dietary supplements.'"¹² Specifically, in addition to "clarifying its authorities," the FDA proposed to "require all dietary supplements to be listed with the FDA."¹³ The proposal is a step in the right direction but insufficient to reign in a largely unregulated industry. We call on Congress to amend DSHEA to grant the FDA the express statutory authority to regulate dietary supplements prior to entering the market by requiring manufacturers to submit Supplement Labels to the FDA for pre-market review; require that supplements undergo both pre-market composition testing and post-market randomized composition testing; provide the FDA the express authority to remove adulterated dietary supplements from the market; and establish an excise tax on dietary supplements.

II. Background

In *Nutrilab, Inc. v. Schweiker*, issued in 1983, the Seventh Circuit drew a bright line between food and dietary supplements,¹⁴ supporting the FDA's stance that it had regulatory power over supplements. In *Nutrilab*, a manufacturer sued the FDA over a request to pull its starch blocker from shelves after the agency classified the weight loss supplement as a drug, which would require agency approval prior to sale in the US.¹⁵ The starch blocker was extracted from raw kidney beans and sold in pill form. Purportedly, when taken with a meal, it disabled the alpha-amylase enzyme that digested starch, therefore preventing the body's metabolism of starch-derived calories.¹⁶ The court rejected the plaintiff's argument that its derivation from kidney beans, a food, made starch blockers a food, too, finding that under the "common sense" definition, starch blockers could not be food because they were not used for their "taste,

¹¹ See *Weight Loss, Male Enhancement and Other Products Sold Online or in Stores May be Dangerous*, Food & Drug Admin., <https://www.fda.gov/consumers/consumer-updates/weight-loss-male-enhancement-and-other-products-sold-online-or-stores-may-be-dangerous> (last updated Dec. 8, 2021).

¹² *Summary of FY 2024 Legis. Proposals*, FOOD & DRUG ADMIN., <https://www.fda.gov/media/166049/download> (last visited Aug. 25, 2023).

¹³ *Id.*

¹⁴ See *Nutrilab, Inc. v. Schweiker*, 713 F.2d 335, 337 (7th Cir. 1983).

¹⁵ See *id.* at 335.

¹⁶ See *id.* at 335-36.

aroma, or nutritive value.”¹⁷ Instead, the court noted, “they are taken for their ability to block the digestion of food and aid in weight loss.”¹⁸

In 1994, Congress passed DSHEA, creating a new regulatory framework for dietary supplements and establishing standards for the dietary supplement industry.¹⁹ With DSHEA’s passage, pills like starch blockers became dietary supplements, and the FDA’s clear delineation suddenly became much murkier.²⁰ DSHEA defines a dietary supplement as any product, excluding food or drugs, that contains a “vitamin, mineral, herb, or amino acid” that is “intended to supplement the diet” and is “labeled as a dietary supplement.”²¹ Under DSHEA, dietary supplement manufacturers and distributors are responsible for evaluating safety and effectiveness and labeling their products before marketing.²² Dietary supplements can be classified solely as foods, even if they make health-related claims, though the FDA has little oversight authority over those claims.²³

A manufacturer that makes a claim about the effects of the dietary supplement on a structure or function of the human body, a claim of a benefit related to classical nutrient deficiency disease, or a claim of general well-being in the labeling of a dietary supplement, must substantiate its claims and assert that its claims are “truthful and not misleading.”²⁴ The requirement mirrors a ban against adulterated or misbranded dietary supplements.²⁵ A dietary supplement is deemed adulterated if it contains a poisonous or deleterious substance that is injurious to health, poses an imminent hazard to public safety or health, or if the dietary supplement has been prepared, packed, or

¹⁷ *Id.* at 337-38.

¹⁸ *Id.* at 338.

¹⁹ See Dietary Supplement Health & Educ. Act of 1994, Pub. L. No. 103-417, 108 Stat. 4325 (codified as amended in scattered sections of 21 U.S.C.).

²⁰ PETER BARTON HUTT ET AL., FOOD & DRUG LAW 88-9 (4th ed. 2014).

²¹ See Dietary Supplement Health & Education Act, Pub. L. No. 103-417, Sec. 3, 108 Stat. 4327 (1994) (codified as § 21 U.S.C. § 321(ff)).

²² See Dietary Supplement Health & Education Act, Pub. L. No. 103-417, Sec. 8, 108 Stat. 4331 (1994) (codified as § 21 U.S.C. § 350(b)).

²³ See Lewis A. Grossman, *Food, Drugs, and Droids: A Historical Consideration of Definitions and Categories in American Food and Drug Law*, 93 CORNELL L. REV. 1091, 1134 (2008); *Dietary Supplements: What Are They and How Are They Regulated?*, PEW CHARITABLE TRUSTS (Oct. 2017), https://www.pewtrusts.org/-/media/Assets/2017/10/HCP_Dietary_Supplements_What_Are_They_and_How_Are_They_Regulated_final.pdf.

²⁴ 21 U.S.C. § 343(6)(B).

²⁵ 21 U.S.C. §§ 343(a), 343(s)(1)-(2), 352(f)(1), 353(b)(1)(A); see, e.g., *Warning Letter: Anabolic Laboratories Inc.*, FOOD & DRUG ADMIN. (Nov. 14, 2022), <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/anabolic-laboratories-inc-636308-11142022>.

held under unsanitary conditions.²⁶ However, a dietary supplement may also be deemed adulterated if it omits any material ingredient.²⁷ The statute does not include the presence of drug ingredients in its definition of “adulteration.” Instead, the FDA often labels supplements that contain drug ingredients as an illegal sale of an unapproved drug product or a misbranded drug.²⁸

The definition of dietary supplement explicitly excludes any new drug or drug authorized for investigation that was not, prior to its approval as a drug, marketed as a dietary supplement or food.²⁹ Therefore, where a supplement contains an active pharmaceutical ingredient, it is transformed into an unapproved drug and subject to recall.³⁰ A product is misbranded if it contains a drug, but fails to include “adequate directions for use,” which for prescription drug products can only be accomplished “safely at the direction, and under the supervision, of a licensed practitioner.”³¹ Dietary supplements, additionally, are misbranded if they do not list all ingredients or are “false or misleading.”³²

Once the FDA deems a dietary supplement adulterated or misbranded, DSHEA authorizes the FDA to take action against the manufacturer that introduced the supplements into the market.³³ Generally, the FDA’s first step is to issue a “Warning Letter” notifying the dietary supplement manufacturer that its product is adulterated or misbranded while urging a “voluntary recall.”³⁴ When the FDA requests a voluntary recall, the product remains available to

²⁶ See 21 U.S.C. §§ 342(a)(1)–(4), (C).

²⁷ See *id.* at § 342(b)(1).

²⁸ See U.S. GOV’T ACCOUNTABILITY OFF., GAO-09-250, *DIETARY SUPPLEMENTS: FDA SHOULD TAKE FURTHER ACTIONS TO IMPROVE OVERSIGHT AND CONSUMER UNDERSTANDING* 55 (2009).

²⁹ See 21 U.S.C. § 321(ff)(3)(B)(ii) (The Secretary has discretion to issue a regulation overriding this general rule).

³⁰ See, e.g., *Jongu 4308 Issues Voluntary Nationwide Recall of Hydro Pineapple Burn Due to the Presence of Undeclared Sibutramine*, U.S. FOOD & DRUG ADMIN. (Aug. 11, 2021), <https://www.fda.gov/safety/recalls-market-withdrawals-safety-alerts/jongu-4308-issues-voluntary-nationwide-recall-hydro-pineapple-burn-due-presence-undeclared>.

³¹ 21 U.S.C. § 352(f)(1); *Warning Letter: Anabolic Lab ’ys Inc.*, U.S. FOOD & DRUG ADMIN. (Nov. 14, 2022), <https://www.fda.gov/inspections-compliance-enforcement-and-criminal-investigations/warning-letters/anabolic-laboratories-inc-636308-11142022>.

³² 21 U.S.C. § 352(a), (s)(1)–(s)(2)(A)(i).

³³ See *Dietary Supplements*, U.S. FOOD & DRUG ADMIN. (2023) <https://www.fda.gov/food/dietary-supplements>.

³⁴ Pieter A. Cohen, *The FDA and Adulterated Supplements—Dereliction of Duty*, JAMA NETWORK OPEN, Oct. 12, 2018, at 1.

consumers until the manufacturer complies. If the manufacturer complies with the request, the FDA publicizes the recall notice.³⁵

Even in the face of a voluntary recall, a bad actor could theoretically rebrand the same product or sell a subsequent, tainted batch.³⁶ If the dietary supplement has been extensively distributed or poses a serious health hazard, the FDA can also issue a public notice of the potential dangers of consuming the adulterated supplement.³⁷ If a dietary supplement manufacturer declines to issue a voluntary recall, the FDA can issue mandatory recalls or product seizures of an adulterated supplement from the market, but only if the agency can establish that the dietary supplement is harmful.³⁸ Finally, the FDA can seize dietary supplements that are imported from international manufacturers or seek an injunction against manufacturers and distributors that violate the law.³⁹

Unlike pharmaceuticals, which must undergo clinical trials demonstrating their safety and effectiveness prior to FDA approval, dietary supplements are not required to demonstrate either.⁴⁰ DSHEA does not grant the FDA the authority to require pre-market approval for dietary supplements entering the market or to conduct post-market research studies that would corroborate the safety or effectiveness of the dietary supplement.⁴¹ In general, the FDA's authority is limited to post-market enforcement of DSHEA.⁴²

³⁵ *Id.*; Interestingly, the Recall Notice is published under “Drug” recalls rather than “Food” recalls on the FDA’s website. See *Recalls of Foods and Dietary Supplements*, FOOD & DRUG ADMIN., <https://www.fda.gov/food/recalls-outbreaks-emergencies/recalls-foods-dietary-supplements> (last updated Jan. 25, 2022).

³⁶ See Pieter A. Cohen et al., *Recalls, Availability, and Content of Dietary Supplements Following FDA Warning Letters*, 328 JAMA NETWORK 393, 394 (2022).

³⁷ See *id.*

³⁸ See Charles M. White, *Dietary Supplements Pose Real Dangers to Patients*, 54 ANNALS OF PHARMACOTHERAPY 815, 815-17 (2020).

³⁹ See U.S. GOV’T ACCOUNTABILITY OFF., *supra* note 28, at 55.

⁴⁰ See Roseann B. Termini & Vincent A. Sannuti, *A Look Back at the DSHEA – Over 25 Years Later: The Dangers of a Reactionary Approach to Dietary Supplement Regul.*, 22 QUINNIPIAC HEALTH L. J. 171, 181 (2019).

⁴¹ See George Kennett, *Time for Change: Stepping up the FDA’s Regulation of Dietary Supplements to Promote Consumer Safety and Awareness*, 33 J.L. & HEALTH 47, 62 (2019); Peter J. Cohen, *Science, Politics, and the Regulation of Dietary Supplements: It’s Time to Repeal DSHEA*, 31 AM. J.L. & MED. 175, 211-212 (2005).

⁴² See Ralph L. Quinones, et al., *The Regulation of Dietary Supplements Within the United States: Flawed Attempts at Mending a Defective Consumer Safety Mechanism*, 47 J. OF CONSUMER AFFS. 328, 334 (2013).

However, “new dietary ingredients” (NDIs) are subject to FDA review in the first seventy-five days of availability.⁴³ Dietary supplements that contain NDIs—defined as ingredients introduced after October 15, 1994, the effective date of DSHEA—are deemed adulterated unless the dietary supplement contains only known dietary ingredients that have been present in the food supply, have a history of use, or have other evidence establishing that the dietary ingredient is expected to be safe.⁴⁴ Dietary supplement manufacturers introducing an NDI into the market must notify the FDA, within seventy-five days of introducing the supplement into interstate commerce, of the basis on which the manufacturer relied to conclude the NDI was reasonably expected to be safe.⁴⁵ The dietary supplement containing the NDI is deemed adulterated if such pre-market notification is not submitted to the FDA.⁴⁶

What the FDA cannot do is require testing of a dietary supplement before marketing to confirm it contains only those ingredients that it advertises.⁴⁷ Manufacturers must affirm that they comply with dietary supplement safety standards prior to selling their products.⁴⁸ This dearth of regulatory authority creates an opportunity for bad actors to supply consumers with tainted supplements with limited recourse.

Many, including the FDA itself, cast doubt on the effectiveness of current recall and public notice measures. Research shows consumers continue to buy products after voluntary recalls are issued.⁴⁹ One study found that of thirty-one products the FDA tested that contained ephedrine or amphetamine analogues, almost a third of them were still on the market *six years* after the FDA issued warning letters.⁵⁰ By contrast, only 3% of the products were voluntarily recalled by manufacturers following receipt of an FDA

⁴³ See *New Dietary Ingredients in Dietary Supplements – Background for Industry*, FOOD & DRUG ADMIN., <https://www.fda.gov/food/new-dietary-ingredients-ndi-notification-process/new-dietary-ingredients-dietary-supplements-background-industry> (last updated Feb. 09, 2023).

⁴⁴ See 21 U.S.C. § 350b(a).

⁴⁵ See *New Dietary Ingredients in Dietary Supplements – Background for Industry*, *supra* note 43.

⁴⁶ See *id.*

⁴⁷ See FDA 101, FOOD & DRUG ADMIN., <https://www.fda.gov/consumers/consumer-updates/fda-101-dietary-supplements> (last updated June 2, 2022).

⁴⁸ See *id.*

⁴⁹ See Cohen, *supra* note 36; Pieter A. Cohen et al., *Prohibited Stimulants in Dietary Supplements After Enforcement Action by the US Food and Drug Admin.*, 178 JAMA NETWORK. 1721, 1721 (2018).

⁵⁰ See Cohen, *supra* note 36.

warning letter.⁵¹ Another study examining twenty-seven dietary supplements recalled from 2009 through 2012 found that two-thirds were still available for purchase post-recall.⁵² Some of those supplements contained both the pharmaceutical ingredient the FDA identified, *plus others*.⁵³ Yet another study examined the prevalence of one supplement, Pai You Guo, recalled in 2009 because it contained the pharmaceutical ingredients sibutramine and phenolphthalein.⁵⁴ Once again, voluntary recalls were deemed ineffective; of all respondents, almost half did not even *start* using Pai You Guo until after it was recalled, and over six in ten continued purchasing it after a recall.⁵⁵

The FDA warned consumers, after testing seventy products sold on popular e-commerce platforms such as Amazon, eBay, and Walmart.com, that most products contained undeclared pharmaceutical ingredients, including fluoxetine [Prozac], an antidepressant.⁵⁶ The Dr. Reade supplement that touted its “100% natural” ingredients and scientific formulation contained lorcaserin [Belviq], a weight-loss drug the manufacturer voluntarily pulled from US markets at the FDA’s request after testing showed negative psychiatric and memory effects.⁵⁷ Without additional product and batch testing, consumers have no way of determining whether subsequent batches of the Dr. Reade weight loss supplement, or any other supplement, still contain banned ingredients.

The FDA admits that this post-market whack-a-mole is not particularly effective at stopping adulterated supplements from landing in consumers’ hands. In a consumer update on its website, the FDA states, “It is clear from the results of our decade of testing that retailers and distributors, including online marketplaces, do not effectively prevent these types of potentially harmful products from being sold to consumers.”⁵⁸ Given that the FDA’s reactive measures

⁵¹ *See id.*

⁵² Pieter A. Cohen et al., *Presence of Banned Drugs in Dietary Supplements Following FDA Recalls*, 312 JAMA NETWORK 1691, 1691 (2014).

⁵³ *See id.*

⁵⁴ *See* Pieter A. Cohen et al., *Use of a Pharmaceutically Adulterated Dietary Supplement, Pai You Guo, Among Brazilian-Born Women in the United States*, 27 J. GENERAL INTERNAL MED. 51, 51 (2014).

⁵⁵ *See id.* at 53.

⁵⁶ *See Weight Loss, Male Enhancement and Other Products Sold Online or in Stores May be Dangerous*, *supra* note 11.

⁵⁷ *See Public Notification: Dr. Reade Slim Sense Contains Hidden Drug Ingredient*, *supra* note 1.

⁵⁸ *Tainted Sexual Enhancement Products*, FOOD & DRUG ADMIN., <https://www.fda.gov/drugs/medication-health-fraud/tainted-sexual-enhancement-products> (last updated Aug. 22, 2023).

are ineffective, Congress must give the FDA the power it needs to act proactively.

III. The Need For Legislative Reform

The FDA's lack of pre-market authority over dietary supplements has resulted in the introduction of harmful products into the stream of commerce.⁵⁹ Nationwide, over 23,000 emergency department visits per year are attributable to the use of dietary supplements.⁶⁰ Of those emergency department visits, 65.9% involved the consumption of herbal or complementary nutritional products.⁶¹ Herbal and dietary supplements now account for 20% of hepatotoxicity cases in the United States, with incidence on the rise.⁶² The greatest concern, however, is attributed to weight loss and energy supplements, which represented 71.8% of all supplement-related adverse events.⁶³

One of the most infamous dietary supplements removed from the market was DMAA (1,3-dimethylamylamine), an amphetamine derivative marketed as a tool to enhance sports performance and promote weight loss.⁶⁴ In 2012, the FDA issued warning letters to several manufacturers of DMAA-containing products to cease manufacture and sale after it received over one hundred reports of illnesses, including six deaths.⁶⁵ One of those manufacturers, USPlabs, sold the popular workout and weight loss supplements, Jack3d and OxyELITEPro.

Between February 2012 and February 2014, the FDA received 114 reports of adverse events involving the consumption of OxyELITEPro.⁶⁶ Out of the 114 adverse event reports received, 48%

⁵⁹ See Amy Hudson, et al., *A Review of the Toxicity of Compounds Found in Herbal Dietary Supplements*, 84 PLANTA MEDICA 613, 614-15, 625 (2018).

⁶⁰ See Andrew I. Geller, et al., *Emergency Department Visits for Adverse Events Related to Dietary Supplements*, 373 NEW ENG. J. MED. 1531, 1533 (2015).

⁶¹ See *id.* at 1535.

⁶² See Victor J. Navarro, et al., *Liver Injury from Herbal and Dietary Supplements*, 65 HEPATOLOGY 363, 364-65 (2017).

⁶³ See Geller, *supra* note 60, at 1536.

⁶⁴ See *DMAA in Products Marketed as Dietary Supplements*, FOOD & DRUG ADMIN. (Aug. 2018), <https://www.fda.gov/food/dietary-supplement-products-ingredients/dmaa-products-marketed-dietary-supplements>.

⁶⁵ See Harris R. Liberman, et al., *Surveillance of the Armed Forces as a Sentinel System for Detecting Adverse Effects of Dietary Supplements in the General Population*, 21 PUB. HEALTH NUTRITION 882, 883 (2017).

⁶⁶ See Karl C. Klontz et al., *The Role of Adverse Event Reporting in the FDA Response to a Multistate Outbreak of Liver Disease Assoc. 'ed with a Dietary Supplement*, 130 PUB. HEALTH REP. 526, 526 (2015).

of OxyELITEPro consumers described signs and symptoms of liver damage.⁶⁷ Of those, 60% were hospitalized and three underwent liver transplantation.⁶⁸ The FDA issued warning letters to USPlabs, urging them to initiate a voluntary recall of their products.⁶⁹ In response to those warning letters, USPlabs replaced DMAA with aegeline, an NDI with a similar composition to DMAA, failing to notify the FDA as required by law.⁷⁰ USPlabs introduced the aegeline-containing OxyELITEPro into the market and continued to sell OxyELITEPro until USPlabs voluntarily removed it from the market in November 2013.⁷¹

The high volume and severity of reports led to a multi-agency investigation spearheaded by the FDA and the Department of Justice (DOJ). In 2020, a federal court in Texas sentenced two former USPlabs executives to prison and ordered USPlabs to pay \$4.7 million in criminal forfeiture.⁷² The two former USPlabs executives were found guilty of conspiracy to introduce misbranded food into interstate commerce after they imported substances into the US from China with false and misleading labeling to avoid law enforcement and regulatory attention.⁷³

Despite well-documented reports of harmful dietary supplements sold on US markets, Congress has been reluctant to introduce new legislation granting pre-market authority to the FDA to ensure the safety of dietary supplements before they become available to consumers.⁷⁴ Antiquated legislation and congressional inaction have resulted in numerous calls for legislative reform by scholars, health care professionals, and industry officials.⁷⁵ Unsurprisingly, the dietary supplement industry argues that tighter control over the industry would frustrate innovation, delay the introduction of dietary supplements into the stream of commerce, and

⁶⁷ See *id.* at 529.

⁶⁸ See *id.*

⁶⁹ See Natasha Singer & Peter Lattman, *F.D.A. Sends Warning Letters to 10 Marketers of 'Workout Boosters'*, N.Y. TIMES, Apr. 12, 2012 (§ B), at 2.

⁷⁰ Klontz et al., *supra* note 66, at 527.

⁷¹ See *id.*

⁷² See *Two Individuals and Two Cos. Sent'ed in Scheme to Fraudulently Sell Popular Dietary Supplements*, U.S. DEP'T OF JUST. (Oct. 15, 2020), <https://www.justice.gov/opa/pr/two-individuals-and-two-companies-sentenced-scheme-fraudulently-sell-popular-dietary>.

⁷³ See *id.*

⁷⁴ See *AMA Policy Calls for Increased Regulation of Dietary Supplements*, AM. MED. ASS'N. (Nov. 18, 2020), <https://www.ama-assn.org/press-center/press-releases/ama-policy-calls-increased-regulation-dietary-supplements>.

⁷⁵ See *id.*

increase costs for consumers.⁷⁶ Even if proven to be true, such claims should not outweigh the public's interest in ensuring dietary supplements on the market are safe.

IV. Proposal

To achieve the FDA's goal of ensuring the safety of available dietary supplements, we call on Congress to grant the FDA the express statutory authority to regulate dietary supplements prior to entering the market. Specifically, the FDA should be able to require manufacturers to submit Supplement Labels to the FDA for pre-market review—this must include pre-market composition testing followed by post-market randomized composition testing performed by an authorized laboratory. The FDA must also be given express authority to swiftly remove adulterated dietary supplements from the market and to establish an excise tax on dietary supplements.

Undoubtedly, this proposal will require resources and political will to implement. Nonetheless, public need and desire for greater oversight appears to be mounting⁷⁷ as the FDA struggles to keep consumers safe from harmful dietary ingredients and adulterated products. In March 2023, the FDA launched a new Dietary Supplement Ingredient Directory, where it posts ingredients commonly found in dietary supplements about which the FDA previously warned consumers, including links to those warnings.⁷⁸ Moreover, the industry's seemingly exponential growth and real risk of harm provide sufficient justification for implementing greater controls.

⁷⁶ See *Dietary Supplement Indus. Argues 2016 Guidance Contrary to DSHEA*, NAT. PRODS. INSIDER (Dec. 4, 2016),

<https://www.naturalproductsinsider.com/supplement-regulations/dietary-supplement-industry-argues-2016-guidance-contrary-to-dshea>.

⁷⁷ See Kathy Talkington, *Stronger Fed. Oversight of Dietary Supplements Will Protect Consumers from Unsafe Prods.*, PEW TRUSTS (Jan. 26, 2023), <https://www.pewtrusts.org/en/research-and-analysis/articles/2023/01/26/stronger-federal-oversight-of-dietary-supplements-will-protect-consumers-from-unsafe-products>.

⁷⁸ See *FDA Launches New Directory of Ingredients Used in Prods. Marketed as Dietary Supplements*, FOOD & DRUG ADMIN. (Mar. 26, 2023), <https://www.fda.gov/food/cfsan-constituent-updates/fda-launches-new-directory-ingredients-used-products-marketed-dietary-supplements>.

A. Grant the FDA Express Regulatory Pre-Market Authority

Under DSHEA, the FDA has limited power to regulate dietary supplements pre-market. DSHEA does not grant the FDA express authority to regulate the dietary supplement industry, which hinders the FDA's ability to promulgate new rules.⁷⁹ In its current form, DSHEA restricts the FDA's power to regulate dietary supplements on the market unless the FDA can establish that they are unsafe, adulterated, mislabeled, or misbranded.⁸⁰ Specifically, the FDA needs express authority to oversee and impose regulatory controls over the manufacturing, labeling, and distribution of dietary supplements prior to entering the market. Without express statutory authority, rules promulgated by the FDA are especially vulnerable to change with each administration.

Congress should also consider amending the Food, Drug, and Cosmetics Act (FD&C Act) provision on "new dietary ingredients" to apply to all dietary supplements, not just those marketed after October 1994.⁸¹ Doing so will explicitly deem dietary supplements adulterated if they contain any dietary ingredients not "present in the food supply"—a distinction which clearly and unequivocally would put drug-laced supplements into the "adulterated" category.⁸² This amendment would place nearly all dietary supplements squarely within the purview of FDA review at least seventy-five days prior to their entering the market.

B. Require Preapproval of the Supplement Facts Label

This Article proposes that Congress grant the FDA pre-market authority to review Supplement Facts labels. The FDA currently requires all dietary supplements to bear a label of its ingredients titled "Supplement Facts."⁸³ In addition to dietary ingredients, "other ingredients"—"such as excipients, fillers, artificial colors, artificial sweeteners, flavors, or binders"—must be listed below the label.⁸⁴ The proposed statutory amendment would not only provide the FDA authority to review ingredient labels prior to their marketing, but it would also provide the FDA an avenue to

⁷⁹ See *FDA 101: Dietary Supplements*, *supra* note 47.

⁸⁰ See Ilisa B. Bernstein & Karin L. Bolte, *Is My Patient Taking an Unsafe Dietary Supplement?*, 24 AM. MED. ASS'N J. ETHICS 390, 392 (2022).

⁸¹ 21 U.S.C. § 350b.

⁸² 21 U.S.C. § 350b(a)(1).

⁸³ 21 C.F.R. § 101.36 (2016).

⁸⁴ 21 C.F.R. § 101.4(g) (2016).

catalogue all dietary supplements currently sold in the US—a major gap in the FDA’s enforcement over the industry today, and one that the agency seems keen on closing, as evidenced by its FY 2024 budget proposal.⁸⁵

Both the Dietary Supplement Listing Act of 2022 and the dietary supplement-related provision of the FDA Safety and Landmark Advancements (FDASLA) Act of 2022, introduced in the Senate as part of the Prescription Drug User Fee Act (PDUFA) reauthorization package, embraced a similar proposal.⁸⁶ Generally, the policies required manufacturers to register their supplements with the FDA, disclosing the supplement’s name, ingredients, and health claims prior to marketing a product.⁸⁷ With this information, the FDA could create a compendium of approved dietary supplements, akin to the Orange Book for approved drug products, to help consumers and industry officials identify safe dietary supplements and therapeutic doses. FDASLA would have also prohibited selling a product that does not meet the definition of a dietary supplement under 21 U.S.C. § 321.⁸⁸ Though PDUFA VII passed “clean”—without any policy amendments or riders⁸⁹—the mere consideration of two bills aimed at bolstering supplement regulation suggests that the requisite political will for greater industry oversight exists.

C. Pre- and Post-Market Composition Testing Requirements

Although dietary supplements are not considered pharmaceuticals, they more closely resemble drug products than food, which can trick consumers into believing supplements are regulated as tightly as drugs. However, unlike pharmaceuticals, dietary supplements do not undergo any composition testing.⁹⁰ As of mid-August 2023, the FDA issued twenty-four public notifications, warning consumers that several dietary supplements were tainted

⁸⁵ See *Summary of FY 2024 Legislative Proposals*, *supra* note 12.

⁸⁶ See FDASLA Act of 2022, S. 4348, 117th Cong. (2022).

⁸⁷ See Pieter A. Cohen et al., *Institutionalizing Misinformation—The Dietary Supplement Listing Act of 2022*, 387 NEW ENG. J. MED. 3, 3 (2022).

⁸⁸ See FDASLA of 2022, S. 4348, 117th Cong. (2022).

⁸⁹ Nicholas Choate, et al., *Congress Set for Busy Lane Duck Session; To Take Up Expansive Set of Issues, Including Defense, Healthcare, Tax, and More*, JD SUPRA (Nov. 15, 2022), <https://www.jdsupra.com/legalnews/congress-set-for-busy-lame-duck-session-2661322/>.

⁹⁰ See *Questions and Answers*, FOOD & DRUG ADMIN. (Oct. 26, 2022), <https://www.fda.gov/food/information-consumers-using-dietary-supplements/questions-and-answers-dietary-supplements>.

with undeclared drugs, including sildenafil [Viagra], tadalafil [Cialis], and sibutramine [Meridia].⁹¹

It is unlikely that a more stringent labeling requirement would be sufficient to stop manufacturers from sneaking drug ingredients into dietary supplements after entering the market, but requiring manufacturers to submit evidence of supplement ingredients might. Thus, the FDA should require manufacturers to prove the composition of their supplement matches the ingredients listed on the Supplement Label, such that their products are safe for human consumption. We propose that Congress provide the FDA the authority to require manufacturers to submit their dietary supplements to composition testing—which would be conducted by an independent FDA-registered laboratory.

Our proposal grants authority to the FDA to require that all dietary supplement manufacturers submit products for pre-market composition testing and post-market randomized composition testing. This new regulatory authority will be more effective at deterring manufacturers from introducing hidden ingredients into their dietary supplements after their product has undergone pre-market composition testing and entered the market.

D. Express Authority to Remove Harmful or Adulterated Dietary Supplements

As discussed in Section II of this Article, the FDA lacks the authority to remove harmful or adulterated substances from the market unless the FDA can establish that the supplement is harmful or adulterated. DSHEA places the burden of proof on the FDA to show that a dietary supplement presents a significant or unreasonable risk of illness or injury before the FDA can prohibit the sale of a supplement.⁹² DSHEA's voluntary-recall-first approach allows adulterated dietary supplements to remain available to consumers for extended periods of time while presenting a safety risk, as evidenced by the history of OxyELITEPro sales in the United States.

Instead, this proposal would allow the FDA to bypass the voluntary recall step and mandate a product's removal from the market when the FDA's investigation finds that a dietary supplement

⁹¹ See *Health Fraud Product Database*, FOOD & DRUG ADMIN. (May 11, 2023), <https://www.fda.gov/consumers/health-fraud-scams/health-fraud-product-database>.

⁹² Rahi Azizi, "Supplementing" the DSHEA: Congress Must Invest the FDA with Greater Regul. Auth. Over Nutraceutical Mfrs. by Amending the Dietary Supplement Health and Education Act, 98 CAL. L. REV. 439, 441 (2010).

contains prohibited or hidden dietary ingredients, is unsafe, or is misbranded or mislabeled. This proposal shifts the burden to the manufacturer to affirmatively prove its product is safe before it can be reintroduced into the market. By shifting the onus to manufacturers, the FDA can conserve limited financial and human resources. While the harms associated with non-pharmaceutical dietary ingredients might garner significant debate and require extensive research, the presence of a pharmaceutical or banned ingredient in a dietary supplement—a category of food—and the potential harm caused by its presence is relatively clear. The FDA is tasked with ensuring the safety of food and drugs consumed in the United States; the agency needs stronger authority to assure consumers that their dietary supplements are not tainted with drugs.

E. Establish an Excise Tax

To help fund augmented FDA oversight of dietary supplements, Congress should consider establishing an excise tax on supplement manufacturers and distributors. Congress might consider modeling the excise tax after the Airport & Airway Trust Fund Act of 1970, which established the Airport & Airway Trust Fund (AATF) as the primary source of funding for the Federal Aviation Administration (FAA).⁹³ To replenish the trust fund, the Act levies an excise tax on users of the National Airspace System.⁹⁴ The revenue collected from the excise tax is deposited into the AATF.⁹⁵

Similarly, we propose that Congress establish a trust fund and levy an excise tax on dietary supplement manufacturers and distributors. The proposed Dietary Supplement Trust Fund (DSTF) could act as the FDA's primary source of revenue for the regulation of dietary supplements and would generate most of the funds necessary to finance the FDA's operational costs of increased federal oversight over the dietary supplement industry.

We recognize dietary supplement manufacturers may attempt to pass those costs on to consumers via higher prices. To avoid unintended consequences, particularly disparate access, dietary supplements with legitimate medical uses—such as prenatal vitamins or calcium/vitamin D supplements—should be exempted from tax-related price increases.

⁹³ *Airport & Airway Trust Fund Act of 1970*, U.S. DEP'T OF TRANSP. (Feb. 21, 2023), <https://www.faa.gov/about/budget/aatf>.

⁹⁴ *See id.*

⁹⁵ *See id.*

V. Conclusion

The dietary supplement industry has grown exponentially since the passage of DSHEA nearly thirty years ago. The industry's boom, however, has left the FDA nearly powerless to regulate the industry—to the extent that the FDA publicly acknowledged a need for greater authority. As this Article demonstrates, the FDA's current regulatory structure is insufficient to protect consumers from adulterated dietary supplements.

State legislators, too, are taking notice of the unwieldy nature of the dietary supplement industry. In New York, for example, Assemblywoman Nily Rozic and Senator Shelby Mayer sponsored Assembly and Senate bills, respectively, that would restrict the sale of dietary supplements labeled as weight-loss or muscle-building products to minors.⁹⁶

The FDA urgently needs the tools to regulate the dietary supplement industry, remove harmful or ineffective dietary supplements from the market, impose pre- and post-market requirements, and enhance labeling requirements. We suggest Congressional reforms to grant the FDA express authority to regulate dietary supplements and hold dietary supplement manufacturers accountable for adulterated, misbranded, or mislabeled dietary supplements. Our proposal offers Congress a blueprint for preventing the introduction of adulterated and mislabeled dietary supplements into the market. The important question now is whether consumers are willing to sacrifice unfettered access to dietary supplements in exchange for greater assurances of safety.

⁹⁶ See S. Res. S5823C, 2023 Leg., Reg. Sess. (N.Y. 2023), <https://www.nysenate.gov/legislation/bills/2023/S5823>; Assemb. A5610A, 2023 Leg., Reg. Sess. (N.Y. 2023), <https://www.nysenate.gov/legislation/bills/2023/a5610/amendment/a>.

The Contradictory Nature Of U.S. Laws And Nutrition Programs And Their Effects On Infant Feeding

Lily Patel

I. Introduction

The contradictory nature of U.S. laws, including the laws concerning infant feeding, though supposedly aligned with policies to promote wellness in Americans, can exacerbate gender and race inequality and work against the National Strategy. The overarching goal of U.S. laws concerning infant feeding is to ensure that infants are fed, nourished, and receive proper nutrition. However, the laws often appear to be directly contradictory to one another in the priorities they are promoting. The United States Department of Agriculture's (USDA) "mission is to increase food security and reduce hunger in partnership with cooperating organizations by providing children and people with low income access to food, a healthy diet, and nutrition education in a manner that supports American agriculture and inspires public confidence."¹ As such, the USDA supports many different programs,² and sometimes in its efforts to broadly maintain and promote all of agriculture, the ultimate result appears to be contradicting priorities at odds with one another leading to inequity. The conflicting nature of the universal USDA agriculture programs represents the overall conflicting nature of U.S. laws and causes confusion. U.S. laws are meant to improve Americans' overall well-being, but can sometimes lead to inequitable results.

The USDA - Food and Nutrition Service (FNS) supports and promotes breastfeeding and publishes guidance regarding breastfeeding.³ "WIC promotes and supports breastfeeding as an

¹ *FNS Nutrition Programs*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/programs#:~:text=Our%20mission%20is%20to%20increase,agriculture%20and%20inspires%20public%20confidence> (last visited Sept. 19, 2023).

² *See About USDA*, U.S. DEP'T OF AGRIC., <https://www.usda.gov/our-agency/about-usda> (last visited Sep. 11, 2023).

³ *See About WIC Breastfeeding Support and Formative Research Findings*, U.S. DEP'T OF AGRIC. WIC BREASTFEEDING SUPPORT, <https://wicbreastfeeding.fns.usda.gov/about-wic-breastfeeding-support-and-formative-research-findings> (last visited Sep. 11, 2023) (The goal of the campaign is to equip WIC moms with the information, resources, and support they need to successfully breastfeed.).

important part of the nutrition service benefits to meet its mission of safeguarding the health of low-income women, infants and children.”⁴ However, the USDA’s Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) programs allow for SNAP and WIC benefits to be used to purchase infant formula.⁵ “WIC is the major purchaser of infant formula in the United States.”⁶ While the USDA supports breastfeeding, it also supports the infant formula industry in its overarching goal to support infant feeding and to ensure that infants do not go hungry.⁷ However, USDA’s priorities can seem directly contradictory to one another, causing confusion that affects infant feeding.

II. History of Infant Feeding and Formula Use

In 1865, Justus von Liebig, a chemist, developed an infant food, first in a liquid form and then in a powdered form for better preservation.⁸ Liebig’s formula was made from cow’s milk, wheat and malt flour, and potassium bicarbonate, and was considered the “perfect infant food.”⁹

By the early 1900s, most doctors were male¹⁰ and advocated

⁴ *FNS Nutrition Programs*, *supra* note 1; see INST. OF MED. OF THE NAT’L ACADS., INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS 46 (2004) <https://www.ncbi.nlm.nih.gov/books/NBK215837/> (“Manufacturers desire to produce products that mimic the advantages of breastfeeding. This motivation implies that formula...is inferior when compared with human milk.”).

⁵ See *WIC Frequently Ask Questions*, U.S. DEP’T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/wic/frequently-asked-questions> (last updated Apr. 4, 2023); *Is baby food and infant formula eligible for purchase with SNAP program benefits?*, U.S. DEP’T OF AGRIC. ASKUSDA, <https://ask.usda.gov/s/article/Is-baby-food-and-infant-formula-eligible-for-purchase-with-Supplemental-Nutrition-Assistance-Program#:~:text=Yes%2C%20you%20can%20use%20your,any%20other%20eligible%20food%20item>. (Last visited Apr. 20, 2023).

⁶ *The WIC brand of infant formula varies by State*, U.S. DEP’T OF AGRIC. ECON. RSCH. SERV., <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=78481#:~:text=USDA's%20Special%20Supplemental%20Nutrition%20Program,is%20purchased%20with%20WIC%20benefits> (last visited Sept. 19, 2023).

⁷ See *FNS Nutrition Programs*, *supra* note 1.

⁸ See Emily E. Stevens, ET AL., *A History of Infant Feeding*, J. OF PERINATAL EDUC., 32, 36 (2009), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2684040/pdf/jpe-18-032.pdf>.

⁹ *Id.*

¹⁰ See Anna Walling ET AL., *The Only Woman in The Room: Oral Histories of Senior Women Physicians in a Midwestern City*, WOMEN’S HEALTH REPORT, 279,

for scheduled feedings of babies as opposed to feeding on demand, which severely and adversely affected breastmilk production in women, facilitating the way for formula companies to make formula-feeding a more attractive option for feeding infants.¹¹ “By 1910, the United States had an estimated 9,015 female physicians, representing 6.0% of the profession.”¹² This means that 94% of the physicians were male. At the same time, formula companies (likely headed by male CEOs) promoted relentlessly to new parents who, as a result, believed that formula was “a more modern and scientific choice than breastfeeding.”¹³ It seems that males were impacting and directing mothers on their infant feeding methods.

A pretty high percentage, “84% of American newborns, start out breastfeeding, but only 25.8% exclusively breastfeed until 6 months of age per CDC recommendations.”¹⁴ Some federal laws have been designed to protect lactating workers, such as workplace lactation rooms and insurance coverage of breast pumps¹⁵; however, these protections are inadequate because pumping is not the same as directly breastfeeding a baby.¹⁶ These federal laws assume that breastfeeding and pumping are the same when they are not.¹⁷ Moreover, breastfeeding is not the same as pumping because an infant is better at extracting breastmilk than the pump is.¹⁸ Also, “close [physical] contact between the mother and child stimulates the mother to make antibodies against bacteria colonized in the infant and to secrete these antibodies

279 (Apr. 29, 2020),

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7784804/#:~:text=By%201910%2C%20the%20United%20States,representing%206.0%25%20of%20the%20profession.> (“By 1910, the United States had an estimated 9015 female physician, representing 6.0% of the profession.”).

¹¹ See Carla Cevasco *What We Get Wrong About Life Before Modern Baby Formula*, TIME (May 17, 2022 3:39 PM), <https://time.com/6177644/baby-formula-breastfeeding-history/>.

¹² Walling ET AL., *supra* note 10.

¹³ Cevasco, *supra* note 11.

¹⁴ *Id.*

¹⁵ *See id.*

¹⁶ *See* Catherine Crider, *What’s Best for You? Exclusively Breastfeeding or Pumping?*, HEALTHLINE (Jan. 21, 2023),

<https://www.healthline.com/health/breastfeeding/breastfeeding-vs-pumping> (“Pump suction is also not always as effective as a baby’s mouth at getting milk out of the breast. As a result, depending on the person, exclusively pumping can result in less milk production than breastfeeding.”).

¹⁷ *See id.*

¹⁸ *See id.*

in her milk.”¹⁹ This special property about breastmilk can be lost if a mother’s physical proximity to her baby is impeded and if the baby is only getting expressed breastmilk. The lack of distinction made between pumping versus directly breastfeeding indicates that there may be confusion, misinformation, or an inadequate definition on what being a lactating mother means, and, therefore, inadequate protections for lactating mothers. It is often much harder to keep breastmilk supply up when exclusively pumping versus directly breastfeeding.²⁰ The lack of universal paid family leave also prevents many working parents from breastfeeding.²¹

Research found that formula feeding is more common in wealthy households across the world while breastfeeding is significantly higher in children living in the poorest households across the world.²² Infant formula use is more common in families with wealth.²³ Therefore, it will likely become more common as countries continue to develop and to increase in wealth.²⁴ However, in the U.S., it seems the opposite, that formula feeding is more common in low-income households as opposed to in upper middle class homes where the choice to breastfeed is more available.²⁵ Black women, who disproportionately are the workers of low-wage jobs and often the primary wage earner in the household, do not have the time to breastfeed and end up formula-feeding because they need to return to work sooner and their work hours tend to be inflexible.²⁶ Also, because infant formula is subsidized by the

¹⁹ INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 46.

²⁰ See Crider, *supra* note 16.

²¹ Cevasco, *supra* note 11.

²² See Paulo A R Neves et al., *Infant Formula Consumption is Positively Correlated with Wealth, Within and Between Countries: A Multi-Country Study*, 150 J. NUTRITION 910, 910-916 (2020).

²³ See Neves et al., *supra* note 22, at 910.

²⁴ See *id.*

²⁵ See Christina Szalinski, *For low-income families, getting formula has always been a strain*, TAMPA BAY TIMES (June 21, 2022), <https://www.tampabay.com/news/health/2022/06/21/for-low-income-families-getting-formula-has-always-been-a-strain/>; see also Amani Echols, *The Challenges of Breastfeeding as a Black Person*, ACLU (Aug. 15, 2019), <https://www.aclu.org/news/womens-rights/challenges-breastfeeding-black-person>.

²⁶ See Laura Santhanam, *Racial disparities persist for breastfeeding moms. Here’s why.*, PBS NEWS (Aug. 29, 2019, 8:08 PM, EDT), <https://www.pbs.org/newshour/health/racial-disparities-persist-for-breastfeeding-moms-heres-why>; see also Echols, *supra* note 25.

federal government through WIC and SNAP, which are programs that have eligibility requirements based on income,²⁷ government programs, in combination with low-wage jobs that often have inflexible hours, may have an impact on infant feeding in the U.S., leading to more formula-feeding in low-income and WIC-eligible families. “Mothers’ own milk is the best source of nutrition for nearly all infants.”²⁸ Efforts need to be made to protect, promote, and to support breastfeeding to reduce infant formula use, which has hazards associated with its use.²⁹ Recent events such as the *Cronobacter* bacteria contamination in infant formula produced by Abbott at the Sturgis, Michigan location that sickened infants show just how hazardous infant formula use can be.³⁰ Another potential risk of formula feeding can result from its “preparation . . . with water contaminated with infectious agents.”³¹

“The word *formula* stems from the 1890s and it literally was taken from mathematical formulas — physicians were absolutely desperate to find a way to save babies’ lives. They thought that they could “humanize” cow’s milk if they could make it mimic the substances they could recognize, like the percentage of fat, the percentage of protein, the percentage of milk sugar.”³²

²⁷ See *WIC Frequently Ask Questions*, U.S. DEP’T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/wic/frequently-asked-questions> (last updated Apr. 4, 2023).

²⁸ See Crider, *supra* note 16 (“Breast milk nutrients match your baby’s needs especially well when your body is interacting with your baby in the close way that breastfeeding requires. Your breast responds to the baby’s saliva content, producing antibodies for viruses or bacteria to which the baby has been exposed.”); *Breastfeeding Benefits*, U.S. DEP’T OF AGRIC. WIC BREASTFEEDING SUPPORT, <https://wicbreastfeeding.fns.usda.gov/breastfeeding-benefits> (last visited Sep. 16, 2023) (stating “Breast milk... changes to meet your baby’s need as he or she gets older.”); Federica Guaraldi & Guglielmo Salvatori, *Effect of Breast and Formula Feeding on Gut Microbiota Shaping in Newborns*, FRONTIERS (Oct. 16, 2012), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3472256/pdf/fcimb-02-00094.pdf> (“Breast milk, whose beneficial health-effects are undoubtedly unique, has to be considered the food of choice for infants in the first 6 months of life.”).

²⁹ See Neves et al., *supra* note 22, at 916.

³⁰ See Press Release, Rosa DeLauro, United States Rep., DeLauro Shares Whistleblower Report, Contaminated Infant Formula Led to Hospitalizations and Deaths (Apr. 28, 2022), <https://delauro.house.gov/media-center/press-releases/icymi-deलाuro-shares-whistleblower-report-contaminated-infant-formula>.

³¹ INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 51.

³² Lily Rothman, *Desperate Women, Desperate Doctors and the Surprising History Behind the Breastfeeding Debate*, TIME (Jul. 31, 2018, 4:00 PM), <https://time.com/5353068/breastfeeding-debate-history/>.

During the Civil War, troops received canned milk, which led to food companies introducing infant foods.³³ They did not claim to be better than breastmilk, but compared themselves to other infant foods.³⁴ Nestle then came out with a powdered infant milk that did not need to be mixed with cow milk, which often spoiled in cities because there were not farms nearby.³⁵ Because cow milk spoiled, the infant milk alternatives using cow milk could be deadly.³⁶

In the 1880s and 1890s the U.S. industrialized, and there was less time to breastfeed, and, as a result, babies were subjected to schedules.³⁷ Regarding breastfeeding, the more a baby suckles, the more breastmilk will be produced.³⁸ In contrast, if a baby is placed on a strict schedule, the mother's breastmilk supply will decrease.³⁹

However, doctors believed that the decreased lactation was due to a medical problem in mothers.⁴⁰ Doctors did not connect this to the change in feeding habits forced upon infants and their mothers.⁴¹ "There was a large group of doctors who feared that girls in school during the time they were going through puberty were causing their reproductive systems to compete with their brains for energy, and their brains were winning."⁴² These doctors believed that girls were over-educated and that getting an education interfered with the female reproductive system. These false beliefs discriminated against women, and provided evidence of ongoing gender inequality in history; the history of breastfeeding is a part of women's history. Because of existing laws and an American society that does not support breastfeeding, a woman's career impacts that woman's time and ability to breastfeed and sometimes to pump.

³³ *See id.*

³⁴ *See id.*

³⁵ *See id.*

³⁶ *See id.*

³⁷ *See id.*

³⁸ *See id.*

³⁹ *See id.*

⁴⁰ *See id.*

⁴¹ *See id.*

⁴² *Id.*

Breastfeeding takes time; time taken away from a woman's career. Working mothers struggle with balancing their careers and being a mother,⁴³ struggles that fathers do not face.

"There are all kinds of reasons why women choose to feed their babies however they decide to feed their babies."⁴⁴ Things are different in the U.S. in that employers do not accommodate breastfeeding mothers like similarly wealthy countries do by allowing for a lengthy paid maternity leave.⁴⁵ Breastfeeding in the U.S. is very hard as a mother because the social supports are not in place.⁴⁶

In the 1890s, you could find breast pumps for purchase, but it was for pumping breastmilk for premature babies that were too weak to suckle at the breast.⁴⁷ Pumping is quite common now, especially because so many women work, and it is mainly privileged women with personal work offices that can take time during the workday to close the door for privacy to pump.⁴⁸

Recent events chronicle a struggle with the formula shortage and trying to find formula.⁴⁹ This infant formula shortage could have been a good opportunity for the federal government to reinforce its guidance supporting breastfeeding.⁵⁰ Focusing on having adequate infant formula supply may deflect from supporting breastfeeding and ultimately impact infant feeding.

⁴³ See Lauren Smith Brody, *How to Be Mostly O.K. (and Occasionally Fantastic) at the Whole Working Mom Thing*, N.Y. TIMES, <https://www.nytimes.com/guides/working-womans-handbook/how-to-be-a-working-mom> (last visited Sept. 16, 2023) ("‘We expect women to work like they don’t have children, and raise children as if they don’t work.’ That’s a recipe for mommy guilt...") (quoting AMY WESTERVELT, *FORGET HAVING IT ALL: HOW AMERICA MESSED UP MOTHERHOOD – AND HOW TO FIX IT*, (Seal Press 2018)).

⁴⁴ Rothman, *supra* note 32.

⁴⁵ See *id.*

⁴⁶ See *id.*

⁴⁷ See *id.*

⁴⁸ See *id.*

⁴⁹ See Ximena Bustillo, *It's Getting Easier to Find Baby Formula. But You Might Still Run into Bare Shelves*, NAT'L PUB. RADIO (Oct. 27, 2022, 5:00 AM), <https://www.npr.org/2022/10/27/1131561457/its-getting-easier-to-find-baby-formula-but-you-might-still-run-into->.

⁵⁰ See generally *Breastfeeding Benefits*, *supra* note 28.

III. Laws and Nutrition Programs Implicated

A. FDA Regulates Infant Formula Under the Federal Food, Drug, and Cosmetics Act

The agencies and laws that regulate the American food system are fractionated and often confusing to reconcile. The USDA regulates food products such as meat and poultry.⁵¹ The Food and Drug Administration (FDA) regulates most of the other foods, including infant formula.⁵² However, there are overlaps between foods that contain a certain amount of meat, depending on the amount, and eggs, depending on if they are shelled or not.⁵³ Under the authority of the Infant Formula Act (21 U.S.C. § 350a)⁵⁴ in 1982, the FDA issued regulations for infant formula quality control procedures (21 C.F.R. § 106).⁵⁵ The FDA regulates foods and drugs, including foods that are processed,⁵⁶ such as infant formula, which does not come from an animal. Instead, it is a substance made from many different ingredients.⁵⁷

While the USDA does not regulate infant formula, its feeding programs such as SNAP and WIC support the infant formula industry, and SNAP and WIC benefits can be used to purchase infant

⁵¹ See *What Foods Does the Food and Drug Administration Regulate?*, U.S. DEP'T OF AGRIC. ASKUSDA (Jan. 12, 2023), <https://ask.usda.gov/s/article/What-foods-does-the-FDA-regulate#:~:text=Foods%20regulated%20by%20the%20Food,juices%2C%20vegetarian%20entrees%2C%20etc>.

⁵² See *id.*

⁵³ See *Markets, Regulation, and Policy*, U.S. DEP'T OF AGRIC. ECON. RSCH. SERV. (Mar. 10, 2023), <https://www.ers.usda.gov/topics/food-safety/markets-regulation-and-policy/#:~:text=USDA%20is%20responsible%20for%20regulating,and%20almost%20all%20other%20foods.> (“USDA is responsible for regulating meat and poultry, processed egg products, and catfish, whereas the U.S. Food and Drug Administration (FDA) oversees food safety for fresh eggs and almost all other foods.”).

⁵⁴ See 21 U.S.C. § 350(a).

⁵⁵ See FDA ENFORCEMENT MAN. § 1653 OTHER FOOD PROCESSING CGMP REGULATIONS (2023).

⁵⁶ See 21 U.S.C. § 350(a); *How to Start a Food Business*, U.S. FOOD AND DRUG ADMIN. (May 13, 2021), [https://www.fda.gov/food/food-industry/how-start-food-business#:~:text=FDA%20regulates%20all%20foods%20and,Department%20of%20Agriculture%20\(USDA\)](https://www.fda.gov/food/food-industry/how-start-food-business#:~:text=FDA%20regulates%20all%20foods%20and,Department%20of%20Agriculture%20(USDA)) (“FDA regulates all foods and food ingredients introduced into or offered for sale in interstate commerce, with the exception of meat, poultry, and certain processed egg products regulated by the U.S. Department of Agriculture.”).

⁵⁷ See discussion *infra* Section IV.B.

formula.⁵⁸

*B. 21 U.S.C § 342 Adulterated Food and 21 C.F.R. § 109.6
Added Poisonous or Deleterious Substances*

21 U.S.C. § 342 applies to adulterated food. A food is considered adulterated if: “(a)(1) it bears or contains any poisonous or deleterious substance which may render it injurious to health; but in case the substance is not an added substance such food shall not be considered adulterated under this clause if the quantity of such substance in such food does not ordinarily render it injurious to health;” or “(a)(4) if it has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health.”⁵⁹ The contaminated formula manufactured at Abbott’s Sturgis, Michigan facility could be considered “adulterated” under 21 U.S.C. § 342 because it was “injurious to [the] health” of the infants that ingested the infant formula. The substance may not have been an added substance, but it was of the quantity that rendered it “injurious to health.”⁶⁰ It also was “prepared, packed, or held under insanitary conditions . . . whereby it may have been rendered injurious to health.”⁶¹ Therefore, the infant formula could be argued as “adulterated under this clause,”⁶² and shown to be hazardous to the health of infants. Though infant formula can be dangerous to the health of infants,⁶³ it still seems to be promoted more than breastfeeding.

21 C.F.R. § 109.6 states that: “(a) Use of an added poisonous or deleterious substance, other than a pesticide chemical, that is also a food additive, will be controlled by a regulation issued under section 409 of the act when possible. When such a use cannot be approved under the criteria of section 409 of the act, or when the added poisonous or deleterious substance is not a food additive, a tolerance, regulatory limit, or action level may be established

⁵⁸ See *What Can Snap Buy?*, U.S. DEP’T OF AGRIC. FOOD AND NUTRITION SERV. (Apr. 14, 2021), <https://www.fns.usda.gov/snap/eligible-food-items>; See also *WIC Fact Sheet*, U.S. DEP’T OF AGRIC. FOOD AND NUTRITION SERV. (Aug. 2, 2022), <https://www.fns.usda.gov/wic/wic-fact-sheet>.

⁵⁹ 21 U.S.C. §§ 342(a)(1), (a)(4).

⁶⁰ *Id.* § 342(a)(1).

⁶¹ *Id.* § 342(a)(4).

⁶² *Id.* § 342(a)(1).

⁶³ See Neves et al., *supra* note 22, at 916.

pursuant to the criteria in paragraphs (b), (c), or (d) of this section.”⁶⁴ Although 21 C.F.R. § 109.6 regulates contaminants in food, this section does not apply to this case, because the *Cronobacter* bacteria was not “added.” Although it is naturally occurring, the bacteria was likely introduced because of the insanitary conditions found at the Sturgis, Michigan plant.⁶⁵ Because the *Cronobacter* bacteria was not “added,” 21 C.F.R. § 109.6 does not apply and does not need to be considered regarding whether a tolerance may be established in this case, and it reverts to 21 U.S.C. § 342, adulterated foods.

Many baby-food and formula companies promote their products heavily to new parents.⁶⁶ However, these companies did not ensure that their formula products were free from contaminants. In fact, there is evidence that Abbott knew that there were issues with its infant formula, but did not stop producing or marketing it despite knowledge of the issues.⁶⁷ Representative DeLauro shared a whistleblower report about contaminated infant formula, detailing falsification of records, untested formula, and information being hidden in a 2019 FDA Audit, but FDA did not take action until the infant formula recall in February 2022.⁶⁸ In September 2021, the FDA learned from a former Abbott plant employee about a possible *Cronobacter* bacteria contamination in the powdered infant formula made at Abbott’s Sturgis, Michigan facility that caused four hospitalizations and the deaths of at least two babies.⁶⁹ Perhaps this inaction by the FDA might not rise to the level of the federal government not caring about the health of infants, but it could show that the federal government supports big infant formula manufacturers so much that it allows them to continue operating even among possible food safety issues.

The whistleblower report stated an existence of falsified records including shipping packages with weights lower than what the label stated; release of untested formula; failure to properly sanitize; failure to maintain traceability of the product; hiding information during the 2019 FDA audit; failure to correct defective

⁶⁴ 21 C.F.R. § 109.6 (1990).

⁶⁵ See Christina Jewett, *F.D.A. Leader Details ‘Shocking’ Conditions At a Formula Factory*, N.Y. TIMES, May 26, 2022, at A21.

⁶⁶ Cevalco, *supra* note 11.

⁶⁷ See DeLauro, *supra* note 30.

⁶⁸ See *id.*

⁶⁹ See *id.*

and deficient testing procedures; and retaliation against any employees who raised concerns.⁷⁰ Abbott did not stop putting its formula on the market, even after months of problems with contamination, and the FDA reacted very slowly to this whistleblower report, not initiating the formula recall until February 2022, which was five months after FDA learned of the possible contamination.⁷¹ Again, this gives the impression that the federal government was less concerned with infant safety as compared with supporting formula companies, because it did not require big infant formula manufacturers to cease production until five months after FDA learned of the possible contamination, which goes against the goals of the National Strategy. This gives the appearance of conflicting actions and priorities.

The FDA regulates and monitors infant formula under section 412 of the Federal Food, Drug, and Cosmetics Act (FFDCA) (21 U.S.C. § 350a) and FDA's implementing regulations in 21 C.F.R. § 106 and 107, which require formula manufacturers to test their product and to verify that the product is safely manufactured using quality control procedures.⁷² The FDA's slow reaction in response to its apparent knowledge of manufacturing issues, and failure to verify the safety of infant formula is troubling, calling into question whether the FDA truly verifies the safety of domestic formula, let alone imported formula, when it failed to verify the safety of its domestic formula for several months.⁷³ These tragic events call into question the federal government's conflicting priorities of infant safety and health in alignment with the National Strategy,⁷⁴ and big corporations' ability to continue operating and profiting.

C. USDA SNAP and WIC

SNAP is a federally funded health and nutrition program that

⁷⁰ *See id.*

⁷¹ *See id.*

⁷² *See* 21 U.S.C. § 350(a); *see also* 21 C.F.R. §§ 106.1, 107.1.

⁷³ *See* DeLauro, *supra* note 30.

⁷⁴ *See* THE WHITE HOUSE, BIDEN-HARRIS ADMINISTRATION NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, 26 (2022), <https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf>. [hereinafter NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH].

assists low-income families and children.⁷⁵ SNAP gives a monthly amount, based on household income, preloaded onto an EBT (Electronic Benefits Transfer) card to buy food for the recipient and his/her family.⁷⁶ SNAP can buy any food for the household,⁷⁷ including infant formula.⁷⁸

WIC does not give the recipient a dollar amount to buy food.⁷⁹ WIC provides nutrition education, breastfeeding support and referrals, and nutritious foods to pregnant women, breastfeeding women, postpartum women, infants, and children.⁸⁰ WIC foods are chosen based on nutritional value and USDA standards.⁸¹ WIC recipients receive a WIC card, to be used like a debit or credit card.⁸²

“The federal government not only regulates formula makers. It's also their biggest customer. About half of all formula sold in the U.S. is paid for by the Department of Agriculture, through its Special Supplemental Nutrition Program for Women, Infants and Children (WIC).”⁸³ States have to enter an exclusive contract with one of the formula manufacturers to supply subsidized infant formula to WIC-eligible families.⁸⁴ The government receives a huge discount from the formula company.⁸⁵ In exchange, the formula company gets a guaranteed market.⁸⁶ USDA research confirmed that whichever company gets the WIC contract in a state gets a market hold in that state, in effect getting a monopoly over WIC sales and also capturing a “spillover” market of non-WIC customers.⁸⁷ This is because the WIC-contracted formula company gets prime shelf space at the

⁷⁵ See *Learn the Difference Between SNAP and WIC Programs*, BENEFITS (Dec. 8, 2021), <https://www.benefits.gov/news/article/439>.

⁷⁶ See *id.*

⁷⁷ See *What Can SNAP Buy?*, *supra* note 58.

⁷⁸ See *Is Baby Food and Infant Formula Eligible for Purchase with Supplemental Nutrition Assistance Program Benefits?*, *supra* note 5 (“You can use your Supplemental Nutrition Assistance Program (SNAP) benefits to buy baby food. This includes infant formula, cereals, juices, baby food and any other eligible food item.”).

⁷⁹ See *Learn the Difference Between SNAP and WIC Programs*, *supra* note 75.

⁸⁰ See *id.*

⁸¹ See *id.*

⁸² See *id.*

⁸³ Scott Horsley, *How the U.S. got into this baby formula mess*, NAT’L PUB. RADIO (May 19, 2022, 5:00AM, ET), <https://www.npr.org/2022/05/19/1099748064/baby-infant-formula-shortages>.

⁸⁴ See *id.*

⁸⁵ See *id.*

⁸⁶ See *id.*

⁸⁷ See *id.*

grocery store, which attracts infant formula purchasers alike, WIC-eligible or not, to purchase that particular brand.⁸⁸ So, when a formula company wins the WIC contract with a state, in addition to capturing all of the WIC-eligible purchasers in that state, it results in the formula company capturing the rest of the formula purchasers in that state.

WIC exclusively contracts with Abbott in two-thirds of all the states in the U.S.⁸⁹ WIC benefits can only be used to purchase the brand that WIC has contracted with, which means that in two-thirds of U.S. states, Abbott holds the market. When Abbott temporarily shut down its Sturgis, Michigan plant, the formula market in two-thirds of U.S. states was affected. Because of the way WIC is structured, the program ended up adversely affecting formula-fed infants as an unintended consequence. Infant formula prices increased because of the ongoing infant formula supply issues and severely impacted infant feeding.⁹⁰

IV. National Strategy: White House National Strategy on Hunger, Nutrition, and Health

A. Formula Feeding and the National Strategy

The promotion of breastfeeding is supported by the National Strategy.⁹¹ 10.6% more mothers started breastfeeding during the formula shortage as compared to before the formula shortage.⁹² Breastfeeding was also more appealing due to reports of babies sickened by formula.⁹³ The National Strategy supports breastfeeding and also aims to expand breastfeeding.⁹⁴

⁸⁸ See *id.*

⁸⁹ See *id.*

⁹⁰ See Conor Murray, *Enfamil Infant Formula Price Spikes: Frustrated Consumers Cry, 'Robbery!' As Shortages Persist*, FORBES (Mar. 22, 2022), <https://www.forbes.com/sites/conormurray/2023/03/21/enfamil-infant-formula-price-spikes-frustrated-consumers-cry-robbery-as-shortages-persist/?sh=67f0c2dd61a2>.

⁹¹ See NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 26.

⁹² See Annie Imboden et al., *Impact of the Infant Formula Shortage on Breastfeeding Rates*, 37 J. PEDIATRIC HEALTH CARE 279, 279 (2023).

⁹³ See *id.*

⁹⁴ See NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 26.

The National Strategy states that “the Administration also recognizes that for children and adults with digestive and inherited metabolic disorders, ensuring access to the right types of nutritional supports, such as infant formula, can prevent hospitalizations and be lifesaving. Still, there are often systematic barriers making access to these specialized nutritional supports challenging.”⁹⁵ Beyond this statement regarding infant formula, however, there are no other references to infant formula in the National Strategy. On the contrary, there is a section on page 26 about how the Administration supports breastfeeding.⁹⁶

Despite these statements, there are many barriers to breastfeeding in the U.S.⁹⁷ Many people, including health professionals, are not aware of the healthful benefits of breastfeeding for infants, and believe that infant formula is equivalent to breastmilk with respect to its health benefits.⁹⁸ This belief indicates a lack of education concerning the healthful benefits of breastfeeding. “In the United States, bottle feeding is viewed by many as the ‘normal’ way to feed infants.”⁹⁹ While formula regulations aim to protect infants and prioritize their safety, they also protect domestic formula companies from overseas competition.¹⁰⁰

While the National Strategy promotes increased access to nutritious foods, such as fruits and vegetables,¹⁰¹ and has as a goal to lower the amount of sodium in processed foods,¹⁰² it is silent

⁹⁵ *Id.* at 18-19.

⁹⁶ *See id.* at 26.

⁹⁷ U.S. DEP’T OF HEALTH AND HUMAN SERVS., OFF. OF THE SURGEON GEN., NBK52688, *The Surgeon General’s Call to Action to Support Breastfeeding*, 1, 10 (2011), <https://www.ncbi.nlm.nih.gov/books/NBK52688/>.

⁹⁸ *See id.*

⁹⁹ *Id.* at 2.

¹⁰⁰ *See* Horsley, *supra* note 83.

¹⁰¹ *See* NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 25. This almost tracks with FAO’s *Guiding Principles for Sustainable Healthy Diets*, which states under Principle 2 that “sustainable healthy diets are based on a great variety of unprocessed or minimally processed foods, balanced across food groups, while restricting highly processed food and drink products.” *Sustainable Healthy Diets Guiding Principles*, FOOD AND AGRIC. ORG. OF THE UNITED NATIONS 12 (2019), <https://www.fao.org/3/ca6640en/CA6640EN.pdf>. The difference is that the National Strategy calls for a reduction of sodium content in processed foods rather than specifically calling for a reduction in the consumption of processed foods.

¹⁰² *See* NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 23.

regarding the consumption of ultra-processed foods,¹⁰³ and does not specifically state as a goal to lower consumption of processed foods in general.

B. How is Formula Not a Processed Food?

Formula is created in a laboratory using many ingredients.¹⁰⁴ Here in the U.S., the three main laboratories that manufacture infant formula are Abbott Laboratories, Mead Johnson, and Nestle/Gerber.¹⁰⁵ Abbott creates “life-changing technologies that . . . bring you information, medicines and breakthroughs to manage your health.”¹⁰⁶

The USDA defines processed foods under 7 C.F.R. § 65.220 as “a retail item derived from a covered commodity that has undergone specific processing resulting in a change in the character of the covered commodity . . . Specific processing that results in a change in the character of the covered commodity includes cooking (e.g., frying, broiling, grilling, boiling, steaming, baking, roasting), curing (e.g., salt curing, sugar curing, drying), smoking (hot or cold), and restructuring (e.g., emulsifying and extruding).”¹⁰⁷ Similac Advance lists its ingredients as follows: “Nonfat Milk, Lactose, High Oleic Safflower Oil, Whey Protein Concentrate, Soy Oil, Coconut Oil, Galactooligosaccharides*. Less than 2% of: Schizochytrium Sp. Oil†, M. Alpina Oil‡, Beta-Carotene, Lutein, Potassium Citrate, Calcium Carbonate, Ascorbic Acid, Soy Lecithin, Potassium Chloride, Magnesium Chloride, Ferrous Sulfate, Choline Bitartrate, Choline Chloride, Ascorbyl Palmitate, Salt, Taurine, Inositol, Zinc Sulfate, Mixed Tocopherols, d-Alpha-Tocopheryl Acetate,

¹⁰³ See *id.*

¹⁰⁴ See e.g., *Product-Baby formula-Advance Powder*, SIMILAC, <https://www.similac.com/products/baby-formula/advance-powder/12-4oz-can-6ct.html> (last visited Oct. 3, 2023).

¹⁰⁵ See ABBOTT, <https://www.abbott.com> (last visited Sep. 11, 2023) (stating that they “create breakthrough products – in diagnostics, medical devices, nutrition and . . . pharmaceuticals. . .”); see also MEAD JOHNSON, <https://www.meadjohnson.com> (last visited Sep. 11, 2023) (Mead Johnson was acquired by Reckitt in June 2017); see also RECKITT, <https://reckitt.com> (last visited Sep. 11, 2023) (Stating Reckitt is “[h]ome to the world’s most loved and trusted hygiene, health and nutrition brands.”); see also NESTLE, <https://www.nestle.com> (last visited Sep. 11, 2023) (stating Nestle is “constantly pushing the boundaries of what’s possible with food, drink and nutritional health solutions.”).

¹⁰⁶ ABBOTT, *supra* note 105.

¹⁰⁷ 7 C.F.R. § 65.220 (2016).

Niacinamide, Calcium Pantothenate, L-Carnitine, Vitamin A Palmitate, Copper Sulfate, Thiamine Hydrochloride, Riboflavin, Pyridoxine Hydrochloride, Folic Acid, Manganese Sulfate, Phylloquinone, Biotin, Sodium Selenate, Vitamin D3, Vitamin B12, Calcium Phosphate, Potassium Phosphate, Potassium Iodide, Potassium Hydroxide, and Nucleotides (Adenosine 5'-Monophosphate, Cytidine 5'-Monophosphate, Disodium Guanosine 5'-Monophosphate, Disodium Uridine 5'-Monophosphate). * Prebiotic † Source of DHA. ‡ Source of ARA.”¹⁰⁸

It is hard to understand what the majority of these ingredients are. These ingredients do not naturally come together, and are structured like this in a laboratory to create an infant milk alternative. This “formula” has been constructed and has “undergone changes to its natural state,”¹⁰⁹ arguably making it a processed food.

According to the NOVA food classification system, ultra-processed foods are “not foods, but are formulations of ingredients.”¹¹⁰ Applying Monteiro’s definition of ultra-processed foods to infant formula, infant formula is an ultra-processed food because it is a “formulation of ingredients,” and a milk alternative that is designed to replace breastmilk.¹¹¹ Because infant formula is an “industrial formulation,” under the NOVA classification system, infant formula is an ultra-processed food.¹¹²

According to the National Strategy, obesity is on the rise, and poor eating patterns via an excess calorie intake are a cause of diet-related diseases.¹¹³ According to the CDC, about one in five women aged fifteen to forty-nine are not able to get pregnant after one year

¹⁰⁸ *Product-Baby formula-Advance Powder*, *supra* note 104.

¹⁰⁹ See *Processed Foods and Health*, HARV. SCH. PUB. HEALTH, <https://www.hsph.harvard.edu/nutritionsource/processed-foods/> (last reviewed Aug. 2023).

¹¹⁰ Monteiro, *The NOVA food classification system*, YOUTUBE (Jan. 6, 2021), https://www.youtube.com/watch?v=wucc_Ra4wuo.

¹¹¹ See *id.*

¹¹² See *Food, Nutrition & Fitness I: The Digestion Journey Begins with Food Choices*, EDUCHANGE (2018), <https://ecuphysicians.ecu.edu/wp-content/uploads/sites/78/2021/07/NOVA-Classification-Reference-Sheet.pdf>.

¹¹³ See NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 7.

of trying.¹¹⁴ Obesity is increasing and has negative effects on fertility.¹¹⁵ There is a mistaken belief for babies that “big is healthy,” which can lead to formula-feeding as “mothers . . . may be encouraged to supplement breastfeeding with formula.”¹¹⁶ Thus, consumption of processed foods, excess calories, and infant feeding methods have a direct correlation with obesity and diet-related diseases.

Substituting formula for breastfeeding, along with the lack of support for breastfeeding and the effects of not breastfeeding on the gut microbiome of infants, has a lasting effect, can change the nature of mothering, and can affect human health outcomes.¹¹⁷ An increased use of formula can lead to a decreased need for breastfeeding. The less the baby is near the mother, the less breastmilk supply a mother’s body will have, similar to how milking cows have to be pregnant to have milk supply.¹¹⁸ With continued use of formula-feeding and the lack of support for breastfeeding, perhaps the need and ability to breastfeed is being bred out, which affects only the female gender because males cannot lactate, and also does not support the National Strategy.

C. Is Infant Formula a food or a drug under FFDCA?

The laws make it confusing to determine whether infant formula is a food or a drug. It does not occur naturally and is made in a laboratory. However, it is the only source of food and nutrition for some infants under the age of 6 months. Under the FFDCA, “‘food’ means (1) articles used for food or drink for man or other animals, (2) chewing gum, and (3) articles used for components of

¹¹⁴ See *Infertility FAQs*, CENTERS FOR DISEASE CONTROL AND PREVENTION, [\(https://www.cdc.gov/reproductivehealth/infertility/index.htm#%3A~%3Atext%3DIs%20infertility%20a%20common%20problem%2Cyear%20of%20trying%20\(infertility\)\)](https://www.cdc.gov/reproductivehealth/infertility/index.htm#%3A~%3Atext%3DIs%20infertility%20a%20common%20problem%2Cyear%20of%20trying%20(infertility)) (last visited Oct. 14, 2023).

¹¹⁵ See Özcan Dağ & Dilbaz, *Impact of obesity on infertility in women*, NAT’L LIBR. MED. 111, 114 (2015), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4456969/>.

¹¹⁶ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 11.

¹¹⁷ See discussion *infra* Sections VIII(A), IX.

¹¹⁸ See *About Dairy Cows*, COMPASSION IN WORLD FARMING, <https://www.ciwf.com/farmed-animals/cows/dairy-cows/> (last visited Sept. 15, 2023) (“Like humans, cows only produce milk as a result of being pregnant. Dairy cows must give birth to one calf per year in order to continue producing milk. Typically they are artificially inseminated within three months of giving birth.”).

any such article.”¹¹⁹ Under the FFDCA, a “drug” is an “(B) article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease.” Some infant formulas are used for medical purposes, such as “hypoallergenic formulas for children with cow’s milk protein allergy” that serves a critical medical purpose,¹²⁰ making it seem more like a drug than food. Though formula may be less beneficial neurologically or immunologically, it is not unsafe¹²¹ as a food for infants. In fact, compared to animal milk substitutes which are insufficient nutritionally and sometimes unsafe, infant formula is a better substitute for breastmilk¹²² as a food source for infants.

V. Other Federal Laws that Impact Infant Feeding

A. Fair Labor Standards Act

“Workplace barriers contribute to low rates of breastfeeding. Research shows that supportive state laws correlate with higher rates, yet by 2009, only 23 states had adopted any laws to encourage breastfeeding in the workplace.”¹²³ The “reasonable break time” provision of the Patient Protection and Affordable Care Act is time given to pump for [and *not* to directly feed] children younger than one year, and exempts small employers that demonstrate hardship from having to provide this “reasonable break time.”¹²⁴

The National Strategy “support[s] extending workplace protections to breastfeeding mothers,” because it recognizes that “parents who choose to breastfeed continue to face substantial barriers in sustaining this choice.”¹²⁵ It is apparent that there is a need for laws to be put in place to protect breastfeeding, because of the barriers that discourage breastfeeding. Even though there are laws to protect breastfeeding, it is not clear how effectively these laws are

¹¹⁹ 21 U.S.C. § 321(f).

¹²⁰ See Press Release, The White House, President Biden Announces First Two Infant Formula Defense Production Act Authorizations (May 22, 2022), <https://www.whitehouse.gov/briefing-room/statements-releases/2022/05/22/president-biden-announces-first-two-infant-formula-defense-production-act-authorizations/>.

¹²¹ See INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 41.

¹²² See *id.* at 43.

¹²³ Lindsey Murtagh & Anthony D. Moulton, *Working Mothers, Breastfeeding, and the Law*, AM J. PUB. HEALTH. 217, 217 (2011).

¹²⁴ See *id.* (emphasis added).

¹²⁵ See NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 26.

enforced, as barriers to breastfeeding still exist and impede continued breastfeeding.¹²⁶

B. 42 U.S.C. § 1790 Breastfeeding Promotion Program

Under 42 U.S.C. § 1790, “The Secretary, from amounts received under subsection (d), shall establish a breastfeeding promotion program to promote breastfeeding as the best method of infant nutrition, foster wider public acceptance of breastfeeding in the United States, and assist in the distribution of breastfeeding equipment to breastfeeding women.”¹²⁷ Even though this law promotes breastfeeding for infants and assists breastfeeding women, the stigma surrounding breastfeeding, especially in public places,¹²⁸ acts as a deterrent to breastfeeding. A 2001 study found that only 43% of U.S. adults believed that women have the right to breastfeed in public places.¹²⁹ Many mothers have been asked to stop breastfeeding in public places.¹³⁰ This correlates to an embarrassment connected to the disapproval of public breastfeeding.¹³¹ These feelings caused some women to choose supplementing with formula or to give up breastfeeding in its entirety.¹³²

Another barrier to breastfeeding is a father’s general opposition to it as a feeding method, due to concerns around their role in feeding and whether they would be able to bond with their infant if they were personally unable to feed the infant.¹³³ A lack of education about the benefits of breastfeeding and the right to breastfeed¹³⁴ are also barriers to breastfeeding. Breastfeeding does not require equipment. Breastfeeding equipment, as referenced in the above statute, refers to pumping, and pumping is not the same as breastfeeding.

¹²⁶ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 5, 10.

¹²⁷ 42 U.S.C. § 1790.

¹²⁸ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 13.

¹²⁹ See *id.*

¹³⁰ See *id.*

¹³¹ See *id.*

¹³² See *id.*

¹³³ *Id.* at 12. Some fathers being opposed to breastfeeding, along with the CEOs of the big infant formula companies being male, indicates lack of male support for breastfeeding, and gender inequality issues surrounding infant feeding. See *id.*

¹³⁴ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 10-11, 13.

Working mothers find that returning to work is a barrier to breastfeeding due to inflexible work hours, lack of privacy for breastfeeding or expressing milk, and limited maternity leave benefits.¹³⁵ Workplaces generally do not allow infants.¹³⁶ Many working mothers are pressured not to take breaks to pump or breaks are not long enough to allow for enough time for pumping.¹³⁷ Some working mothers have to pump in the restroom, which is unsanitary and leads to premature weaning.¹³⁸

Unfortunately, the USDA's goals to prevent hunger in children under the age of five, federal programs supporting infant formula, social stigma, lack of knowledge, and work barriers to breastfeeding, all end up as factors that contribute to formula feeding of infants. Male employees do not face the same challenges around infant feeding that female employees do. While laws allow for pumping, pumping is not the same as breastfeeding. Laws that allot time to pump are not equivalent to laws that allot time to breastfeed an infant. Similar to a pregnant dairy cow with a calf nearby to continue milk production,¹³⁹ it can be challenging for a mother to be able to pump breastmilk when her body does not detect the infant nearby to detect the infant's need for breastmilk. Pumping breastmilk does not ensure that the mother will be able to keep up her breastmilk supply.¹⁴⁰ The mother's body will readjust to the apparent decreased need to produce breastmilk, because the baby is not directly breastfeeding, and if she misses a pumping session because of work, her breastmilk supply can decrease.¹⁴¹ Increasing her breastmilk supply after this decrease is not easy.¹⁴²

¹³⁵ See *id.* at 14.

¹³⁶ See *id.*

¹³⁷ See *id.*

¹³⁸ See *id.*

¹³⁹ See *About Dairy Cows*, *supra* note 118.

¹⁴⁰ See Rothman, *supra* note 32 ("The more a baby sucks, that's what stimulates milk production. If you put a baby on a strict schedule, mothers' milk supplies go down.").

¹⁴¹ See *Low Milk Supply*, WIC BREASTFEEDING SUPPORT, <https://wicbreastfeeding.fns.usda.gov/low-milk-supply> (last visited Sep. 17, 2023) (listing the following as possible "[c]auses of Low Milk Supply: limiting your baby's breastfeeding sessions, or giving your baby infant formula instead of breastfeeding.").

¹⁴² See *id.* (recommending women "breastfeed every time your baby is hungry" as a main way to increase milk supply... [because] [y]our body will make milk to meet your baby's demand.").

VI. Infant Formula Shortage

A. Federal Nutrition Programs—Such as Entitlement to WIC for Formula Feeding—and Their Effects on the Formula Market and Infant Feeding

WIC-qualified brands get prominent shelf placing, which induces non-WIC parents to buy more of the WIC-qualified brands, because that brand is more visible on the grocery store shelves.¹⁴³ Because there are so few infant formula manufacturers in the U.S., and formula is not a competitive market (tariffs are 17.5% on foreign formula¹⁴⁴), there is no incentive for formula to evolve, or for other formula companies to enter the market. This caused a formula shortage in the U.S. when Abbott, one of the four companies that control 90% of the formula market, temporarily paused operations at its Sturgis, Michigan plant.¹⁴⁵ Abbott holds a WIC contract with two-thirds of the states in the country.¹⁴⁶ Because Abbott held a two-thirds majority, WIC participants in those states were most impacted because they could not purchase or even find WIC-approved formula.¹⁴⁷

In recent history, the WIC program ended up leading to monopolies and exacerbating the problems with shortages, highlighting a need to overhaul the U.S. food system.¹⁴⁸ WIC is for

¹⁴³ See Horsley, *supra* note 83.

¹⁴⁴ See Julie Creswell & Madeleine Ngo, *Baby Formula Shortage Has an Aggravating Factor: Few Prods.*, N.Y. TIMES, May 20, 2022 (§ A), at 1.

¹⁴⁵ These events that impact the U.S. food supply so drastically should prompt the U.S. to reconsider allowing concentration in the different industries, and for these monopolies to form, and to consider an overhaul of the U.S. food system to protect against crises such as the ones facing infants' food source, which is limited to breastmilk or infant formula when they are under six months of age. See Horsley, *supra* note 83 ("Other parts of the food chain have similar vulnerabilities. When the giant meatpacking company JBS was hit by a ransomware attack last year, 20% of the nation's beef and pork slaughtering capacity was temporarily idled.").

¹⁴⁶ See *The WIC brand of infant formula varies by state*, U.S. DEP'T OF AGRIC. ECON. RSCH. SERVS. (Sept. 22, 2015), <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=78481>.

¹⁴⁷ See *id.*; see also *Information for Health Care Providers*, MICH. HEALTH & HUM. SERVS., <https://www.michigan.gov/mdhhs/assistance-programs/wic/medicalproviders#:~:text=The%20current%20Michigan%20WIC%20infant,2021%20through%20October%2031%2C%202026>. (last visited Oct. 15, 2023) (stating that "[t]he current Michigan WIC infant formula manufacturer contract with Abbott Nutrition is effective November 1, 2021 through October 31, 2026.").

¹⁴⁸ See *id.*

“Women, Infants, and Children” because, historically, “Congress [found] that substantial numbers of pregnant women, infants and young children are at special risk in respect to their physical and mental health by reason of poor or inadequate nutrition or health care, or both.”¹⁴⁹

An overall lack of education on the benefits of breastfeeding led many people, even some health professionals, to believe that infant formula is just as beneficial as breastmilk.¹⁵⁰ Together with the federal nutrition programs, this barrier to breastfeeding can have an impact on infant feeding and can lead to increased infant formula feeding.¹⁵¹ Because more women of color rely on formula-feeding, this shortage disproportionately affected women of color.¹⁵²

B. Three Main Infant Formula Companies Monopolize the Formula Market

Infant formula is regulated by the FDA. The U.S. produces 98% of the formula it consumes,¹⁵³ which contributes to a monopoly for the three main companies in the domestic infant formula market, and deters foreign infant formula manufacturers from being able to export formula to the U.S.¹⁵⁴ FDA regulates domestic and foreign formula equally.¹⁵⁵ Foreign infant formula manufacturers are unlikely to export infant formula to the U.S. because of higher

¹⁴⁹ Victor Oliveira, et al., *The WIC Program: Background, Trends, and Issues*, 27 FOOD ASSISTANCE AND NUTRITION RSCH. REP., iii, 1, 8, 10 (2002).

¹⁵⁰ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 10.

¹⁵¹ See *id.*

¹⁵² See Jason Breslow, *As the baby formula crisis worsens, it's also magnifying disparities in the U.S.*, NAT'L PUB. RADIO (June 19, 2022), <https://www.npr.org/2022/06/02/1102479185/baby-formula-shortage-disparities>; see also Mariel Padilla, *The 19th Explains: Why baby formula is still hard to find months after the shortage*, 19TH NEWS (Dec. 1, 2022), <https://19thnews.org/2022/12/19th-explains-infant-formula-shortage/#%3A~%3Atext%3DLow%2Dincome%20parents%2C%20particularly%20women%2Cfor%20Disease%20Control%20and%20Prevention>. (“Low-income parents, particularly women of color, rely on formula to feed their babies at higher rates and continue to be most impacted by the shortage, according to data from the Centers of Disease Control and Prevention.”).

¹⁵³ See Hassan Z. Sheikh, ET AL., CONG. RSCH. SERV., IF12123, *Infant Formula Shortage: FDA Regul. and Fed. Response* (2022).

¹⁵⁴ See Creswell & Ngo, *supra* note 144.

¹⁵⁵ See Sheikh, ET AL., *supra* note 153.

manufacturing costs to meet FDA's requirements, in addition to 25% duties on imports into the U.S. of foreign formula.¹⁵⁶

During the ongoing formula shortage, FDA guidance dissuaded new parents from making their own formula.¹⁵⁷ Low-income families, especially new mothers of color, suffered more at the mercy of the big three formula companies during this shortage.¹⁵⁸ Further, new mothers unable to breastfeed are shamed for not breastfeeding,¹⁵⁹ which shows the lack of understanding for the mechanism of breastfeeding. Women of color who are single mothers needed to go back to work,¹⁶⁰ and not all workplaces provide a lactation space for breastfeeding mothers to express milk.¹⁶¹ Due to decreased breastfeeding capability, decreased breastmilk supply from not expressing milk, or other reasons that cause a mother's breastmilk supply to drop,¹⁶² many mothers eventually turn to formula to supplement. This infant formula shortage combined with the stigma of not being able to exclusively breastfeed to sustain the baby's life,¹⁶³ something a father does not experience, caused extreme stress, especially on mothers of color.¹⁶⁴

The infant formula market is highly lucrative.¹⁶⁵ Providing free hospital packs of infant formula led mothers to not exclusively breastfeed past ten weeks as compared to mothers who did not receive

¹⁵⁶ See *id.*

¹⁵⁷ See *FDA Advises Parents and Caregivers to Not Make or Feed Homemade Infant Formula to Infants*, FOOD & DRUG ADMIN. (Feb. 24, 2021), <https://www.fda.gov/food/alerts-advisories-safety-information/fda-advises-parents-and-caregivers-not-make-or-feed-homemade-infant-formula-infants>.

¹⁵⁸ See Breslow, *supra* note 152; See also Padilla, *supra* note 152.

¹⁵⁹ See Rebekah Diamond, *Why breastfeeding isn't a solution to the formula shortage*, NBC NEWS (May 12, 2022, 4:18 PM ET), <https://www.nbcnews.com/think/opinion/baby-formula-shortage-mothers-breastfeeding-blamed-rcna28595>.

¹⁶⁰ See Breslow, *supra* note 152; Padilla, *supra* note 152.

¹⁶¹ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 14.

¹⁶² See *Low Milk Supply*, *supra* note 141.

¹⁶³ See Cevalco, *supra* note 11 ("Breastfeeding has never been possible for everyone and people have always needed substitutes for breastmilk."); Diamond, *supra* note 159.

¹⁶⁴ See Breslow, *supra* note 152; Padilla, *supra* note 152.

¹⁶⁵ See *U.S. Baby Infant Formula Market Is Expected to Reach \$6.78 Billion by 2030*, GLOBE NEWSWIRE (Jun. 15, 2022), <https://www.globenewswire.com/en/news-release/2022/06/15/2463074/0/en/U-S-Baby-Infant-Formula-Market-Is-Expected-to-Reach-6-78-Billion-by-2030-Says-AMR.html>.

free packs while in the hospital.¹⁶⁶ This result provides an advantage to the three main formula companies and encourages these companies to begin marketing in the hospital to new delivering mothers.¹⁶⁷ Companies that provide hospitals with formula samples that can be given to new moms for free incentivize new moms to formula-feed. On the one hand, the availability of formula for new mothers can relieve stresses that new mothers experience with breastfeeding.¹⁶⁸ However, the lack of support for breastfeeding from employers¹⁶⁹ and society is also to the advantage of the formula industry. It should not be a surprise that the CEOs of the big three U.S. formula companies are all male.¹⁷⁰ In addition to supermarkets giving prime shelf space to the WIC-contracted formula company, pediatricians also recommend certain brands more readily to new parents,¹⁷¹ and physicians hold significant credibility when it comes to infant feeding recommendations.¹⁷² This makes it difficult for parents that formula-feed their infants to find infant formula, especially when a brand facing a shortage (Abbott) is the WIC-contracted formula brand in that particular state.¹⁷³ Marketing practices and medical advice contribute to the disproportionate effects of U.S. laws and nutrition

¹⁶⁶ See Kenneth D. Rosenberg et al., *Marketing Infant Formula Through Hospitals: the Impact of Commercial Hospital Discharge Packs on Breastfeeding*, 98 AM. J. PUB. HEALTH, 290, 290 (2008) (“Commercial hospital discharge packs are one of several factors that influence breastfeeding duration and exclusivity. The distribution of these packs to new mothers at hospitals is part of a longstanding marketing campaign by infant formula manufacturers and implies hospital and staff endorsement of infant formula.”).

¹⁶⁷ See *id.*

¹⁶⁸ See generally *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 11.

¹⁶⁹ See *id.* at 14.

¹⁷⁰ See *id.* at 12 (“Paternal influences on maternal feeding practices are critically important in early decision making about breastfeeding.”); See also *Executive Team*, ABBOTT, <https://www.abbott.com/corpnewsroom/utilities/executive-team.html> (last visited Sept. 30, 2023); Julia Musto, *US Formula Shortage to Improve by October, Gerber CEO Projects*, FOX BUS. (Sept. 13, 2022), <https://www.foxbusiness.com/markets/us-formula-shortage-improve-october-gerber-ceo-projects#>; *Mead Johnson Nutrition CEO and Executive Team*, CRAFT, <https://craft.co/mead-johnson-nutrition/executives> (last visited Sept. 30, 2023).

¹⁷¹ See Horsley, *supra* note 83.

¹⁷² It is troubling to know that “a recent survey of pediatricians showed that many believe the benefits of breastfeeding do not outweigh the challenges that may be associated with it, and they reported various reasons to recommend against breastfeeding.” Such a recommendation against breastfeeding because of its challenges is directly contrary to the National Strategy’s recommendation to promote breastfeeding and nutrition science’s evidence that breastfeeding is best for an infant. See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 15.

¹⁷³ See Horsley, *supra* note 83.

programs on new mothers, impact infant feeding, and exacerbate gender and race inequality.

VII. Effects of Laws on New Mothers' Behaviors

A. *Infant Formula Offered to New Mothers Post-Birth Impacts Infant Feeding*

The First Amendment Right to Free Speech, applied to commercial speech, allows companies to use speech as long as it is not false or misleading.¹⁷⁴ Some hospitals allow infant formula companies to market their infant formulas at the hospital to new mothers (at their most vulnerable) after delivering their babies, by offering formula instead of assisting in initiation of breastfeeding,¹⁷⁵ as long as the information is not false or misleading.¹⁷⁶ As a result of this marketing, infant formula companies receive positive views for promoting their infant formulas for free. The infant formula samples may be free, but formula-feeding affects the mother's breastmilk supply and interferes with breastfeeding.¹⁷⁷ The shortage of infant formula in the past year,¹⁷⁸ together with the government's high tariffs on imported formula,¹⁷⁹ placed parents, in particular mothers of color,¹⁸⁰ in a debilitating position where the possibility of not being able to feed their infant was a real concern.

Infant formula companies incentivized formula use by

¹⁷⁴ See *Turtle Island Foods SPC v. Soman*, 424 F. Supp. 3d 552, 561 (E.D. Ark. 2019) (finding First Amendment commercial speech protects against "a restriction on commercial speech that prevents companies from sharing truthful and non-misleading information about their products.").

¹⁷⁵ See Szalinski, *supra* note 22 ("Previous research shows hospital maternity wards that serve larger black populations are less likely to help black women initiate breastfeeding after giving birth or offer lactation support following delivery, according to the CDC study. Often, staff in these facilities instead offer black babies formula."); see also Echols, *supra* note 22 ("Hospitals in communities with an above-average Black population are significantly less likely to promote nursing than hospitals located in other neighborhoods. Black women are also more likely to experience in-hospital formula introduction, which is associated with lowered breastfeeding rates.").

¹⁷⁶ See Cevalco, *supra* note 11.

¹⁷⁷ See *Low Milk Supply*, *supra* note 141.

¹⁷⁸ See Horsley, *supra* note 83.

¹⁷⁹ See *id.*

¹⁸⁰ See Breslow, *supra* note 152; see also Padilla, *supra* note 152 ("Low-income parents, particularly women of color, rely on formula to feed their babies at higher rates and continue to be most impacted by the shortage, according to data from the Centers for Disease Control and Prevention.").

distributing samples to hospitals and encouraging hospital workers to pass out those samples to new mothers.¹⁸¹ However, a mother's breastmilk is also free. After a baby is born, breastfeeding can be difficult, and its success often depends on early access to an in-hospital lactation consultant.¹⁸² A new mother's milk is commonly not immediately available after the baby is born.¹⁸³ In these critical early days, new mothers can become extremely discouraged due to a belief of inadequacy from a lack of milk supply, and therefore succumb to pressures to formula feed.¹⁸⁴ Women are particularly vulnerable in these moments after childbirth,¹⁸⁵ and formula companies that give samples of formula in the hospital may cause a new mother to formula-feed instead of breastfeed.¹⁸⁶ Even for the first several weeks of the new infant's life, it is difficult to establish breastfeeding, especially if there is not support from the workplace or from society in general.¹⁸⁷ It may even lead a new mother to use the free formula samples from the hospital to feed the infant.¹⁸⁸ This affects the mother's milk supply¹⁸⁹ and ultimately impacts infant feeding.

¹⁸¹ Nathaniel Meyersohn, *Companies aggressively marketed baby formula. Then there was a shortage.*, CNN (July 1, 2022, 1:50 PM), <https://www.cnn.com/2022/07/01/business/baby-formula-marketing-tactics/index.html>; see also Rosenberg et al., *supra* note 166; see also *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 15.

¹⁸² See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 13 ("Successful initiation depends on experiences in the hospital as well as access to instruction on lactation from breastfeeding experts, particularly in the early postpartum period.").

¹⁸³ See *Breastfeeding and Delayed Milk Production*, JOHN HOPKINS MED., <https://www.hopkinsmedicine.org/health/conditions-and-diseases/breastfeeding-and-delayed-milk-production#:~:text=Sometimes%20a%20mother%20has%20a,%2C%20don't%20feel%20discouraged> (last visited Sep. 25, 2023).

¹⁸⁴ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 13 ("Lack of confidence in breastfeeding or not understanding the normal physiology of lactation can lead to the perception of an insufficient milk supply when in fact the quantity is enough to nurture the baby.").

¹⁸⁵ See *id.*

¹⁸⁶ See *id.*; see also Meyersohn, *supra* note 181.

¹⁸⁷ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 12-13.

¹⁸⁸ See Meyersohn, *supra* note 181. ("The linchpin of their marketing strategy is to get free samples into the hands of breastfeeding mothers. What they hope will happen is if a breastfeeding mother runs into any trouble at all she will have formula already in a bottle and ready to put in her baby's mouth.").

¹⁸⁹ See *Low Milk Supply*, *supra* note 141.

B. WIC promotes Breastfeeding in Alignment with the National Strategy

WIC benefits for formula makes sense for fathers because they have no other way of feeding a child as males cannot breastfeed.¹⁹⁰ Thus, WIC benefits may not impact fathers in the same way as they do mothers when it comes to infant feeding decisions. However, WIC benefits and breastfeeding guidance are contradictory. Conflicting advice about solutions to breastfeeding problems, a lack of confidence in breastfeeding, and a lack of understanding of the physiology of lactation leading to the misperception of inadequate milk supply,¹⁹¹ are contradictory concepts that can impact infant feeding decisions.

WIC benefits can be used for infant formula.¹⁹² However, WIC's website promotes breastfeeding and is in alignment with the National Strategy.¹⁹³ WIC encourages breastfeeding on demand,¹⁹⁴ but does not take into account that many working mothers face inflexible work schedules.¹⁹⁵

The USDA's Food and Nutrition Service (FNS) recommends breastfeeding as "one of the best things you can do for your baby," and to "breastfeed your baby as much as you can, and for as long as you can."¹⁹⁶ However, the U.S. government's position concerning breastfeeding appears inconsistent. While the Fair Labor Standards Act (FLSA) allows for lactation rooms, this is for pumping and not for direct breastfeeding.¹⁹⁷ Pumping and breastfeeding are not the

¹⁹⁰ See generally *Welcoming Dads to WIC Family*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV. (Jun. 9, 2022), <https://www.fns.usda.gov/wic/welcoming-dads-to-wic-family>.

¹⁹¹ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 11.

¹⁹² See *WIC Frequently Ask Questions*, *supra* note 5 ("WIC recognizes and promotes breastfeeding as the optimal source of nutrition for infants. For women who do not fully breastfeed, WIC provides iron-fortified infant formula.").

¹⁹³ See generally *Breastfeeding Benefits*, *supra* note 28 (stating "Breast milk is one of the best things that your baby needs to grow and develop.").

¹⁹⁴ See *Low Milk Supply*, *supra* note 141.

¹⁹⁵ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 14.

¹⁹⁶ *About WIC Breastfeeding Support and Formative Research Findings*, *supra* note 3.

¹⁹⁷ See *FLSA Protections to Pump at Work*, U.S. DEP'T OF LAB., <https://www.dol.gov/agencies/whd/pump-at-work/> (last visited Oct. 15, 2023) ("The

same.¹⁹⁸ When a new mother knows that she is able to pump during work, she may choose to go back to work sooner, which will affect her breastmilk supply, because pumping is not as effective at keeping milk supply up as direct breastfeeding.¹⁹⁹ Exclusively breastfeeding requires mothers to not be away from their babies for long stretches of time, which the FLSA does not address.²⁰⁰ It simply gives a mother the ability to pump during work. Pumping can be more difficult than direct breastfeeding,²⁰¹ which impacts infant feeding and can lead to a mother's use of formula. "The lack of universal paid family leave still prevents some working parents from breastfeeding,"²⁰² which impacts infant feeding and can also lead to formula use.

Though the USDA, FNS supports breastfeeding as preferred over formula-feeding, many factors such as the lack of paid leave for working parents and financial support to new parents through WIC, impact infant feeding decisions and lead to formula-feeding. Plus, hospitals are allowed to give formula samples provided by infant formula companies during the first few days after the baby is born when the mother is most vulnerable,²⁰³ which can impact infant feeding and lead to formula-feeding. This misleads new mothers into believing that the hospital is endorsing those formula companies.²⁰⁴ The government's position concerning breastfeeding appears conflicting, because while it provides WIC for formula purchases, it does not provide paid leave to new parents to facilitate, support, and

Fair Labor Standards Act (FLSA) requires employers to provide reasonable break time for an employee to express breast milk for their nursing child for one year after the child's birth each time such employee has need to express the milk. Employees are entitled to a place to pump at work, other than a bathroom, that is shielded from view and free from intrusion from coworkers and the public.").

¹⁹⁸ See generally Crider, *supra* note 16.

¹⁹⁹ See Leisa Bailey, *Breastfeeding: Returning to Work*, FAMILYDOCTOR.ORG (July 2022), <https://familydoctor.org/breastfeeding-returning-to-work/>.

²⁰⁰ See Crider, *supra* note 16.

²⁰¹ See *id.*

²⁰² Cevalasco, *supra* note 11.

²⁰³ See Rosenberg et al., *supra* note 166 ("Among women who had initiated breastfeeding, 66.8% reported having received commercial hospital discharge packs. Women who received these packs exclusively breastfed for fewer than 10 weeks as compared to the women who had not received the packs. Commercial hospital discharge packs are one of several factors that influence breastfeeding duration and exclusivity. The distribution of these packs to new mothers at hospitals is part of a longstanding marketing campaign by infant formula manufacturers and implies hospital and staff endorsement of infant formula. Commercial hospital discharge pack distribution should be reconsidered in light of its negative impact on exclusive breastfeeding").

²⁰⁴ See *id.*

promote breastfeeding.²⁰⁵

Breastfeeding mothers can participate in WIC longer than non-breastfeeding mothers,²⁰⁶ which could be an incentive for mothers to breastfeed. However, the lack of paid family leave, difficulty in continued lactation the longer a mother is away from her infant,²⁰⁷ and adversity stacked against breastfeeding,²⁰⁸ mothers wanting to breastfeed long-term may find it infeasible.

Allowing breastfeeding mothers to participate in WIC longer than non-breastfeeding mothers²⁰⁹ may have an unintended inequitable effect against women who are physically unable to breastfeed due to physiological reasons, but might have done so if they were physically able.²¹⁰ These mothers might have wanted to breastfeed if they were physiologically able to in order to avail themselves of WIC's benefit of extended coverage for breastfeeding mothers.²¹¹ The nutrition benefits programs thus have an unequal effect on mothers depending on their physical ability to breastfeed. Once again, these concerns do not affect males at all.

WIC takes active steps to ensure fathers feel included in childhood development.²¹² However, granting a father access to WIC feels counter-intuitive because the program was designed to help support low-income and nutritionally disadvantaged women, infants, and children; even further, women, rather than men, are incredibly vulnerable post-birth.²¹³ WIC was specifically created to address

²⁰⁵ See Cevalco, *supra* note 11.

²⁰⁶ See *WIC Fact Sheet*, *supra* note 58.

²⁰⁷ See Mary Sauer, *How to handle a sudden decrease in milk supply*, BABYCENTER (Aug. 15, 2022), https://www.babycenter.com/baby/breastfeeding/i-think-my-milk-supply-is-dwindling-what-could-be-the-proble_8872.

²⁰⁸ See generally *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97.

²⁰⁹ See *WIC Fact Sheet*, *supra* note 58.

²¹⁰ See Amy McKeever, *Many women struggle to breastfeed. Scientists are starting to ask why.*, NAT'L GEOGRAPHIC (AUG. 9 2023), <https://www.nationalgeographic.com/premium/article/many-women-struggle-to-breastfeed-scientists-are-starting-to-ask-why> ("Only about five to 10 percent of women are physiologically unable to breastfeed.").

²¹¹ See *WIC Fact Sheet*, *supra* note 58.

²¹² See *Welcoming Dads to WIC Family*, *supra* note 190.

²¹³ See Victor Oliveira et al., *The WIC Program: Background, Trends, and Issues*, U.S. DEP'T OF AGRIC. ECON. RSCH. SERV. (Sept. 2002), https://www.ers.usda.gov/webdocs/publications/46648/15841_fanrr27_1_1_.pdf?v=0

public concern of malnutrition among low-income mothers and children,²¹⁴ and only women, not men, can be pregnant.²¹⁵

The FNS states, “We don't encourage dads to step up and then we wonder why they don't show up.”²¹⁶ This appears to place blame on those who do not encourage dads to step up as fathers, excuses dads for not stepping up, and places the responsibility on external forces that should have encouraged these dads to step up. While it could be true that dads are not encouraged to be fathers, the WIC program was created to address public concern of malnutrition specifically found in low-income mothers²¹⁷ and not fathers. Moreover, the USDA historically reflects an American farmer demographic of white males.²¹⁸ Statements like these on the USDA's website continue to highlight the underlying gender discrimination that exists and exacerbates gender inequality issues that have been allowed to fester and continue in our country, perhaps not overtly, but insidiously. Allowing fathers to participate in WIC is not in alignment with the purpose of WIC, which was to address the special needs of pregnant women arising from their pregnancy condition,

(“The origin of WIC dates back to the 1960s when the Nation began to recognize that many low-income Americans were suffering from malnutrition.....special attention be given to the nutritional needs of low-income pregnant women and preschool children...in response to the growing public concern about malnutrition among low-income mothers and children.”).

²¹⁴ See *id.*

²¹⁵ See *Geduldig v. Aiello*, 417 U.S. 484, 496-97, n.20 (1974).

²¹⁶ See *Welcoming Dads to WIC Family*, *supra* note 190.

²¹⁷ See Oliveira, et al., *supra* note 213.

²¹⁸ See Laura Reiley & Andrew Van Dam, *Advocates hoped census would find diversity in agriculture. It found old white people.*, THE WASH. POST (Apr. 13, 2019, 6:30 AM),

<https://www.washingtonpost.com/business/2019/04/13/advocates-hoped-new-report-would-find-diversity-ag-it-found-old-white-people/>; see also *2012 Census of Agriculture Highlights: Women Farmers*, U.S. DEP'T OF AGRIC. NATION'L AGRIC. STAT. SERV. (Sept. 2014),

https://www.nass.usda.gov/Publications/Highlights/2014/Highlights_Women_Farmers.pdf (Outlining statistical findings of women farmers in the US); see also Seth L. Ellis, *Disestablishing "The Last Plantation": The Need for Accountability in the United States Department of Agriculture*, 4 J. FOOD L. & POL'Y 93, 94 (2008) (“Many American citizens do not share Abraham Lincoln's view of the USDA as being the ‘people's Department’; rather, they identify it as being ‘the last plantation’ due to its long history of open discrimination against African-American farmers...In 1865, Congress established the Bureau of Refugees, Freedmen, and Abandoned Lands (Freedmen's Bureau) to oversee the allocation of Southern land to former slaves. The Act which founded the Freedmen's Bureau ‘promised every *male* citizen, whether refugee or freedman, forty acres of land at rental for three years with an option to buy.”) (emphasis added).

which is a condition that men can never be in

VIII. Breastfeeding vs. Formula Feeding

A. Benefits of Breastfeeding

Research shows that breastfeeding has lifelong benefits for both mother and child.²¹⁹ Breastfed children are more likely protected against infections and childhood death.²²⁰ Breastfeeding can also protect babies against asthma and sudden infant death syndrome (SIDS).²²¹ Breastfed babies also have less ear infections and stomach bugs.²²² Research also shows an increase in intelligence and reduced rates of obesity and diabetes in childhood, lasting into adulthood.²²³ Mothers that breastfeed are more likely protected against ovarian and breast cancer.²²⁴ Type 2 diabetes and high blood pressure are less common in women who breastfeed.²²⁵ Breastfeeding is also linked to lower risks of obesity, Type 1 diabetes, and asthma in children.²²⁶ Breastmilk changes as the baby grows to specifically meet that baby's nutritional needs,²²⁷ whereas infant formula does not.²²⁸

The potential public health consequences of not supporting women to breastfeed²²⁹ are increased obesity in mothers and undeveloped microbiome in infants. These public health consequences must be examined in tandem with formula companies that “have real clout”²³⁰ and influence on women's decisions to breastfeed or to formula-feed.

²¹⁹ See Neves, et al., *supra* note 22, at 910.

²²⁰ See *id.*

²²¹ See *Breastfeeding Benefits Both Baby and Mom*, CTDS. FOR DISEASE CONTROL AND PREVENTION: DIVISION OF NUTRITION, PHYSICAL ACTIVITY, AND OBESITY (Sept. 7, 2023), <https://www.cdc.gov/nccdphp/dnpao/features/breastfeeding-benefits/index.html#%3A~%3Atext%3DBreastfeeding%20can%20help%20protect%20babies%20Cear%20infections%20and%20stomach%20bug>.

²²² See *id.*

²²³ See Neves, et al., *supra* note 22, at 910.

²²⁴ See *id.*

²²⁵ See *Breastfeeding Benefits Both Baby and Mom*, *supra* note 221.

²²⁶ See Roni Caryn Rabin, *U.S. Guidelines Sidestep Scientific Advice to Cut Sugar and Alcohol*, N.Y. TIMES, Dec. 30, 2020, at A17.

²²⁷ See *Breastfeeding Benefits Both Baby and Mom*, *supra* note 221.

²²⁸ See INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 44-46.

²²⁹ Rothman, *supra* note 32.

²³⁰ *Id.*

Breastmilk is a living substance²³¹ which affects not only the neonatal gut and immune system, but also lifelong health.²³² A new study also “showed that what really helped prevent obesity was getting breast milk directly from the breast,” as opposed to from a bottle.²³³

B. Is Breastfeeding a Right?

According to the USDA, breastfeeding mothers have certain rights, and there are laws about breastfeeding in public and pumping at work.²³⁴ However, working moms who are hourly workers, as opposed to salaried workers, do not have as much control over their schedules, which makes it difficult for them to take the time to pump during work hours.²³⁵

Mothers choose not to breastfeed for many reasons including misinformation about the adequate nutrition of breastmilk²³⁶ and a lack of support for lactating women,²³⁷ especially in the workplace.²³⁸ Even WIC benefits themselves may sway working mothers that need to earn money to support their families to decide to formula-feed rather than to breastfeed. Working mothers are pressured to not take breaks to pump and babies are not allowed in the workplace²³⁹ because both take the working mother away from

²³¹ See INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 46.

²³² See Rothman, *supra* note 32.

²³³ Claire McCarthy, *The Real Link Between Breastfeeding and Preventing Obesity*, HARVARD MED. SCH. (Oct. 16, 2019), <https://www.health.harvard.edu/blog/the-real-link-between-breastfeeding-and-preventing-obesity-2018101614998>.

²³⁴ See *Your Breastfeeding Rights*, U.S. DEP’T OF AGRIC. WIC BREASTFEEDING SUPPORT, <https://wicbreastfeeding.fns.usda.gov/your-breastfeeding-rights#:~:text=There%20is%20no%20national%20law,any%20public%20or%20private%20place> (last visited Oct. 14, 2023). There are laws about breastfeeding in public and pumping at work, but not breastfeeding while at work, because for the most part, babies are not allowed at the workplace. See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 14.

²³⁵ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 14-15.

²³⁶ See *id.* at 10.

²³⁷ See McKeever, *supra* note 210 (stating there is “minimal institutional support for women who are trying to breastfeed. In contrast to the dairy industry, which has funded extensive studies of lactation in cattle, researchers have barely scratched the surface with human milk.”).

²³⁸ Cevasco, *supra* note 11.

²³⁹ See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 14.

her job duties.

Infant formula companies promote their product, infant formula, but the big three infant formula companies all have male CEOs.²⁴⁰ Women should have the choice to decide how they use their bodies and whether they want to breastfeed or formula-feed. However, laws, nutrition programs, breastfeeding barriers, and other societal factors, impact a woman's choice around infant-feeding methods. Women are sometimes discouraged to breastfeed and end up formula-feeding.

During the infant formula shortage in 2022,²⁴¹ a mother might have experienced less anxiety knowing that she had breastmilk,²⁴² one of two possible sources of acceptable and safe foods if, at the time, she had an infant less than six months of age. However, the barriers to breastfeeding, which might have led a mother to formula-feed instead of breastfeed, together with the formula shortage, take away her feelings of assurance that her infant will be fed. Although the "American Academy of Pediatrics (AAP) recommends *exclusive* breastfeeding for approximately 6 months after birth,"²⁴³ mothers receive conflicting information from their doctors,²⁴⁴ and the laws and nutrition programs also appear contradictory concerning infant feeding and impact infant feeding decisions.

C. Overall Lack of Support for Breastfeeding and Its Impact on Infant Feeding

While National Strategy written materials²⁴⁵ and the FNS's

²⁴⁰ See also *Executive Team*, *supra* note 170; see also Musto, *supra* note 170; see also Mead Johnson Nutrition CEO and Executive Team, *supra* note 170.

²⁴¹ See Horsley, *supra* note 83.

²⁴² See Imboden et al., *supra* note 92, at 1.

²⁴³ Joan Meek & Lawrence Noble, *Policy Statement: Breastfeeding and the Use of Human Milk*, 150 AM. ACAD. OF PEDIATRICS 1, 1, (June 27, 2022) (emphasis added).

²⁴⁴ See *The Surgeon General's Call to Action to Support Breastfeeding*, *supra* note 97, at 5 ("Women report receiving conflicting advice from clinicians about how to solve problems with breastfeeding." And "a recent survey of pediatricians showed that many believe the benefits of breastfeeding do not outweigh the challenges that may be associated with it, and they reported various reasons to recommend against breastfeeding.").

²⁴⁵ See generally NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 26.

website indicate that the federal government recommends breastfeeding, written materials and actual actions are inconsistent with respect to what the government really recommends. “WIC is the major purchaser of infant formula in the United States.”²⁴⁶ The federal government appears to support time for lactating workers to pump breastmilk, but this is not the same as breastfeeding.²⁴⁷ This also assumes employers follow all required laws.²⁴⁸ While one method of feeding recommendation does not mean an exclusion of other feeding methods, a recommendation for formula-feeding ultimately discourages breastfeeding.²⁴⁹ The same is not true in reverse because the success of formula-feeding does not rely on a mother’s milk supply; breastfeeding success requires milk production and is adversely impacted by a decrease in milk supply due to increased formula feeding.²⁵⁰ Breastfeeding is more cost-effective than formula-feeding for a mother.²⁵¹ If breastfeeding is not supported or encouraged, the end result is that mothers pay to formula-feed their infant when they already had a more cost-effective method in their own breastmilk.

Mothers who breastfeed their infants require less sick leave absences to care for sick children as compared to mothers who formula-feed their infants because of reduced occurrences of health problems in breastfed babies and their mothers.²⁵² Many mothers that chose formula out of necessity are women of color.²⁵³ Increased health problems could occur in formula-fed babies and their mothers, and these health problems may not occur if exclusive breastfeeding was promoted.²⁵⁴ These babies of color that were not exclusively

²⁴⁶ See *The WIC brand of infant formula varies by State*, *supra* note 6.

²⁴⁷ See Crider, *supra* note 16, at 4.

²⁴⁸ Many working mothers are pressured not to take breaks to pump, or breaks are not long enough to allow enough time for pumping. See *The Surgeon General’s Call to Action to Support Breastfeeding*, *supra* note 97, at 4.

²⁴⁹ See *Low Milk Supply*, *supra* note 141, at 3.

²⁵⁰ See *id.*

²⁵¹ See *Breastfeeding Benefits*, *supra* note 28.

²⁵² See Nicole Kennedy Orozco, *Pumping at Work: Protection from Lactation Discrimination in the Workplace*, 71 OHIO ST. L.J. 1281, 1289 (2010).

²⁵³ See Breslow *supra* note 152, at 5; See Padilla *supra* note 152, at 7.

²⁵⁴ See *Breastfeeding Benefits Both Baby and Mom*, *supra* note 221; see also Neves et al., *supra* note 22, at 916 (“There is ample evidence on the hazards associated with formula feeding and suboptimal breastfeeding practices. These include not only increased child morbidity and mortality, but also reduced human capital in adulthood associated with lower intelligence, and possible effects on diabetes and obesity. . . . Urgent action is needed in order to promote and support exclusive breastfeeding in all social groups.”).

breastfed, because it was not supported or encouraged, may start out their lives at a disadvantage being formula-fed rather than breastfed.

“Successful breastfeeding promotion policies can have nontrivial impacts on the U.S. labor market.”²⁵⁵ Marketing infant formula-feeding or breastfeeding also impacted the duration and initiation of breastfeeding.²⁵⁶ For the most part, exposure of mothers to infant formula marketing shortened the duration and initiation of exclusive breastfeeding, and instead resulted in formula-feeding.²⁵⁷ Exposure to breastfeeding, for the most part, caused higher rates of initiation and duration of breastfeeding.²⁵⁸ Because of the infant formula shortage, the rate of mothers initiating breastfeeding increased by 10.6% compared to before the shortage.²⁵⁹ The reports of sick babies due to consumption of formula caused a preference for breastfeeding.²⁶⁰

The lack of universal paid family leave exacerbates the problem faced by American women when it comes to paid leave to care for a baby.²⁶¹ When a mother is at work and not in the presence of her baby, her body senses that there is not a need to make breastmilk.²⁶² Infant formula companies can benefit from this. Once the mother’s milk dries up, it can be a difficult process to get it to come back (relactation).²⁶³

²⁵⁵ Bidisha Mandal et al., *Work and breastfeeding decisions are jointly determined for higher socioeconomic status US mothers*, REV. OF ECON. OF THE HOUSEHOLD 237, 237 (2014), <https://doi.org/10.1007/s11150-012-9152-y>.

²⁵⁶ See Yuanting Zhang et al., *The Association of Prenatal Media Marketing Exposure Recall with Breastfeeding Intentions, Initiation, and Duration*, J. HUM LACT. 500 (2013), <https://pubmed.ncbi.nlm.nih.gov/23686404/> (“Exposure to infant formula information from print media was associated with shorter intended duration of exclusive breastfeeding, and formula information from websites was related to lower odds of both intended and actual initiation. Exposure to breastfeeding information from websites was related to higher odds of both intended and actual initiation and longer intended duration of any breastfeeding. Breastfeeding information from print media was associated with longer duration of any breastfeeding, but information from broadcast media was associated with shorter duration of any breastfeeding.”).

²⁵⁷ See *id.*

²⁵⁸ See *id.*

²⁵⁹ See Imboden et al., *supra* note 92, at 279.

²⁶⁰ See *id.*

²⁶¹ See generally Imboden et al., *supra* note 92.

²⁶² See Sauer, *supra* note 207.

²⁶³ See *How To Reintroduce Lactation After Stopping Breastfeeding*, CLEVELAND CLINIC (Jun. 16, 2022), <https://health.clevelandclinic.org/relactation/>.

IX. Effects of Formula Feeding on Health

A. Mothers and Weight Control

Babies and kids start out life with an innate biological knowledge to not overeat.²⁶⁴ They stop breastfeeding or eating when they have had enough. However, “parents can teach children to distrust their internal hunger and fullness cues by serving portions that exceed children’s needs which, in turn, prompts children to overeat.”²⁶⁵ This can happen with formula-feeding from a bottle.

Babies are not able to control how much they eat, and because babies do not need to latch onto a bottle to make the milk come out, babies have less control in formula-feeding.²⁶⁶ Because babies do not control the amount of food given to them from a bottle, this can lead to overeating. Therefore, formula-feeding from a bottle can lead to a generation of humans that do not learn to read their own body’s signals that would inform them when they are full and have had enough to eat. Each human is an individual and the right amount of food for one person may not be the same as the amount for another.

When a mother breastfeeds exclusively, it promotes greater weight loss than feeding some combination of breastmilk and formula.²⁶⁷ Exclusive breastfeeding can prevent obesity.²⁶⁸ Breastfeeding outcomes correlate directly with race and income: white and Asian babies are breastfed more than Black infants.²⁶⁹ Low-income women of color that have to rely on formula to feed their babies²⁷⁰ often do not experience the weight-controlling benefits

²⁶⁴ See Eck et al., “My Tummy Tells Me” *Cognitions, Barriers and Supports for Parents and School-Age Children for Appropriate Portion Sizes*, NAT’L LIBR. MED. (2018), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6115960/> (“Healthy children are born with an innate ability to self-regulate their dietary intake to match their needs.”).

²⁶⁵ *Id.*

²⁶⁶ See, McCarthy, *supra* note 233.

²⁶⁷ See Irene E. Hatsu et al., *Effect of infant feeding on maternal body composition*, INT’L BREASTFEEDING J., 18, 18 (2008), <https://internationalbreastfeedingjournal.biomedcentral.com/articles/10.1186/1746-4358-3-18>.

²⁶⁸ See *id.* at 18, 23 (“There is a need to encourage mothers to exclusively breastfeed as a means of overweight and obesity prevention.”). But see Breslow, *supra* note 152 (recognizing exclusive breastfeeding is difficult for women of color who often have to formula-feed because their work schedules are inflexible in accommodating pumping or breastfeeding); see also Padilla, *supra* note 152.

²⁶⁹ See Cevalco, *supra* note 11.

²⁷⁰ See Breslow, *supra* note 152; see also Padilla, *supra* note 152.

of breastfeeding.²⁷¹ When a father formula feeds, he does not experience the same health consequences as a mother, especially a mother that chose one method of infant feeding over another. Infant feeding choices thus have consequences that do not equally impact women and men (based on gender), and women of color (based on race). Continued studies that examine the effects of laws on infant feeding and its impacts on inequality are crucial for this reason.

B. Babies and Failure to Develop Proper Gut Microbiome

Breastmilk helps babies to develop proper microbiomes. When babies are not breastfed for long enough, they do not learn how to develop proper microbiomes.²⁷² “Babies who drink breast milk are more likely to have certain bacteria in their digestive tracts that help prevent obesity.”²⁷³ “The higher protein content of artificial baby milk compared to the lower protein content in breastmilk is responsible for the increased growth rate and adiposity during the influential period of infancy of formula-fed infants.”²⁷⁴ Breastfed infants consume less milk than the same infant given infant formula during early months and consume less calories than formula-fed infants.”²⁷⁵

An individual is first exposed to microorganisms during delivery in the mother’s birth canal and through breastmilk, and exactly which microbiota species an infant is exposed to depends on the mother’s DNA.²⁷⁶ Formula feeding can alter the structure and relative abundances of the bacterial communities normally found in a breastfed infant’s gut.²⁷⁷ “Cesarean section[s] (C-section[s]),

²⁷¹ See Hatsu, *supra* note 267, at 18, 23.

²⁷² See National Public Radio, *The Invisible Universe Of The Human Microbiome*, YOUTUBE (Nov. 5, 2013), <https://www.youtube.com/watch?v=5DTrENdWvM>.

²⁷³ McCarthy, *supra* note 233.

²⁷⁴ Wendy H. Oddy, *Infant feeding and Obesity risk in the Child*, 20 BREASTFEEDING REV. 7, 7 (2012).

²⁷⁵ See INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 46.

²⁷⁶ See *The Microbiome*, HARV. SCH. PB. HEALTH, <https://www.hsph.harvard.edu/nutritionsource/microbiome/> (last visited Oct. 1, 2032) (“A person is first exposed to microorganisms as an infant, during delivery in the birth canal and through the mother’s breast milk... [l]ater on, environmental exposures and diet can change one’s microbiome to be either beneficial to health or place one at greater risk for disease.”).

²⁷⁷ See Noel T. Mueller et al., *The Infant Microbiome Development: Mom Matters*, 21 NAT’L LIBR. MED. 109, 115 (2015).

perinatal antibiotics, and formula feeding . . . have been linked to increased risks of metabolic and immune diseases.”²⁷⁸ Breastfeeding and formula-feeding influence microbiota.²⁷⁹ “Breast-fed newborns have been demonstrated to carry a more stable and uniform population when compared to the formula-fed ones,” and the type of feeding method used “has a major impact on the development of immune functions.”²⁸⁰ Studies have shown that “milk formula with prebiotics, probiotics, and lactoferrin has been demonstrated to change newborns’ microflora composition toward breast-feeding pattern and to stimulate immune response. [However,] no definitive results are available regarding the real health improvement, so that breast milk, whose beneficial health-effects are undoubtedly unique, has to be considered the food of choice for infants in the first 6 months of life.”²⁸¹

Providing formula has an unintended potential consequence on an infant’s ability to develop the necessary microbiota to fight off infections, diabetes, and obesity. To replace that necessary microbiota that infants receive from mother’s breastmilk with probiotics, feeds into a multi-billion dollar industry.²⁸²

If infant formula is an ultra-processed food in alignment with the NOVA4 food classification, then it can impact human health including pro-inflammatory microbiome contribution.²⁸³ Higher consumption of ultra-processed foods also leads to obesity, depression, diabetes, hypertension, cardiovascular diseases, breast cancer, and higher mortality.²⁸⁴ Formula-feeding, with a disproportionately higher prevalence in low-income women of color,²⁸⁵ may lead to continued poor communities as a result of reduced health outcomes that originated from lack of consumed breastmilk during infancy.

²⁷⁸ *Id.* at 109.

²⁷⁹ See Guaraldi & Salvatori, *supra* note 28, at 3.

²⁸⁰ *Id.* at 3-4.

²⁸¹ *Id.* at 5.

²⁸² See *The Microbiome*, *supra* note 276 (“Probiotic supplement sales exceed \$35 billion in 2015, with a projected increase to \$65 billion by 2024.”).

²⁸³ See *Food, Nutrition & Fitness I*, *supra* note 112, at 4; See also Monteiro, *supra* note 110, at 22:58.

²⁸⁴ Monteiro, *supra* note 110, at 23:53.

²⁸⁵ See Breslow, *supra* note 152; see also Padilla, *supra* note 152.

X. Recommendations

This article recommends, in alignment with the National Strategy: (1) instructing federal agencies to work together to reduce confusion around existing laws that impact infant feeding; and (2) increasing educational outreach efforts to Americans around breastfeeding benefits, including obesity reduction and disease reduction in mothers and infants.²⁸⁶ Americans should be educated regarding the benefits of breastmilk including: (1) its more appropriate protein content;²⁸⁷ (2) naturally-present nutrients in breastmilk that are added to infant formulas to mimic breastmilk;²⁸⁸ (3) its ability to help babies to develop microbiota, which protect from infections;²⁸⁹ and (4) a reduced risk of obesity risk and diet-related disease.²⁹⁰ Increased educational outreach efforts are also consistent with the goals of the National Strategy to support overall efforts of encouraging breastfeeding.²⁹¹

XI. Conclusion

Conflicting laws in the U.S. lead to confusion and significantly impact infant feeding. Marketing infant formula in the hospital post-birth impacts infant feeding by incentivizing new mothers, at a time when they are vulnerable and impressionable, to formula-feed. This impacts a new mother's ability to breastfeed, which leads to increased purchases of infant formula over the lower-cost option of breastfeeding.

While U.S. laws support breastfeeding, these laws often seem to contradict one another and can affect how a woman decides to feed her infant. Mothers, especially low- income working mothers

²⁸⁶ See Neves, et al., *supra* note 22 at 910-16; see also *Breastfeeding Benefits Both Baby and Mom*, *supra* note 221.

²⁸⁷ See Oddy, *supra* note 274, at 9-10 ("The adverse long-term effects of early growth acceleration emerge as fundamental in later overweight and obesity. The higher protein content of artificial baby milk compared to the lower protein content in breastmilk is responsible for the increased growth rate and adiposity during the influential period of infancy of formula-fed infants.").

²⁸⁸ See INFANT FORMULA: EVALUATING THE SAFETY OF NEW INGREDIENTS, *supra* note 4, at 44-45.

²⁸⁹ See Guaraldi & Salvatori, *supra* note 28, at 1-2.

²⁹⁰ See Neves, et al., *supra* note 22 at 916.

²⁹¹ See NATIONAL STRATEGY ON HUNGER, NUTRITION, AND HEALTH, *supra* note 74, at 26.

of color, end up being pressured into buying formula to formula-feed their infants. Moreover, workplace factors that do not contribute to breastfeeding or even pumping further exacerbate this pressure. Formula-feeding interferes with breastfeeding. Nutrition science demonstrates that feeding methods, such as formula-feeding, are not optimal, and can affect the health of both the infant and mother.

Making infant formula available to mothers, in particular working mothers, as an alternative to breastfeeding could cause unintentional impacts leading to inequality based on race and gender. The infant formula shortage led to higher prices and disproportionately impacted low-income women of color. This presents a problem when formula is food that an infant needs to survive if a mother is unable to breastfeed for whatever reason, including inflexible work hours. Because the use of infant formula affects a mother's breastmilk supply, a new mother can lose confidence in her ability to breastfeed, or feel that she has an inadequate supply of breastmilk to sustain her baby. This could therein cause her to formula-feed her baby, which also affects her breastmilk supply and ability to breastfeed.

Women, in particular low-income women of color, often must choose between work and children. The lack of paid maternity leave, inflexibility from an employer that does not allow pumping in the workplace, and a lack of breastfeeding support, all contribute to women that choose to formula-feed. This shows a troubling lack of power that women have over their own bodies and choices.

Enacted laws to support breastfeeding often seem contradictory. Because infant feeding choices have consequences that do not equally impact women and men (based on gender), and women (based on race), it is important to study the impacts of laws on infant feeding that lead to inequality, and continue finding equity solutions to address these disparities. Paid maternity leave is one way to encourage more breastfeeding, a solution consistent with the National Strategy. Other options in support of breastfeeding should also be researched and explored to help reach overall health and nutrition goals in the National Strategy for Americans.

Growing Agriculture Literacy's Presence in America's Classrooms

Emily Stone

“Americans, as a whole, were at least two generations removed from the farm and did not understand even the most rudimentary of processes, challenges, and risks that farmers and the agricultural industry worked with and met head-on every day.”¹ This quote perfectly describes the mindset of agriculture stakeholders in 1981 as they began to realize the drastic steps our education system had taken away from using principles of agriculture in K-12 education. As they saw it, Americans were moving out of rural America, away from farms, and becoming less connected to the food they daily consumed. Simultaneously, the education system did nothing to preserve the use of agriculture principles as tools for teaching. If they were worried in 1981, just imagine what they would say if they saw American society in 2023! Today, most school-aged children are very limited in the knowledge of their food's origin. The lack of attention given to agriculture in schools is especially problematic when combined with the number of food systems issues the next generation is bound to face. This article seeks to demonstrate the food systems-related dangers facing the next generation and explain the benefits of teaching agriculture literacy to school-aged children; to describe the origins of the Agriculture in the Classroom program and evaluate its success; and to propose new ways to improve and incentivize agriculture literacy's presence in K-12 schools.

I. The Need for Agriculture Literacy in America's Classroom

Related to the production and consumption of food, there are many problems that we have been quick to categorize as a “crisis,” such as the obesity and climate crisis. In name alone, those two crises may not seem related, but to an agriculturally literate person they are. There are many on-going issues related to the food system that prior generations have created, and thus left for the next generation to

¹ *A Trend Analysis of National Agriculture in the Classroom Program Data: 2006 – 2010*, NAT'L AGRIC. IN THE CLASSROOM ORG. (quoting *Agriculture in the Classroom White Paper*, NAT'L AGRIC. IN THE CLASSROOM ORG. (2011)), https://cdn.agclassroom.org/nat/data/get/trend_analysis_poster.pdf [hereinafter *Trend Analysis*]

inherit. As our population continues to grow in the upcoming years, humans will have to make difficult decisions about the future of agriculture. These decisions will require an understanding of agriculture production, natural plant and animal lifecycles, climate change, food processing, nutritional values, food access, economic and cultural factors, and much more. To face the challenges ahead, it is imperative that today's students are conscious of agriculture, and its impact on their health, the economy, and the environment. Because of this, the need for agriculture literacy has never been as great as it is now.

A. Defining Agriculture Literacy

Agriculture literacy has been defined by many in various ways. The first documented definition describes an agriculturally literate person as one who would understand the "food and fiber system...its history and current economic, social, and environmental significance to all Americans."² Later, researchers began adding that an agriculturally literate person should be able to go beyond mere understanding, and competently "synthesize, analyze, and communicate basic information about agriculture."³ Despite the various definitions, most researchers and educators would probably agree that the agriculturally literate person is one who knows and can communicate the value of agriculture, while using that knowledge to analyze the impact of agriculture on their daily life and make informed decisions with that knowledge.

This article recognizes that agriculture affects every single person—we all eat, we all wear clothes, and we all live in an ecosystem. Agriculture literacy is not a program designed with the sole intention of convincing students to go into careers in agriculture. Agriculture literacy programs can be great tools for teaching students about potential careers in agriculture, but they are not designed to be a course of workforce training. Instead, they are designed to give students a foundational knowledge about the food they daily consume, and the impact that food can have on their health, society, and the environment. Agriculture literacy promotes the use of

² *Understanding Agriculture: New Directions for Education*, NAT'L RSCH. COUNCIL (1988), <http://www.nap.edu/catalog/766/understanding-agriculture-new-directions-for-education>.

³ Martin J. Frick et al., *A definition and the concepts of agricultural literacy*, J. OF AGRIC. EDUC., 32(2), 49-57 (1991), <https://jae-online.org/index.php/jae/article/view/2197>.

agriculture topics and themes to teach core subjects in K-12 schools. Among the curriculum this article will evaluate, are lesson plans using agriculture to teach math, science, social studies, reading, history, and the arts.

B. The Danger in Failing to Teach Agriculture Literacy

After learning about the definition of agriculture literacy, most Americans, especially those living outside of rural areas with no connection to food production, would probably ask why they should care about students having the ability to analyze and communicate information about agriculture. This article argues that agriculture literacy is important because agricultural decisions affect every person alive every day. Furthermore, it is important for our education system to prepare the next generation to be informed voters and policy makers with the ability to rationally determine what is truth. Often, when misinformation is spread, citizens vote for lawmakers who support policies that could be harmful to the agriculture industry, the food supply, the economy, and the personal health and nutrition choices made each day. It is not the intention of this article to advocate for one side or another of specific agricultural policy decisions, but to show the importance of preparing an electorate with the abilities to form opinions on their own.

In recent years, there has been a multitude of circumstances that prove the need for agriculture literacy has never been more prominent than it is now. There is a startling disconnection today between consumers and the food production industry. This disconnection is never more evidenced than when a new health fad or emotionally triggering agriculture-related campaign becomes popular. For example, a hot topic in the past decade stemmed from consumer confusion about Genetically Modified Organisms (GMOs). GMOs are organisms “whose genetic material has been altered by means of genetic engineering.”⁴ The term genetic engineering generally means altering the genetic makeup of cells which can be done through a wide variety of methods, including pest or weed control, crossbreeding, enhancing a trait to improve nutrient content, and more.⁵ The methods of genetic engineering are complex and can be difficult for those without scientific training to understand. Because of its complexity, the media created confusion

⁴ Jessica Eise & Whitney Hodge, *THE COMMC’N SCARCITY IN AGRIC.* 32 (2017).

⁵ *See id.*

about the true nature and impact of GMOs. Everyone had their “take” on whether GMOs were safe—news stories from reputable sources like *Fox Business*, *Time*, and *Forbes*, along with opinions found on social media or blogs, flooded the consciousness of Americans daily.⁶ Unfortunately, though, the public conversation was mostly driven by sources without a scientific background.⁷ While most of the public concern against GMOs came from moral opposition and disgust at the thought of food being poked, prodded, and injected with unnatural substances, the scientific community generally agreed that GMOs were safe for consumption.⁸

GMO confusion did not just produce an outcry of public concern, but it also created discrepancies and confusion in the labeling of food products. Because of the public distrust of GMOs, many foods, including those that derive from agricultural products for which there is no GMO variety, slapped on a label claiming “non-GMO.” Though this claim is objectively true, the agriculturally literate person would be able to recognize the label as a mere marketing tool, because a “non-GMO” label on a product that could not actually have GMOs is confusing. This created a misconception of the prominence of GMOs in foods and allowed food companies to prey on consumer confusion. The GMO labeling issue is noteworthy because it speaks to the importance of preparing our population to read and understand the labels placed on their food products. It is also noteworthy because the GMO labeling issue sparked debate among policymakers about the regulation of GMO products and the duty of a private company to inform consumers about the contents of their food products.

However, the GMO controversy is an important example of how an uneducated population could be easily confused in today's information-saturated world. Because agriculture affects everyone, and because of the prominence of confusing information in a social media dominated world, it is imperative that agriculture literacy becomes a more prominent fixture in the American classroom, so the students of today can become the informed electorate of tomorrow. Next, this article will look at the current Agriculture in the Classroom system and evaluate its effectiveness as a tool to teach agriculture literacy.

⁶ See *id.* at 33.

⁷ See *id.* at 33-34.

⁸ See *id.*

II. National Agriculture in the Classroom

A. Background of Agriculture in the Classroom

In prior generations, most of the United States' population lived in rural areas and interacted with farms on a regular basis.⁹ Because the farming operation was something most children understood, agriculture was used commonly in primary and secondary education as a tool for teaching math, science, the arts, and other subjects.¹⁰ With the urbanization of society and the mass move of our populations away from the farm, education stepped away from this practice and agriculture generally stopped being discussed in the classroom other than for occupational training. In recognition of America's unfortunate move away from the inclusion of agriculture in K-12 education, in 1981 the United States Department of Agriculture (USDA) invited representatives from various agricultural and education groups to Washington, D.C. to talk about agriculture literacy.¹¹ The 1981 meeting was an attempt to remedy this reality. Following the meeting in 1981, a national task force was created with representatives from various industries including agriculture, business, education, and government.¹² The task force recommended the creation of a national agriculture classroom literacy program with USDA coordinating to fund and assist the creation of programs on a state level.¹³ This was the birth of Agriculture in the Classroom.

Officially, Agriculture in the Classroom was established in 1982 by the Secretary of Agriculture, John Block.¹⁴ Though the task force determined the USDA should serve as the coordinator of the agriculture literacy initiative, they believed the programs should be created and maintained on the state level.¹⁵ With this in mind, Secretary Block encouraged each state's governor and department of agriculture officials to establish a committee for organizing the state's agriculture literacy program.¹⁶ This decision led to the unique

⁹ See *History of Agriculture in the Classroom*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/get/history/> (last visited Nov. 22, 2023) [hereinafter AITC History].

¹⁰ See *id.*

¹¹ See *id.*

¹² See *id.*

¹³ See *Trend Analysis*, *supra* note 1.

¹⁴ See *id.*

¹⁵ See *id.*

¹⁶ See *id.*

and state-specific system of Agriculture in the Classroom programs seen today. Presently, a majority of states, the District of Columbia, and Puerto Rico have state Agriculture in the Classroom programs.¹⁷ Each state program varies in structure and operation—some operate as a part of the state's agriculture department, some are maintained through the state's farm bureau, some independently operate as a non-profit, and some are run through a university or institution of higher education.¹⁸ For example, California's program is run through a 501(c)(3) non-profit organization called the California Foundation for Agriculture in the Classroom.¹⁹ Conversely, Texas runs their program through the Texas Farm Bureau,²⁰ and Oklahoma runs their program through a three-pronged partnership between the Oklahoma Department of Agriculture, Food and Forestry, the Oklahoma Department of Education, and the Oklahoma Cooperative Extension Service.²¹ Additionally, each state program is tailored to the state where it sits, meaning the curriculum is based on that state's agriculture industry and resources offered to teachers and students vary from state to state.

Though the current system of Agriculture in the Classroom (AIRC) programs are maintained at the state level, the USDA still serves in its designated coordinator role by both providing grants to AIRC programs and resources through the National Agriculture in the Classroom Organization. As it operates today, the National Agriculture in the Classroom Organization (NAITCO) is a non-profit that works to “increase agricultural literacy through K-12 education.”²² NAITCO is a national organization that provides membership to state and territory programs through the payment of dues.²³ To NAITCO, agriculture literacy is defined as the ability to

¹⁷ See *Affiliates – Programs*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/affiliates/programs/> (last visited Nov. 17, 2023).

¹⁸ See *Get Involved – Mission*, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://agclassroom.org/get/mission/> (last visited Nov. 17, 2023) [hereinafter *NAITCO Mission*].

¹⁹ See LEARNABOUTAG.ORG, <https://learnaboutag.org/> (last visited Nov. 17, 2023) [hereinafter California AIRC website].

²⁰ See *Ag in the Classroom*, TEX. FARM BUREAU, <https://texasfarmbureau.org/youth/ag-in-the-classroom/> (last visited Nov. 17, 2023).

²¹ See *About Us*, OKLA. AG IN THE CLASSROOM, <https://oklahoma.agclassroom.org/about/> (last visited Nov. 22, 2023).

²² *NAITCO Mission*, *supra* note 18.

²³ See *Annual Report 2021*, NAT'L AGRIC. IN THE CLASSROOM ORG., 3 (2021) https://cdn.agclassroom.org/nat/data/affiliates/report_annual.pdf [hereinafter *NAITCO Annual Report 2021*].

communicate and understand “the source and value of agriculture as it affects our quality of life,”²⁴ and through providing lesson plans, teacher workshops, and other educational resources they strive to educate students “about the importance of agriculture.”²⁵

NAITCO is funded through state and territory program membership dues, sponsorships from agribusiness companies and organizations, and grants from the USDA’s National Institute of Food and Agriculture (NIFA).²⁶ With the support of the USDA, NAITCO provides an annual national conference for state and territory AITC programs to attend.²⁷ In 2021, over 800 teachers participated in the annual conference in Iowa, where they visited local farms and agribusinesses, and attended workshops focused on using agriculture to teach core subjects.²⁸

Additionally, USDA funds an online curriculum map provided to the state programs through the NAITCO website.²⁹ Created by NIFA, NAITCO, and the National Center for Agriculture Literacy located at Utah State University, the National Agriculture Literacy Curriculum Matrix contains a vast collection of Pre-K-12 lesson plans and companion resources that meet national educational standards and align with the National Agriculture Literacy Outcomes.³⁰ USDA also funds professional development opportunities for teachers, and awards various grants to AITC programs and projects.³¹

B. Literacy Outcomes

After years of having various definitions and standards for agriculture literacy, in 2013, stakeholders recognized the need to identify key outcomes for agriculture literacy programs.³² The

²⁴ *NAITCO Mission*, *supra* note 18.

²⁵ *NAITCO Annual Report 2021*, *supra* note 23, at 3; see *NAITCO Mission*, *supra* note 18.

²⁶ See *NAITCO Annual Report 2021*, *supra* note 23, at 3.

²⁷ See *id.* at 6.

²⁸ See *id.*

²⁹ See *id.* at 3.

³⁰ See *Feeding the World Through User-Inspired Sci.*, U.S. DEP’T OF AGRIC. NAT’L INST. OF FOOD AND AGRIC., 29 (2015).

³¹ See *Agric. in the K-12 Classroom*, U.S. DEP’T OF AGRIC. NAT’L INST. OF FOOD AND AGRIC., <https://www.nifa.usda.gov/grants/funding-opportunities/agriculture-k-12-classroom> (last visited Nov. 24, 2023).

³² See Debra M. Spielmaker & J.G. Leising, *Nat’l Agric. Literary Outcomes*, UTAH STATE UNIV., SCH. OF APPLIED SCIS. & TECH., 1-2 (2013).

stakeholders realized they needed to establish a national standard for what the “agriculturally literate” student should know at each level of their education.³³ In 2013, stakeholders adopted NAITCO’s current definition for agriculture literacy—the ability to “understand and communicate the source and value of agriculture as it affects our quality of life.”³⁴ Soon after, using NAITCO’s definition and various other frameworks and research such as The National Agricultural Literacy Logic Model,³⁵ the National Agriculture Literacy Outcomes (NALO) were created.³⁶

NALO is aligned with national education standards and organized by both theme and grade-level benchmarks.³⁷ NALO identifies five themes that should be present in a curriculum to sufficiently prepare an agriculturally literate person.³⁸ Additionally, NALO highlights the key outcomes that each theme should convey to students at every level in K-12 education.³⁹ The themes include, Agriculture and the Environment; Plants and Animals for Food, Fiber, and Energy; Food, Health, and Lifestyle; Science, Technology, Engineering, and Math; and Culture, Society, Economy, and Geography.⁴⁰ The NALOs are benchmarked by using four grade level bands, Early Elementary (K-2), Upper Elementary (3-5), Middle School (6-8), and High School (9-12).⁴¹ The NALOs have played a key role in the formation of materials available on the National Agriculture Literacy Curriculum Matrix.⁴² The lesson plans and corresponding resources found on the Curriculum Matrix were created to meet the standards outlined in the NALOs.⁴³ To clearly understand the impact of AITC programs and the resources they provide, this article will further discuss each curriculum theme and the highlighted outcomes they should be teaching each grade band of students.

<https://cdn.agclassroom.org/nat/data/get/NALObooklet.pdf> [hereinafter *Literacy Outcomes*].

³³ See *id.* at 1.

³⁴ *Id.*

³⁵ See RESEARCH Logic Model, NAT’L. CTR. FOR AGRIC. LITERACY, <https://www.agliteracy.org/research/logic/> (last visited Nov. 22, 2023).

³⁶ See *Literacy Outcomes*, *supra* note 32.

³⁷ See *id.* at 2.

³⁸ See *id.* at 3, 5, 7, 9, 11.

³⁹ See *id.* at 4, 6, 8, 10, 12.

⁴⁰ See *id.* at 3, 5, 7, 9, 11.

⁴¹ See *Literacy Outcomes*, *supra* note 32, at 4, 6, 8, 10, 12.

⁴² See *id.* at 2.

⁴³ See *id.*

i. Agriculture and the Environment

The first theme examines the relationship between agriculture and the environment. A student who has completed an AITC program in the Early Elementary grades should be able to identify natural resources; describe the roles water and soil play in the raising of crops and animals; explain how farmers use land to grow crops and support livestock; and show the effect weather patterns have on plant and animal growth for food.⁴⁴ Upper Elementary students should be able to list the similarities and differences between natural and managed ecosystems; explain the impact the interaction of the sun, soil, water, and weather has on agricultural production; and recognize the natural resources used in agricultural production.⁴⁵ Additionally, Upper Elementary students are expected to identify conservation methods used in farming and recognize the difference between natural and agricultural ecosystems in their region.⁴⁶

The outcomes highlighted for Middle School students advance past the point of mere recognition and move to holding conversations about the pros and cons of many agricultural decisions. For example, the agriculturally literate student leaving middle school should be able to discuss land and water use by various agricultural groups; the sourcing of food locally versus globally; the pros and cons of converting a natural ecosystem into an agricultural ecosystem; and the migration of people groups to different environments for the purpose of meeting their basic needs.⁴⁷ Additionally, Middle Schoolers should recognize how climate and natural resources determine the crops and livestock that can be grown in a regional area; recognize the factors that determine an agricultural system's sustainability; describe the benefits and challenges of using conservation practices for natural resources in agriculture systems; and explain how natural resources are used and conserved in agriculture.⁴⁸ High School students should be able to describe the maintenance and importance of farmer-created wildlife habitats; identify non-native or invasive species in their state which impact agricultural ecosystems; understand the natural cycles that govern the flow of nutrients in both farming and natural ecosystems;

⁴⁴ See *id.* at 4.

⁴⁵ See *id.*

⁴⁶ See *Literacy Outcomes*, *supra* note 32, at 4.

⁴⁷ See *id.*

⁴⁸ See *id.*

evaluate the various definitions of sustainable agriculture; consider the potential impacts of climate change on agriculture; and discuss the value of agricultural land.⁴⁹ Additionally, students should be able to discuss the scientific basis for regulating the spread of potentially harmful organisms and the methods of control in place, and describe the resource and conservation management practices used in agricultural systems.⁵⁰

ii. Plants and Animals for Food, Fiber, and Energy

The second theme teaches students the importance of stewarding our natural resources by sustainably delivering high quality food, fiber, and energy while maintaining a quality environment. Early Elementary students should be able to identify food products eaten by animals and people, food safety practices to follow at home, the importance of natural resources in farming, animals involved in agricultural production and their uses.⁵¹ Additionally, they should be able to compare types of plants and animals found on farms with plants and animals found in the wild, and explain how farmers work with the lifecycle of plants and animals to harvest a crop.⁵² Agriculturally literate students leaving Upper Elementary should be able to recognize the similarities and differences in food, clothing, shelter and fuel sources among world cultures; distinguish between renewable and non-renewable resources used in agriculture production; explain the impact of soil nutrients on plant growth; provide specific examples of farmers meeting the needs of animals; and understand the concept of stewardship in farming.⁵³

Middle School students are expected to identify farm practices used for plant protection and the harvest of safe products for consumers; recognize renewable and nonrenewable energy sources; highlight strategies used for animal housing that protects animal welfare and the safety of animal products; and determine where labels indicate the origin of food and fiber.⁵⁴ Additionally, Middle School students should be able to describe the effect European settlement of the Americas had on agriculture production,

⁴⁹ *See id.*

⁵⁰ *See id.*

⁵¹ *See Literacy Outcomes, supra* note 32, at 6.

⁵² *See id.*

⁵³ *See id.*

⁵⁴ *See id.*

and explain the role of ethics in the production and management of food, fiber, and energy sources.⁵⁵ High School students should be able to identify food safety inspection processes; discuss the purpose of government involvement in agriculture; compare the effect both organic and inorganic nutrients have on plants; explain the differences between natural plant and animal lifecycles and agricultural systems; and evaluate different perspectives on agriculture production.⁵⁶

iii. Food, Health, and Lifestyle

The third theme explores the interactions between health, food consumption decisions, and food storage and preparation processes. Early Elementary students are expected to identify healthy food options; understand where different types of foods should be stored at home; and recognize agriculture's role in the creation of our most basic necessities like food, fiber, energy and shelter.⁵⁷ Upper Elementary students should learn to identify careers in food, nutrition, and health, and identify the sources of nutrients found in food.⁵⁸ They should additionally be able to use the current dietary guidelines to describe the necessary food components that form a healthy diet; diagram a processed food product's path from farm to table; distinguish between processed and unprocessed food; explain the costs associated with both producing and purchasing food; and highlight practices of safe food handling, preparation, and storage.⁵⁹

Middle School students should be able to evaluate food labels and serving size related to meeting nutritional needs; explain the benefits and disadvantages of food processing; and identify foods that provide valuable nutrients for a balanced diet.⁶⁰ Additionally, they should be able to demonstrate safe methods for handling food in the home; identify forms and sources of food contamination; explain the factors that affect food choices; describe the role ethics play in agriculture production; recognize the sources of agricultural products for their community, state, and nation; and name careers in the food system which are essential for a healthy food supply.⁶¹ The agriculturally literate student leaving High School should be able to

⁵⁵ *See id.*

⁵⁶ *See Literacy Outcomes, supra* note 32, at 6.

⁵⁷ *See id.* at 8.

⁵⁸ *See id.*

⁵⁹ *See id.*

⁶⁰ *See id.*

⁶¹ *See Literacy Outcomes, supra* note 32, at 8.

accurately read and explain food labeling terminology, its nutritional content, and the effect it has on consumer choices.⁶² The students should understand the changing nutritional needs of humans over their lifespan; describe the nutritional value that can be added by processing foods; evaluate the cost of food in the US compared with other countries; explain the influence consumer choices has on food production; identify the effect various foods have on a healthy diet; and provide examples of foodborne contaminants and the policies in place to protect consumers.⁶³

iv. Science, Technology, Engineering, and Math

The fourth theme seeks to prepare students to understand the role science, engineering, technology, and mathematics play in improving the health of plants, animals, people, and our environment, and providing food to a growing population. Early Elementary students will be able to explain the tools and materials used by farmers to reduce temperature in plant and livestock structures, and recognize examples of simple tools used in agriculture settings.⁶⁴ Upper Elementary students should be able to describe how technology helps farms increase their outputs with fewer inputs; explain the impact complex modern machines have had on efficiency in agriculture; provide examples of science being applied in farming; and identify how the knowledge of inherited traits is applied to plants and animals in order to meet specific objectives.⁶⁵

Middle School students should understand the historic impact agriculture technology has had on society by describing our development from hunting and gathering to farming; explaining the influence of agriculture innovation on economic systems; identifying specific technologies that have reduced labor in agriculture; and recounting the increase in food yield resulting from technology.⁶⁶ Additionally, Middle Schoolers should be able to identify science careers related to the production and consumption of agricultural products; provide examples of science and technology used in agricultural systems; and detail the social, economic, and

⁶² *See id.*

⁶³ *See id.*

⁶⁴ *See id.* at 10.

⁶⁵ *See id.*

⁶⁶ *See Literacy Outcomes, supra* note 32, at 10.

environmental impacts of agriculture technologies.⁶⁷ Agriculturally literate middle school students can also explain the impacts and technology developed to influence various organisms related to agriculture production, and describe how biological processes can be leveraged in agricultural production and processing.⁶⁸ High School students should be able to provide examples of how processing adds value to agricultural goods and fosters economic growth; identify potential agricultural uses for emerging scientific discoveries and technologies; evaluate both the benefits and concerns related to the application of technology to agricultural systems; and describe how agricultural practices have contributed to changes in societies and environments over time.⁶⁹ High Schoolers should also be able to discuss population growth, and the impact of science and technology applied in agriculture to increase yields and maintain sustainability; predict the types of careers and skills agriculture scientists will need in the future; and correlate historical events, discoveries in science, and technological innovations in agriculture with day-to-day life in various time periods.⁷⁰

v. Culture, Society, Economy, and Geography

The fifth theme explores the impact economics, geography, and consumer demands of agriculture products have on the evolution of societies in both the United States and the world. Early Elementary students should be able to discuss what a farmer does; explain why farming is important to communities; trace the sources of agricultural products; identify locally raised plants and animals for agriculture; recognize local places and methods of exchange for agricultural products; and name the people involved from production to consumption of agricultural products.⁷¹ Upper Elementary students are taught to describe the impact of supply and demand on the price of agricultural goods; explain the effect historic agricultural events and inventions have on life today; provide examples of non-local agricultural products; list jobs available in the agriculture industry; detail the importance of agriculture in daily life; and understand the agricultural history of their specific community.⁷²

⁶⁷ *See id.*

⁶⁸ *See id.*

⁶⁹ *See id.*

⁷⁰ *See id.*

⁷¹ *See Literacy Outcomes, supra* note 32, at 12.

⁷² *See id.*

Middle School students should be able to explain how agricultural production and trade led to the development of industrialized societies; how prices for agricultural goods are determined; and how exploration and trade sustained early societies.⁷³ Additionally, Middle Schoolers should be able to distinguish between careers that involve agriculture production and those that involve consumers; highlight the significance of state agricultural historic events on governmental and economic development; describe the economic value of agriculture in America; identify agricultural products that are exported and imported; and explain farm ownership in relation to processor ownership.⁷⁴ High School students should be able to provide examples of how changes in cultural preferences can influence the production, processing, marketing, and trade of agricultural products; explain the role of government in the production, distribution, and consumption of food; discuss the impact of major agricultural events and inventions on both world and U.S. history; compare and contrast the economic challenges facing developed and under-developed countries; and communicate how the global agricultural economy influences the sustainability of communities and societies.⁷⁵ High Schoolers should also be able to compare the advantages and disadvantages of having fewer farmers; describe essential agricultural careers; discuss how agricultural practices have increased food yield and impacted the development of the global marketplace; consider the relationship between geography, politics and global economics in the distribution of food; and explain how comparative and absolute advantage in agriculture impacts supply and demand in relation to trade.⁷⁶

C. Numerical Evaluation of National Agriculture in the Classroom

On paper, Agriculture in the Classroom sounds like an incredibly effective program. It has a large number of research-backed resources available through the Curriculum Matrix, good attendance at the National Conference, and fantastic funding support from USDA and various agribusiness companies. However, looking at the numbers, Agriculture in the Classroom seems to fall short. According to the recent 2021 Annual Report, only 916,000 Pre-K-12

⁷³ See *id.*

⁷⁴ See *id.*

⁷⁵ See *id.*

⁷⁶ See *Literacy Outcomes*, *supra* note 32, at 12.

students were reached in 2021 by only 22,000 teachers.⁷⁷ While that number may seem impressive, per the National Center for Education Statistics, 49.4 million K-12 students enrolled in public schools at the start of school in the fall of 2021.⁷⁸ This means that roughly less than two percent of students gained exposure to Agriculture in the Classroom teaching methods and resources.⁷⁹ This is poignant because, while only 916,000 of the 49.4 million students enrolled in K-12 received Agriculture in the Classroom training, all of those 49.4 million children eat food and will be affected in the future by issues surrounding climate, health, and food production. If Agriculture in the Classroom truly wants to be an effective program for preparing agriculturally literate students to go into the world and make informed decisions, more classrooms and school systems need to be incentivized to participate.

D. Uniformity Issues in National Agriculture in the Classroom

Another issue that inhibits the efficiency of the AITC programs is a lack of uniformity across states. There are benefits and disadvantages to the established structure of AITC. The state and territory led programs are beneficial because they allow students to engage with local agriculture and understand agriculture's historic impact on their states and regional communities. Every state and territory is different—each with a unique history, culture, climate, soil type, and more. It is incredibly important that students learn about the agriculture around them and have the opportunity to engage with local agriculture producers, businesses, or institutions of higher learning. Direct engagement will show students the value of agriculture in their community and help them discover potential career paths in the industry. Clearly, this article is not arguing that learning about agriculture on a local or state level is wrong—even the NALOs highlight the necessity of students learning about the local

⁷⁷ See NAITCO Annual Report 2021, *supra* note 23, at 5.

⁷⁸ See *Public School Enrollment*, NAT'L. CTR. FOR EDUC. STAT., <https://nces.ed.gov/programs/coe/indicator/cga/public-school-enrollment> (last visited Nov. 24, 2023).

⁷⁹ This calculation is an estimate because the number representing students were reached by an AITC program includes pre-K students, while the number of total enrollment does not. Additionally, the total enrollment number is only counting public school enrollment, while the AITC number is representing all students including public, private, charter, etc.

agricultural community. However, this article does acknowledge the disadvantages that arise with a state-led system of AITC programs.

As forementioned, the system of state led AITC programs vary in their design and operation. Some are maintained by the state departments of agriculture, some are run as non-profits, and others are run through universities or institutions of higher learning.⁸⁰ Additionally, there is a large group of AITC programs that operate through their state's Farm Bureau.⁸¹ In NAITCO's 2022 Program Report, which is a compilation of the forty-two submitted annual state and territory reports, eighteen of the forty-two state AITC programs were housed in the state's Farm Bureau organization.⁸² This poses a concern because Farm Bureau, through the American Farm Bureau Foundation for Agriculture (The Foundation), has its own set of standards for a curriculum that prepares the agriculturally literate student.⁸³

The Foundation defines its mission as operating "at the nexus of agriculture and education to deliver solid curriculum and high impact programs that present accurate agricultural information."⁸⁴ The Foundation's curriculum and programs are based on its own definition of "agriculturally literate" and structured to meet its own standards, called the "Pillars of Agricultural Literacy."⁸⁵ The Foundation defines the agriculturally literate person as one who understands "not just where food comes from, but who grows it, agriculture's effect on the economy, environment, technology, lifestyle and its relationship to livestock."⁸⁶ The Foundation's model for agriculture literacy is more complex than the NALO. The Foundation sees the Pillars as being a "framework for lifelong learning" and stresses the desire that it be used as a planning tool for educators and a measure of a classroom's success in

⁸⁰ See *Classification of Agricultural Literacy Programs* (illustration), in 2022 Program Report, NAT'L AGRIC. IN THE CLASSROOM ORG., <https://www.jotform.com/report/23167517964206017> (last visited Nov. 26, 2023).

⁸¹ See *id.*

⁸² See *id.*

⁸³ See generally *American Farm Bureau Foundation for Agriculture*, <https://www.agfoundation.org/what-is-ag-literacy> (last visited Nov. 24, 2023) [hereafter AFBF Ag Literacy Page] (explaining the "Agricultural Literacy" program of the American Farm Bureau Foundation for Agriculture).

⁸⁴ American Farm Bureau Foundation for Agriculture, LinkedIn, <https://www.linkedin.com/company/agfoundation/> (last visited Nov. 12, 2023).

⁸⁵ See generally *Pillars of Agricultural Literacy*, AM. FARM BUREAU FED'N, <https://www.agfoundation.org/pillars> (last visited Nov. 12, 2023).

⁸⁶ AFBF Ag Literacy Page, *supra* note 83.

implementing an agriculture literacy program.⁸⁷ The Pillars begin with a “Foundational Knowledge” section that highlights the following themes: the definition of agriculture and key vocabulary; the taxonomy of the industry; the history of agriculture; identification of agricultural products; and production awareness.⁸⁸ The Pillars are then broken down into six categories with learning expectations divided by four age groups. The six categories include: the Relationship between Agriculture and the Environment; the Relationship between Agriculture and Food, Fiber, and Energy; the Relationship between Agriculture and Animals; the Relationship between Agriculture and Lifestyle; the Connection between Agriculture and Technology; and the Relationship between Agriculture and the Economy.⁸⁹

Similar to the NALO, the Pillars do give a few standards for what should be taught at each grade level in each category, but they also give a one-word key objective for each of the levels.⁹⁰ The first grade level is defined as Early Childhood - 3rd grade, and the key objective for this grade level is “awareness.”⁹¹ The Pillars believe that learners in this grade level should be aware of their connection to farmers, of general farming practices, and of basic farm-to-plate processes.⁹² The next grade level is 4th - 8th, and their key objective is discovery.⁹³ The standard for this grade level is that learners discover how farmers accomplish key tasks.⁹⁴ The third grade level is 9th - 12th, and their key objective is knowledge-building.⁹⁵ Learners at this level build upon key discoveries with specific examples of agricultural practices.⁹⁶ The last grade level is Early Adults, and their key objective is analysis.⁹⁷ Early Adults are expected to analyze the impact of farmers’ actions and use that knowledge to inform their

⁸⁷ See *Pillars of Agricultural Literacy*, *supra* note 85.

⁸⁸ See *Pillars of Agricultural Literacy A Planning Tool for Ag Literacy Programs*, AM. FARM BUREAU FOUND. FOR AGRIC., <https://www.agfoundation.org/files/PillarsPacket062016.pdf> (last visited Nov. 11, 2023) [hereinafter *Pillars Packet*].

⁸⁹ See *id.*

⁹⁰ See *id.*

⁹¹ See *id.*

⁹² See *id.*

⁹³ See *Pillars of Agricultural Literacy A planning Tool for Ag Literacy Programs*, *supra* note 88.

⁹⁴ See *id.*

⁹⁵ See *id.*

⁹⁶ See *id.*

⁹⁷ See *id.*

personal decisions.⁹⁸ In addition to the key objectives, the Pillars list two to eight standards for each category that learners at every grade level group are expected to know.⁹⁹ This article's intent is not to criticize the Foundation's support of agriculture literacy or the work they have done to bring agriculture back into classrooms, but this article does recognize the danger of AITC programs that are based on different educational standards. While the Foundation's Pillars do share similarities with the NAITCO-accepted standards found in the NALO, the potential disparity created by inconsistent curriculum criteria threatens the progress of agriculture literacy across America.

In addition to the concerns arising from the use of the Foundation's Pillars, some state AITC programs are not as well funded or promoted through the state. A quick look at the various state-led programs' websites, show that some states provide a significantly higher number of resources than others. For example, the Arkansas AITC program, which is operated by Arkansas Farm Bureau, appears to offer far less resources and curriculum materials than other state-led programs.¹⁰⁰ Arkansas's main AITC program webpage located on the Arkansas Farm Bureau website has a short paragraph describing the mission of AITC, two short videos highlighting Farm Bureau projects, and three tabs that link to other program pages.¹⁰¹ The three tabs are for Teacher Resources, Educational Programs, and Garden Grants.¹⁰² Teacher Resources features a link to request "Classroom Materials"¹⁰³ which include thirteen Arkansas agriculture specific "reader" booklets, two general agriculture booklets, five resources labeled "other" which include a bookmark, poster, placemat, bingo game, and Garden Chef game, and two resources labeled under "Ag Literacy Program."¹⁰⁴

⁹⁸ See *Pillars of Agricultural Literacy A planning Tool for Ag Literacy Programs*, *supra* note 88.

⁹⁹ See generally *id.* (detailing expectations by grade level for early childhood up to 12th grade).

¹⁰⁰ *Compare Ag in the Classroom*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/ag-in-the-classroom/> (last visited Nov. 24, 2023), with California AITC website, *supra* note 19.

¹⁰¹ See *Ag in the Classroom*, *supra* note 100.

¹⁰² See *id.*

¹⁰³ See *Teacher Resources*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/teacher-resources/> (last visited Nov. 24, 2023) [hereafter AR teacher resources].

¹⁰⁴ See *Classroom Materials*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/classroom-materials/> (last visited Nov. 11, 2023).

The Teacher Resources page additionally includes a spot to fill out an order form for the Ag Literacy Project, two AITC teacher award and scholarship programs, and one upcoming teacher workshop.¹⁰⁵ The Classroom Materials page makes no mention of the National Agriculture Literacy Curriculum Matrix.¹⁰⁶ Under the Educational Programs tab, you are taken to a page that describes a singular program run through the Arkansas Farm Bureau education staff where a “Mobile Ag Experience” trailer travels to different schools and events to talk about agriculture using “interactive displays and demonstrations.”¹⁰⁷ The Garden Grants tab takes the viewer to a page highlighting the Outdoor Classroom Garden Mini-Grant Program.¹⁰⁸ This program is available to schools, FFA chapters, and 4-H Clubs and awards up to \$500 to new gardens located on school adjacent property to produce agriculture crops.¹⁰⁹

Conversely, the California AITC program, which operates as a 501(c)(3) non-profit, has a multitude of resources available on their website.¹¹⁰ Its main page has six tabs that lead to various other pages including a Teaching Resources tab, a Programs and Events tab, and a Student Center tab.¹¹¹ The Teaching Resources page has twelve tabs of its own with one labeled Lesson Plans and describing over thirty units available covering a wide-range of topics for grades K-12.¹¹² The Lesson Plans page has a link to thirty-six different California specific plans, a link to the National Agriculture Literacy Curriculum Matrix, and a link to a page with specific distance learning resources.¹¹³ Additionally, under the Teaching Resources page are links to fact sheets, agriculture books for all age groups, one-page sheets called “Ag-Bites” that explain how to perform

¹⁰⁵ See *Teacher Resources*, *supra* note 103.

¹⁰⁶ See *Classroom Materials*, *supra* note 104.

¹⁰⁷ See *Educational Programs*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/educational-programs/> (last visited Nov. 11, 2023).

¹⁰⁸ See *Garden Grants*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/garden-grants/> (last visited Nov. 24, 2023).

¹⁰⁹ See *Outdoor Classroom Garden Mini-Grant Program*, ARK. FARM BUREAU, https://www.arfb.com/uploads/resources/documents/2019_garden_grant.pdf (last visited Nov. 24, 2023).

¹¹⁰ See California AITC website, *supra* note 19.

¹¹¹ See *id.*

¹¹² See *Teaching Resources*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/> (last visited Nov. 24, 2023).

¹¹³ See *Lesson Plans*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/lesson/> (last visited Nov. 24, 2023).

hands-on learning activities with students in various grade levels, school garden guides, and more.¹¹⁴ California's website also has a page that lists eleven programs and events hosted by their AITC program, including California Farm Day, California AITC Conference, *Imagine this...* Story Writing Contest, National Agriculture Week, and several webinars.¹¹⁵ The California website additionally has a "Student Center" with online resources like interactive games and various reading materials.¹¹⁶

When comparing these two state AITC program websites, it is easy to see how vastly different the landscape of resources is. California has thirty-six in-depth state-specific lesson plans and links to the National Curriculum Matrix, while Arkansas merely has a few booklets that teachers can order.¹¹⁷ California offers a number of statewide programs for classrooms to participate in¹¹⁸, while Arkansas only offers two—Garden Grants¹¹⁹ and Mobile Ag Experience.¹²⁰ Arkansas only holds one workshop to train AITC teachers, while California holds several webinars and an annual conference.¹²¹ This is not mentioned to ridicule the Arkansas program, but to illustrate the lack of uniformity across the state-led system of AITC programs and highlight the necessity for common standards to be implemented. Though NALO is a great resource for evaluating the success of an AITC program or curriculum, it is not currently used to ensure that common standards are taught in each classroom operating under the AITC umbrella. For Agriculture in the Classroom to be a truly effective program, it must find a way to

¹¹⁴ See *Teaching Resources*, supra note 112.

¹¹⁵ See *Programs & Events*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/programs/> (last visited Nov. 24, 2023).

¹¹⁶ See *Student Center*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/student/> (last visited Nov. 24, 2023).

¹¹⁷ See generally *Lesson Plans*, CAL. FOUND. FOR AGRIC. IN THE CLASSROOM, <https://learnaboutag.org/resources/lesson/> (last visited Nov. 24, 2023) (detailing California lesson plans and the National Agricultural Literacy Curriculum Matrix); see also *Ag in the Classroom*, supra note 100 (detailing various teaching sources for Arkansas Ag in the Classroom).

¹¹⁸ See generally *Programs & Events*, supra note 115 (detailing various programs available to educators and students in California).

¹¹⁹ See *Garden Grants*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/garden-grants/> (last visited Nov. 8, 2023).

¹²⁰ See *Educational Programs*, ARK. FARM BUREAU, <https://www.arfb.com/pages/education/educational-programs/> (last visited Nov. 8, 2023).

¹²¹ See *Teacher Resources*, ARK. FARM BUREAU, (last visited Nov. 12, 2023), <https://www.arfb.com/pages/education/teacher-resources/>; see also *Programs & Events*, supra note 115.

guarantee all students are taught a curriculum in alignment with NALO, and all teachers are given resources and opportunities to help meet this standard.

III. Making Agriculture's Place in the Classroom More Prominent

Though Agriculture in the Classroom is a well-established program that laid a good foundation for agriculture literacy, there are several key issues that inhibit its success in reaching more students. The question that now remains is whether AITC is the best vehicle to move agriculture literacy forward. For agriculture literacy to become a permanent feature in classrooms across America, schools will need incentivization to adopt agriculture literacy programs and ensure that students are taught a curriculum that meets a common standard, like the NALO. This article proposes that the best way to incentivize participation and ensure the teaching of curriculum aligned with common standards is to require the implementation of an Agriculture Literacy Program for schools participating in various government-funded programs. If the school wishes to receive funding from the federal government, then it will have to prove the implementation of an Agriculture Literacy Program with a curriculum that meets the standards outlined in NALO. The best program to tie this Agriculture Literacy initiative to is the National School Lunch Program.

A. National School Lunch Program

Established in 1946 under the National School Lunch Act, the National School Lunch Program (NSLP) is a federally assisted meal program operating in public and nonprofit private schools and residential childcare institutions.¹²² Approximately 30 million students participate in this voluntary program that provides nutritional, low-cost or no-cost lunches.¹²³ On the federal level, NSLP is run through the Food and Nutrition Service (FNS) of the USDA, and on the state level, it is administered by state agencies.¹²⁴ For each reimbursable meal they serve, participating school districts

¹²² See *National School Lunch Program*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/nslp> (last visited Nov. 24, 2023).

¹²³ See *The National School Lunch Program Fact Sheet*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://fns-prod.azureedge.us/sites/default/files/resource-files/NSLPFactSheet.pdf> (last visited Nov. 8, 2023).

¹²⁴ See *id.*

and independently ran schools receive cash subsidies and USDA foods.¹²⁵ The meals served by participating institutions must meet federal meal pattern requirements and be offered at a free or reduced price to eligible children.¹²⁶ Reimbursements can also be given for snacks served to children participating in an approved afterschool program that includes an educational or enrichment activity.¹²⁷ To be eligible for NSLP, a child may be deemed “categorically eligible” based on their participation in other certain federal assistance programs, or their status as a foster, migrant, homeless, or runaway child.¹²⁸ A child may also be “income eligible” if their household’s income falls within a designated range.¹²⁹

Schools are not required by law to participate in NSLP, but some states require schools to have a free/reduced meal program, some states require the use of NSLP for their mandated free/reduced meal program, and two states—California and Maine—passed legislation authorizing funding for free meal programs for all students.¹³⁰ Generally, FNS distributes cash reimbursements to state agencies who then distribute to participating schools.¹³¹ The reimbursement rate for NSLP is specified in its authorizing legislation.¹³² In the 2021-2022 school year, participating schools received \$3.66-\$3.90 for free meals given to participating students, and \$3.26-\$3.59 for reduced-price (lunch for \$0.40 or less) meals.¹³³ Additionally, schools receive reimbursement for their participation in NSLP through the form of USDA-purchased foods.¹³⁴ USDA foods are purchased by the USDA for distribution to federal nutrition assistance programs.¹³⁵

For the meals to qualify for reimbursements as part of NSLP, the schools must meet a few requirements. First, they must serve meals that meet the federal nutrition requirement.¹³⁶ The nutrition

¹²⁵ *See id.*

¹²⁶ *See id.*

¹²⁷ *See id.*

¹²⁸ *See The National School Lunch Program Fact Sheet*, *supra* note 123, at 1.

¹²⁹ *See* KARA BILLINGS, CONG. RSCH. SERV., R42634, SCHOOL MEALS AND OTHER CHILD NUTRITION PROGRAMS: BACKGROUND AND FUNDING, (last updated May 23, 2022).

¹³⁰ *See id.* at 11.

¹³¹ *See id.* at 6.

¹³² *See id.* at 5.

¹³³ *See id.* at 7.

¹³⁴ *See* Billings, *supra* note 129, at 7.

¹³⁵ *See id.*

¹³⁶ *See id.* at 19.

standard for school meals was most recently updated in 2012 after the passage of the Healthy, Hunger-Free Kids Act of 2010.¹³⁷ Per the legislation, the USDA is required to update the nutrition standards for school meals based on recommendations from the Food and Nutrition Board at the National Academies of Sciences, Engineering, and Medicine.¹³⁸ Based on both the 2010 Dietary Guidelines for Americans and recommendations from the National Academies of Sciences, Engineering, and Medicine, the standards increased the servings of fruits, vegetables, whole grains, and meats/meat alternatives in school meals.¹³⁹ The updated standards also required only low-fat unflavored and fat-free flavored and unflavored varieties of milk, set calorie and sodium limits, and prohibited trans fats in school meals.¹⁴⁰ In addition to nutritional requirements, local educational agencies or school districts participating in NSLP must maintain a wellness policy that sets nutrition and health-related goals and guidelines for schools within the jurisdiction.¹⁴¹ Among other content, the wellness policies are required to establish goals related to nutrition and physical activity and a nutrition standard for school meals that meets or exceeds the federal standard.

The NSLP operates on a federal, state, and local level. Division of authority for the program is as follows. The USDA has overall responsibility for the program, issues guidance and regulations to states, reimburses state agencies for qualifying meals served, and evaluates the state agencies' administration of the program.¹⁴² State agencies will issue guidance to school districts, reimburse school districts for qualifying meals served, and conduct administrative reviews of a school district's administration of the program.¹⁴³ School districts will certify eligible students for free or reduced-price meals, serve nutritionally balanced school meals that meet USDA requirements, and count and claim qualifying meals for reimbursements.¹⁴⁴

¹³⁷ See *id.* at 51.

¹³⁸ See *id.* at 24.

¹³⁹ See Billings, *supra* note 129, at 24.

¹⁴⁰ See *id.*

¹⁴¹ See *id.* at 27.

¹⁴² See *id.* at 14.

¹⁴³ See *id.*

¹⁴⁴ See Billings, *supra* note 129, at 14.

B. Proposing an Agriculture Literacy Program Requirement for NSLP

Because of the already established requirements NSLP participating schools must show, the addition of an Agriculture Literacy Program fits in well. The established chain of administration for NSLP allows school districts to easily report their implemented Agriculture Literacy Program to state agencies for review. School districts are already required to count and report their numbers of participating students and show evidence of their wellness policy and adherence to the required nutrition standards.¹⁴⁵ With the creation of an Agriculture Literacy Program requirement, NSLP participating schools will be required to report program implementation and maintenance, and allows state agencies to review programs for compliance with the common standard curriculum.

However, tying NSLP participation to the implementation of an Agriculture Literacy Program is only accomplishing half of the steps needed to make agriculture's presence in the classroom more prominent. The other half is establishing criteria for what makes a curriculum program effective, then creating a set of standards based on that. Luckily, through NAITCO there is already an accepted and research-backed set of standards found in the NALO. Because of AITC's system of state-led programs and their diverse operational realities, this article proposes NSLP's Agriculture Literacy Program requirement will not solely be the adoption of an AITC program. The use of various agriculture literacy resources is allowed, but they must be in compliance with the standards established in the NALO. School districts will have the authority to select the methods of implementation and curriculum they believe is best for the schools in their charge. This flexibility honors the traditional belief of AITC—that states and localities know best what works for them but ensures that the instruction students are receiving is in line with the national standard. Along with the use of the NALO, participating NSLP schools should be required to incorporate fieldtrips and visiting presentations from local agriculture producers, businesses, and researchers into their curriculum.

¹⁴⁵ See *Local School Wellness Policies*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV., <https://www.fns.usda.gov/tn/local-school-wellness-policy> (last visited Nov. 24, 2023).

IV. Conclusion

As the world population continues to grow and environmental conditions continue to deteriorate, it will be imperative that the next generation of decision-makers and food consumers are properly prepared to tackle these growing issues. Agriculture literacy will be the tool that helps students move forward. Because of the low numbers of participating schools and a lack of uniformity in their curriculum standards, Agriculture in the Classroom alone is not an effective enough program to properly train the next generation. By tying an Agriculture Literacy Program requirement to the National School Lunch Program, potential deficiencies created by different states using different curriculum standards and models is reduced. Further, it sets up an incentive for engagement in agriculture literacy. Our society will be better served when everyone who eats also knows a thing or two about where that food came from.

Chewing the Welfare Cud: A Digested Analysis of a Consumer Versus Producer-Defined Standard of Welfare Practices in Animals Raised for Human Consumption.

*Caitlin C. Robb

“To your breed, your fleece, your clan be true, baa-ram-ewe.”—Babe

Baa-ram-ewe are words that mark a pivotal turning point in the movie *Babe*; a children’s film about a one-of-a-kind sheep herding pig and his farm animal friends that prove their worth to an old sheep farmer.¹ During this pivotal turning point, the antagonist sheepdog turns into a hero when he secured this “baa-ram-ewe” passcode from a herd of reluctant sheep, then relays it to Babe.² Using that passcode, Babe guides six sheep through a difficult herding pattern and subsequently wins a national sheepdog competition with the highest score ever recorded.³ While this kind of feel-good movie involving animals is not unique, it represents a concept that stands consistently between humans and animals—an emotional connection from humans that animals can be more than a source of food.⁴

* This article was selected for the Journal's 2023 Arent Fox Schiff / Dale Bumpers Excellence in Writing Award. J.D. Candidate at the University of Arkansas School of Law. Editor-in-Chief of the *Arkansas Journal of Food Law and Policy*, 2023-2024. The author wishes to thank Professor Margaret Soba McCabe of the University of Arkansas for her significant contributions to the development of this comment during her Food Law and Policy class taught in the Fall 2022 Academic Semester. Next, the author thanks her faculty advisor, Visiting Professor Margaret Alsbrook for her support in developing this comment. The author also wishes to thank Professor Danielle Weatherby for instilling within the author a passion for legal writing and research that guides every piece of legal writing the author writes. The author sends thanks to all her fellow classmates that provided editorial feedback. Lastly, the author thanks her family and friends for their constant support over the years. And as the author’s grandfather often said with a smile, “that’s all that.”

¹ See *BABE* (Universal Pictures 1995).

² See *id.*

³ See *id.*

⁴ See generally Jacqueline Tawse, *Consumer Attitudes Towards Farm Animals And Their Welfare: A Pig Production Case Study*, 3 *BIOSCIENCE HORIZONS* 156, 156-63 (2010) (explaining how consumer attitudes of animals can dictate how that consumer believes an animal should or should not be treated).

Since the eighteenth century, animal well-being remains a concern for American citizens.⁵ Yet, underlying this concern is the thought that while humans should not be cruel to animals, animals are still private property subject to human ownership.⁶ Therefore, multi-faceted questions of what constitutes “animal welfare” find a place in modern American debate.

One such question becomes: should the producer or the consumer define welfare practice standards of animals raised for human consumption?⁷ This note provides an answer to this question by first analyzing the robust history of animal welfare in the United States, along with the domestic and international impact of the livestock industry on the U.S. economy in Parts I and II. Next, in Part III, the note connects that history to constitutional rights and how the Commerce Clause influences consumers’ relationships to food, even though there is no constitutional right to food, or right to know about food.⁸

To illustrate the concepts in the first three parts of the article, Part IV reviews the arguments concerning California’s Proposition 12 (“**Prop 12**”)—a recent ballot initiative limiting pork pen size currently under review by the U.S. Supreme Court.⁹ Part IV parses

⁵ See generally Thomas G. Kelch, *A Short History of (Mostly) Western Animal Law: Part II*, 19 ANIMAL L. 347, 348-50 (2013).

⁶ See generally PEOPLE, PENGUINS, AND PLASTIC TREES 369-70 (Christine Pierce & Donald VanDeVeer eds., 2d ed.1995) (explaining generally how humans cannot be legal property, but anything “nonhuman” could be implicitly assumed as legal property to maximize human satisfaction).

⁷ For further information on the nuances between animals rights and animal welfare, see generally Michelle Miller, *Animal Welfare vs. Animal Rights: What’s the Difference?* AGDAILY (Sept. 13, 2022), <https://www.agdaily.com/insights/animal-welfare-vs-animal-rights-whats-the-difference/>.

⁸ See Benedict Sheehy & Ying Chen, *Let Them Eat Rights: Re-Framing the Food Insecurity Problem Using a Rights-Based Approach*, 43 MICH. J. INT’L L. 631, 685 (2022).

⁹ Proposition 12 originated as a 2018 ballot initiative in California that established confinement standards for certain farm animals and therefore codified into California statute. See *California Finalizes Prop 12 Regulations*, THE NAT’L L. REV. (Sept. 8, 2022), https://www.natlawreview.com/article/california-finalizes-prop-12-regulations#google_vignette. At the time of this comment’s submission, the case remained ongoing in the U.S. Supreme Court with an opinion expected to be released in the summer of 2023. See Dan Flynn, *Prop 12 Put Off Until After SCOTUS Ruling*, FOOD SAFETY NEWS (Dec. 2, 2022), <https://www.foodsafetynews.com/2022/12/prop-12-put-off-until-after-scotus-ruling/>. The opinion was actually released on May 11, 2023 and a plurality opinion upheld the judgment of the Ninth Circuit Court of Appeals. See Nat’l Pork

whether such a ballot initiative adequately resolves the tension between producer-defined and consumer-defined standards. Using precedent, Part IV also examines the tendency of courts to favor producer interests over consumer interests. Part IV further examines when, if at all, morality expressed through animal welfare regulations become constitutional violations.

The note concludes by summarizing potential solutions found in current case law and the livestock industry generally. While a one-size-fits-all solution is not likely feasible due to the complexities of the livestock and poultry industry, a place for both consumer and producer definitions should be encouraged and welcomed in the current market. Consumers should have the opportunity to choose food that reflects their morals and values, as they do in other consumer product categories. However, ensuring this consumer choice must not infringe upon the interests of producers and the legally recognized concept of animals as private property. Ultimately, any animal welfare practices must still comply with the Commerce Clause. Courts, through the purpose of litigation to resolve disputes, must always remain a final accountability step in defining welfare standards that welcome both producer and consumer definitions.

I. Animal Welfare in the United States

A. Development of Animal Welfare Laws

The concept of animal welfare in the United States developed from a variety of social and economic movements in the 1800s.¹⁰ While nineteenth century state law enacted penalties for crimes against animals, the Puritan “Body of Liberties” could be

Producers Council v. Ross, 598 U.S. 356, 143 S. Ct. 1142, 215 L. Ed. 2d 336 (2023). For a detailed breakdown of that plurality opinion, see Meera Gorjala, et. al., *Supreme Court Pulls Back Dormant Commerce Clause in National Pork Producers Council v. Ross*, ARENTFOX SCHIFF (May 25, 2023), <https://www.afslaw.com/perspectives/alerts/supreme-court-pulls-back-dormant-commerce-clause-national-pork-producers>.

¹⁰ Animal welfare is a global topic and many U.S. animal welfare trends can be originated from foreign actions. See Kelch, *supra* note 5, at 348-50. However, global development of animal welfare is beyond the scope of this article. See *generally id.* (explaining further the development of European trends that influenced the development of Animal Welfare in America).

considered the original set of animal anti-cruelty laws.¹¹ This set of laws was created by early European colonists in New England in the mid 1600s and formed a list of “liberties” that guided the court in carrying out public policy.¹² The “Body of Liberties” outlined treatment for animals “usually kept for man[']s use,” including instructions to not exercise “[t]iranny or [c]rueltie,”¹³ and ensured specific care for sick animals.¹⁴ Some argue that this language is reflective of the general peaceful nature of Puritan culture, but it cannot be ignored that the direct language within this “Body of Liberties” regards animals kept for “man[']s use,” indicating an underlying economic motivation.¹⁵

By the 1800s, individual states recognized that animals, due to their susceptibility in man’s care, required additional protections.¹⁶ For example, in 1821, Maine criminalized beating horses or cattle with monetary or jail-time penalties.¹⁷ Interestingly, domestic animals were outside the scope of this law and only “commercially valuable” animals received statutory protections.¹⁸ Additionally, the statute only criminalized the owner of that commercially valuable animal, which suggests a potential balance of interests between producer profits and animal welfare.¹⁹ In 1829, New York followed suit with a law that criminalized beating or killing “horses, oxen, sheep, or cattle,” regardless of ownership.²⁰ In 1846, Vermont joined by criminalizing certain cruel and malicious actions, but only for

¹¹ See Kelch, *supra* note 5, at 350. The Massachusetts Body of Liberties is known as the first legal code established in New England by European Colonists in 1641 and is often considered as the precursor to the Massachusetts Constitution. See *Massachusetts Body of Liberties*, STATE LIBR. OF MASS., <https://www.mass.gov/service-details/massachusetts-body-of-liberties> (last visited Oct. 22, 2023).

¹² See *Massachusetts Body of Liberties*, *supra* note 11.

¹³ Oxford Dictionary defines “tiranny” as “cruel, unreasonable, or arbitrary use of power or control, and “crueltie” as “callous indifference to or pleasure in causing pain and suffering.” OXFORD LANGUAGES, <https://www.google.com> (last visited Oct. 23, 2023).

¹⁴ See William Henry Whitmore, *Body of Liberties* § 92-93, in A BIBLIOGRAPHICAL SKETCH OF THE LAWS OF THE MASSACHUSETTS COLONY 52-53 (1890).

¹⁵ Kelch, *supra* note 5, at 350-51.

¹⁶ See *id.* at 354-56.

¹⁷ See *id.* at 355-56.

¹⁸ See Kelch, *supra* note 5, at 355; see also David Favre & Vivien Tsang, *The Development of Anti-Cruelty Laws During the 1880’s*, 1993 DET. C.L. REV. 1, 32 (1993).

¹⁹ See generally Kelch, *supra* note 5, at 355.

²⁰ *Id.*

animals belonging to others.²¹ Once again, this Vermont law suggests an animal is property because of its economic viability and susceptibility to the whims of man's care.

These early laws are not the only means by which animal welfare continued to develop in the United States. Both Henry Bergh,²² the founder of the American Society for the Prevention of Cruelty to Animals ("ASPCA"), and Charles Darwin,²³ psychologist, are credited as animal advocates.²⁴ Charles Darwin, although not an American scientist, is credited with concepts that shape viewpoints that animals equate to man.²⁵ Darwin's research on evolutionary biology suggests that animals have both cognitive and emotional capabilities, and should be studied for their human-like qualities, rather than their unparalleled differences from humans.²⁶ Bergh is considered the founding father of animal cruelty laws in the United States and created the ASPCA.²⁷ Bergh's movement of reformed animal welfare laws—including the original New York law, which ultimately gave power to the ASPCA to enforce the statute—can be seen throughout the nineteenth century in states such as Pennsylvania, Illinois, New Hampshire, and New Jersey.²⁸

After the impact of Bergh's actions around animal welfare, a Mississippi court released an opinion seen as the first case law to recognize that animals as private property with economic value still deserve care.²⁹ In *Stephens v. State*, a farmer attempted to chase some neighboring hogs off his land, but after a failed attempt, shot the hogs instead.³⁰ Judge James Arnold wrote in his opinion that while this

²¹ *See id.*

²² For details on the life of Henry Bergh, see SYNDEY H. COLEMAN, *HUMANE SOCIETY LEADERS IN AMERICA* 33-35 (1924).

²³ For details on the life of Charles Darwin, see Adrian J. Desmond, *Charles Darwin*, BRITANNICA, <https://www.britannica.com/biography/Charles-Darwin> (last visited Oct. 23, 2023).

²⁴ *See Kelch, supra* note 5, at 367-69.

²⁵ *See id.*

²⁶ *See id.*

²⁷ Favre, *supra* note 18, at 13. The ASPCA eventually morphed into an organization dedicated to the welfare of children in anti-abuse statutes, which was not uncommon in the early 1900s. *See Kelch, supra* note 5, at 355-56. This likely suggests a concept of caring for those who cannot care for themselves, as both children and animals find themselves at the mercy of adults who provide care, even if that care could be labeled as inferior by public standards.

²⁸ Favre, *supra* note 18, at 21.

²⁹ *See generally Stephens v. State*, 65 Miss. 329, 330-33, 3 So. 458, 458-59 (1888).

³⁰ *See id.*

particular action did not directly violate the statute, it was created “for the benefit of animals, as creatures capable of feeling and suffering . . . To disregard the rights and feelings of equals, is unjust and ungenerous, but to willfully or wantonly injure or oppress the weak and helpless is mean and cowardly.”³¹ Much of the movement in the nineteenth century around the development of animal welfare laws started with the actions of Bergh and moved to the moral perception of animal interests in Judge Arnold’s opinion.³² Over time, both federal and state regulation surrounding the treatment of animals dramatically increased.

B. Current State and Federal Regulations

The power to police animal welfare remains largely within state jurisdiction in the United States, as opposed to the power to police the products of animals which is often ceded to federal regulation.³³ Because the U.S. Constitution does not mention animals, some argue that the primary source of governance for animal welfare stands with the states.³⁴ However, certain phases of farm animal production find themselves on the list of federal regulations, including the Poultry Products Inspection Act,³⁵ the Animal Health and Disease Research Act,³⁶ Humane Slaughter Act,³⁷ the Twenty-Eight Hour Law,³⁸ and the Animal Welfare Act.³⁹ Notably, many of these acts regulate post-production techniques, rather than on-farm production. This could suggest an unwillingness

³¹ *Id.*

³² Favre, *supra* note 18, at 30.

³³ See generally *Federal-State-Local Cooperation in Animal Welfare Enforcement*, THE U.S. DEP’T OF JUST. ARCHIVES (Aug. 15, 2016), <https://www.justice.gov/archives/opa/blog/federal-state-local-cooperation-animal-welfare-enforcement>.

³⁴ David Favre, *Overview of U.S. Animal Welfare Act*, ANIMAL LEGAL & HIST. CENTER (2002), <https://www.animallaw.info/article/overview-us-animal-welfare-act>.

³⁵ See generally 21 U.S.C. §§ 451-472 (explaining the regulation of processing and distribution of poultry products).

³⁶ See 7 U.S.C. §§ 3191-3202 (explaining the promulgations around the prevention of disease through improved health and productivity in livestock, poultry, aquatic animals, and other income-producing animals).

³⁷ See 7 U.S.C. §§ 1901-1907 (explaining the current laws and regulations around the humane handling and treatment of food animals at slaughter facilities).

³⁸ See 49 U.S.C. § 80502 (clarifying that by law, animals transported for longer than twenty-eight consecutive hours must be unloaded for five consecutive hours to receive access to food, water, and rest).

³⁹ See generally 7 U.S.C. §§ 2131-2160 (explaining the only federal law in place to regulate the treatment of animals in research or exhibition).

of the federal government to substitute its knowledge for producer minds, bringing the animal under federal regulation only after it begins to enter commerce for eventual human consumption.

The language in the aforementioned statutes suggests a congressional recognition of both consumer and producer interests. For example, the Humane Slaughter Act was one of the first steps towards federal regulation of welfare in animals designed for human consumption.⁴⁰ During the hearings that contemplated the passage of this act, Congress stated that the “use of humane methods in the slaughter of livestock prevents needless suffering,” suggesting that Congress knew some suffering would occur, but that suffering does not need to come at producer-profit expense.⁴¹ The Poultry Products Inspection Act also highlighted Congress’s recognition of a need for state and federal governments to work together to best serve the interests of producers and consumers alike.⁴²

A large limitation in standard welfare practices for livestock and poultry is the omission of these animals from the Animal Welfare Act.⁴³ Enacted in 1966, this act is the sole federal law “that regulates the treatment of animals in research, teaching, testing, exhibition, transport, and by dealers.”⁴⁴ The U.S. Department of Agriculture (“USDA”) still recognizes that farm animals deserve protections equal to their domestic animal counterparts.⁴⁵ The USDA partners with several third-party organizations to create certification programs based on scientific research written by various industry professionals.⁴⁶ Producers elect to participate in the program, must comply with program guidelines, and are monitored by audits from

⁴⁰ See National Agricultural Library, *Humane Methods of Slaughter Act*, U.S. DEP’T OF AGRIC., [https://www.nal.usda.gov/animal-health-and-welfare/humane-methods-slaughter-act#:~:text=The%20Humane%20Methods%20of%20Slaughter,and%20Inspection%20Service%20\(FSIS\)](https://www.nal.usda.gov/animal-health-and-welfare/humane-methods-slaughter-act#:~:text=The%20Humane%20Methods%20of%20Slaughter,and%20Inspection%20Service%20(FSIS)) (last visited Oct. 26, 2023). The act passed on August 27, 1958 and is enforced by the Food and Safety Inspection Service. *Id.*

⁴¹ See 7 U.S.C. § 1901.

⁴² See 12 U.S.C. § 1037 (explaining generally prohibited behavior by egg-handlers handling eggs to be consumed by humans).

⁴³ See generally 7 U.S.C. § 2131.

⁴⁴ National Agricultural Library, *Animal Welfare Act*, U.S. DEP’T OF AGRIC., <https://www.nal.usda.gov/animal-health-and-welfare/animal-welfare-act> (last visited Oct. 26, 2023).

⁴⁵ National Agricultural Library, *Animal Welfare Audit and Certification Programs*, U.S. DEP’T OF AGRIC., <https://www.nal.usda.gov/animal-health-and-welfare/animal-welfare-audit-and-certification-programs> (last visited Oct. 26, 2023).

⁴⁶ See *id.*

industry professionals.⁴⁷ These programs align consumer concern about production techniques with higher knowledge from those who are more intricately involved with livestock production.⁴⁸

Since no federal regulation on animal welfare exists, states are free to regulate as they see fit.⁴⁹ Many states statutorily enact livestock care boards that create welfare standards.⁵⁰ For instance, several states including Louisiana,⁵¹ Indiana,⁵² Minnesota,⁵³ and North Dakota⁵⁴ created Boards of Animal Health that regulate the care of farm animals.⁵⁵ Ohio even created the Ohio Livestock Care Standards Board (“OLCSB”) via State Issue 2,⁵⁶ an amendment to the Ohio State Constitution in 2009.⁵⁷ The goal of the OLCSB is to “obtain public input and recommend guidelines for the Ohio Department of Agriculture.”⁵⁸ Ohioans can submit complaints regarding violations via an online form⁵⁹ available on the Ohio Department of Agriculture’s website.⁶⁰ New Jersey appears to have

⁴⁷ See *id.*

⁴⁸ See *id.*

⁴⁹ See Legal Information Institute, *Preemption*, CORNELL L. SCH., <https://www.law.cornell.edu/wex/preemption> (last visited Oct. 26, 2023).

⁵⁰ See, e.g., *Enforcement of State Farm Animal Welfare Laws*, ANIMAL WELFARE INST. (Mar. 2020), <https://awionline.org/sites/default/files/uploads/documents/20StateEnforcementReport.pdf>.

⁵¹ See *Animal Health*, DEP’T OF AGRIC. & FORESTRY, <https://www.ldaf.state.la.us/animal-health/> (last visited Oct. 26, 2023).

⁵² See *About BOAH*, IND. STATE BD. OF ANIMAL HEALTH, <https://www.in.gov/boah/about-boah/> (last visited Oct. 26, 2023).

⁵³ See *Our Mission*, MINN. BD. OF ANIMAL HEALTH STATE, <https://www.bah.state.mn.us/our-mission/> (last visited Oct. 26, 2023).

⁵⁴ See *North Dakota State Board of Animal Health*, N.D. DEP’T OF AGRIC., <https://www.ndda.nd.gov/divisions/animal-health> (last visited Oct. 26, 2023).

⁵⁵ See *id.*

⁵⁶ For more details on Issue 2, see generally Peggy Kirk Hall, *Legal Questions and Answers about Issue 2, The Ohio Livestock Care Standards Board Ballot Issue*, THE OHIO STATE UNIV. EXTENSION, <https://farmoffice.osu.edu/sites/aglaw/files/site-library/Issue2FactSheet%20%281%29.pdf> (last visited Nov. 2, 2022).

⁵⁷ See *Livestock Care Standards*, OHIO DEP’T OF AGRIC., <https://agri.ohio.gov/divisions/animal-health/livestock-care-standards> (last visited Oct. 26, 2023).

⁵⁸ *Id.*

⁵⁹ See *Livestock Care Standards Complaint Form*, OHIO DEP’T OF AGRIC., https://agri.ohio.gov/wps/wcm/connect/gov/95e6fc9b-3ccc-494e-9d5f-e037afc112c1/5.18.2022Ohio+Livestock+Care+Standards+Complaint.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_K9I401S01H7F40QBNJU3SO1F56-95e6fc9b-3ccc-494e-9d5f-e037afc112c1-o3tgRma (last visited Oct. 26, 2023).

⁶⁰ See *Livestock Care Standards*, *supra* note 57.

one of the longest histories of statutory protections around animal welfare practices.⁶¹ In 1996, the New Jersey legislature granted authority to the New Jersey Department of Agriculture to promulgate regulations around standard welfare practices.⁶²

These various state actions continue to show the lack of uniformity and malleable concept of what exactly constitutes best welfare practices in animals raised for human consumption. Even further, lack of federal regulation suggests that even the federal government is unwilling to dictate how producers across the country should or should not raise their livestock.

II. Livestock and its Impact on the U.S. Economy

The livestock and poultry industries make up the largest segment of the U.S. agricultural sector.⁶³ The market value of livestock, poultry, and their byproducts increased steadily from 2007, sitting at a current value of slightly under \$200,000,000,000.⁶⁴ In 2017, the total number of U.S. farms used for animal production and aquaculture stood at 1,075,130 across a total of 478,673,553 acres.⁶⁵

In 2021, the U.S. meat and poultry industry processed: 9.3 million chickens (young or mature, heavy or light), 33.9 million head of cattle (heifers, steers, dairy cattle, bulls, and “other” cattle), 391,300 head of calves, 2.26 million head of sheep (sheep, yearlings, and lambs), and 129 million head of hogs (barrows and gilts).⁶⁶ From 1999 to 2020, average meat consumption totaled 252 pounds per person per year.⁶⁷ While averages hit a low between 2007 and 2013

⁶¹ See *Enforcement of State Farm Animal Welfare Laws*, *supra* note 50.

⁶² See *id.*

⁶³ See *Animal Products*, U.S. DEP’T OF AGRIC. ECON. RSCH. SERV. (Apr. 27, 2022), <https://www.ers.usda.gov/topics/animal-products/>; see also *Cattle and Beef Sector at a Glance*, U.S. DEP’T OF AGRIC. ECON. RSCH. SERV. (Aug. 30, 2023), <https://www.ers.usda.gov/topics/animal-products/cattle-beef/sector-at-a-glance/>.

⁶⁴ See U.S. DEP’T OF AGRIC., AC-17-A-51, 2017 CENSUS OF AGRICULTURE 9 (2019).

⁶⁵ See *id.* at 59.

⁶⁶ U.S. DEP’T OF AGRIC., ISSN:0499-0544, LIVESTOCK SLAUGHTER SUMMARY REPORT 1 (Sept. 23, 2021); U.S. DEP’T OF AGRIC., ISSN:2159-7480, POULTRY SLAUGHTER 2021 SUMMARY 7 (Feb. 2022).

⁶⁷ See Gretchen Kuck & Gary Schnitkey, *An Overview of Meat Consumption in the U.S.*, FARMDOC DAILY, (May 12, 2021), <https://farmdocdaily.illinois.edu/2021/05/an-overview-of-meat-consumption-in-the-united-states.html>.

of 235 pounds per person,⁶⁸ in 2020 the average reached a high of 264 pounds.⁶⁹ In 2023, the production amount of beef and red meat hit an all-time high, totaling over 7 billion pounds.⁷⁰

Animals also find themselves as part of human consumption beyond just food. Pharmaceutically, swine gelatin is used for capsule pills, recent medical advancements created human valve replacements from hogs, pancreata from cattle is used for insulin, and sheep intestines are found in surgical sutures.⁷¹ When it comes to everyday items, animal byproducts are found in cosmetics, collagen, footballs, clothing, upholstery, gelatin for food use, and even stearic acid (plastics).⁷² The Pork Checkoff is a congressionally created program intended to highlight the value of pork within the market generally.⁷³ The program coined the phrase “everything but the oink” to signify just how much monetary value a pig holds when it comes to human consumption; a value that goes well beyond just a juicy porkchop or crispy piece of breakfast bacon.⁷⁴

The statistics referenced previously create a consumer demand that falls upon producers in various states across the country to fill.⁷⁵ Several states rank high for top-producers of livestock: California holds the top-position for dairy cattle production, Texas for beef cattle production, and Iowa and North Carolina remain the

⁶⁸ The great recession of 2008 is often attributed to this decrease, as a drop in income can signal a decrease in meat consumption. *Id.*

⁶⁹ *See id.*

⁷⁰ *See* U.S. DEP’T OF AGRIC., ISSN:0499-0544, LIVESTOCK SLAUGHTER SUMMARY REPORT 1 (Feb. 23, 2023).

⁷¹ *See generally About Pork Checkoff*, PORK CHECKOFF, <https://porkcheckoff.org/pork-branding/facts-statistics/everything-but-the-oink/>, (last visited Nov. 2, 2022); *see also Everything But the Baa By-Products From Sheep*, FARM CREDIT OF THE VIRGINIAS, (Jan. 17, 2023), <https://www.farmcreditofvirginias.com/blog/everything-baa-products-sheep>; Amanda Radke, *Cattle are critical for advancements in human medicine*, BEEF (Feb. 3, 2019), <https://www.beefmagazine.com/cattle-market-outlook/cattle-are-critical-for-advancements-in-human-medicine>; *Seven Everyday Items with Animal Byproducts*, KAN. FARM FOOD CONNECTION, <https://kansasfarmfoodconnection.org/spotlights/seven-everyday-items-with-animal-byproducts>, (last visited Oct. 26, 2023).

⁷² *See Seven Everyday Items with Animal Byproducts*, *supra* note 71.

⁷³ *See generally About Pork Checkoff*, *supra* note 71.

⁷⁴ *See Everything But the Oink*, PORK CHECKOFF, <https://porkcheckoff.org/pork-branding/facts-statistics/everything-but-the-oink/> (last visited Oct. 26, 2023).

⁷⁵ For further information and break down on the overall livestock industry in the United States, including comparison of the 2017 USDA Ag Census Report to previous years, see the 2017 USDA Ag Census Report. *See generally* U.S. DEP’T OF AGRIC., *supra* note 64, at 7.

top producing states for sow production.⁷⁶ Moreover, livestock and poultry markets outside the borders of the United States hold an economically significant role. The current total export value for the livestock and poultry industry is over \$37 billion dollars, with Mexico being the largest export market sitting at a \$7.22 billion dollar value.⁷⁷ China, Japan, and South Korea hold the second, third, and fourth place values respectively as top export markets for the U.S. livestock and poultry market.⁷⁸ The predicted increase in both beef and pork global demand for 2023 signals a production requirement likely to be met by U.S. producers.⁷⁹ This prediction further highlights that while producers may be required via state legislation to adhere to welfare practices, the ultimate demand for economic gain from U.S. livestock comes from a demand that far overreaches what any state can attempt to govern.

III. The Constitutional Anchor

A. *Unconstitutional Right to Food*

While the purpose of the nation's Constitution is to establish governmental laws that guarantee certain basic rights for citizens, this archaic but symbolic manuscript required interpretation over the many years as to what is truly granted to American citizens within its documented four corners.⁸⁰ Thus, the U.S. Supreme Court, through various landmark cases, interpreted from the Constitution what are known as fundamental rights,⁸¹ or rights so significant in American history and tradition that they must be protected from government

⁷⁶ See *Cattle Inventory*, U.S. DEP'T OF AGRIC., https://app.usda-reports.penguinlabs.net/?crop=cattle_cows_beef&statistic=inventory_head&year=&year=2022 (last visited Oct. 26, 2023); see also *Hog Inventory*, U.S. DEP'T OF AGRIC., https://app.usda-reports.penguinlabs.net/?crop=hogs&statistic=inventory_head&year=&year=2021 (last visited Oct. 26, 2023).

⁷⁷ See *Dairy, Livestock, and Poultry Exports in 2022*, U.S. DEP'T OF AGRIC., <https://www.fas.usda.gov/commodities/dairy-livestock-and-poultry> (last visited Oct. 26, 2023).

⁷⁸ See *id.*

⁷⁹ See *Livestock and Poultry: World Markets and Trade*, U.S. DEP'T OF AGRIC. 2 (July 12, 2023), https://apps.fas.usda.gov/psdonline/circulars/livestock_poultry.pdf.

⁸⁰ See generally *Constitution*, HISTORY (Mar. 28, 2023), <https://www.history.com/topics/united-states-constitution/constitution#:~:text=The%20Constitution%20of%20the%20United,th e%20Constitutional%20Convention%20in%20Philadelphia>.

⁸¹ See Legal Info. Inst., *Fundamental Right*, CORNELL L. SCH., https://www.law.cornell.edu/wex/fundamental_right (last visited Oct. 26, 2023).

overreach.⁸² For example, the right to marriage⁸³ can be seen through opinions in both *Loving v. Virginia*⁸⁴ and *Obergefell v. Hodges*.⁸⁵ Other constitutionally granted rights include the right to vote,⁸⁶ contraception,⁸⁷ privacy,⁸⁸ and even the custody of one's own children.⁸⁹

Even with a robust history of constitutionally defined rights, the U.S. Supreme Court still has not defined a constitutional right to food through any clearly established case law.⁹⁰ Which begs the question: if the U.S. Constitution does not grant a right to food, should consumers even have a right to know how that food is produced? And without a constitutional right to food, does a consumer even have a right to choose a particular food? An argument likely exists that if either of these questions are answered affirmatively, consumer choice is likely compromised or even removed entirely.⁹¹

Relatedly, modern scholars argue that the next fundamental right should be the intersection of a concept known as the “right to know” with food in general.⁹² Overall, “right to know” is a concept that reflects a citizen's right to the utmost knowledge of public body actions that affect them, except when that obtained knowledge would negate or threaten merits of withholding that public disclosure.⁹³

⁸² See *id.*

⁸³ See generally Legal Info. Inst., *Marriage*, CORNELL L. SCH., <https://www.law.cornell.edu/wex/marriage> (last visited Oct. 26, 2023).

⁸⁴ See generally *Loving v. Virginia*, 388 U.S. 1 (1967) (holding that prohibitions on interracial marriage unconstitutionally violate the Equal Protection Clause).

⁸⁵ *Obergefell v. Hodges*, 574 U.S. 1118 (2015) (explaining that prohibitions on same-sex marriages also unconstitutionally violate the Equal Protection Clause).

⁸⁶ See generally *Harper v. Virginia Bd. of Elections*, 383 U.S. 663 (1966).

⁸⁷ See generally *Griswold v. Connecticut*, 381 U.S. 479 (1965).

⁸⁸ See generally *Eisenstadt v. Baird*, 405 U.S. 438 (1971); *Lawrence v. Texas*, 539 U.S. 558 (2003).

⁸⁹ See *Santosky v. Kramer*, 455 U.S. 745, 753 (1982).

⁹⁰ See Eve E. Garrow & Jack Day, *Strengthening the Human Right to Food*, 7 U.C. IRVINE L. REV. 275, 282-85 (2017).

⁹¹ See Taiwo A Oriola, *Consumer Dilemmas: The Right to Know, Safety, Ethics and Policy of Genetically Modified Food*, 2002 SING. J. LEG. STUD. 514, 567 (2002).

⁹² The right to know and its relevance to food is beyond the scope of this article. For more details on how the right to know intersects more intricately with food and food law, see Oriola, *supra* note 91 (explaining generally how the right to know plays a role in a consumer's right to choose or not choose genetically modified foods).

⁹³ See Fritz Synder, *The Right to Participate and the Right to Know in Montana*, 66 MONT. L. REV. 297, 298 (2005).

Applying this to the context of consumer food choice, this means consumers have a right to know intricate details around their consumed food, including if that food is genetically modified or utilized certain animal welfare production methods. Critics of the “right to know” doctrine argue it is unethical to keep consumers in the dark about certain food choices that a consumer deemed important, but counterarguments state that oftentimes factors beyond even a producer’s control limit a state of consumer utmost knowledge.⁹⁴

Recently, Maine became the first state to address this concept. In November 2021, voters approved—by a 60% majority—an amendment to the Maine Constitution granting a right for “all individuals . . . to grow, raise, harvest, produce and consume the food of their own choosing for their own nourishment, sustenance, bodily health and well-being.”⁹⁵ This direct language insinuates both a consumer’s right to food of their own choosing and a right to choose how that food should be produced. Even further, this right goes beyond general health and safety, highlighting a theory that the consumer is ultimately the person best suited to make decisions for themselves, rather than governmental agencies or regulatory bodies.

Some states codified a right to know for their citizens in various contexts, but not without limitations. New Hampshire specifically recognized this complexity in its legislative materials around its own codified right to know law, stating that compliance “may be difficult and occasionally provide headaches.”⁹⁶ Oregon attempted a ballot initiative in 2014 that would have codified a consumer’s right to know food production methods through mandated GMO-labeling, but a slim majority opposed such a mandate.⁹⁷

These two pieces of legislation imply a consumer does have a right to know animal welfare production methods, but courts have

⁹⁴ See Oriola, *supra* note 91, at 570-74.

⁹⁵ H.P. 61, 130th Leg. 1st Reg. Sess. (Me. 2021); see also Tess Brennan, *Maine Becomes the First US State to Recognize the Right to Food in a Constitutional Amendment*, GVA (Jan. 19, 2022), <https://www.universal-rights.org/blog/maine-becomes-the-first-us-state-to-recognise-the-right-to-food-in-a-constitutional-amendment>.

⁹⁶ 13 NH Practice Series: Local Government Law § 658 (2023).

⁹⁷ See *2014 Oregon Ballot Measure Results*, POLITICO (Nov. 15, 2014, 1:37 AM), https://www.politico.com/2014-election/results/map/ballot-measures/oregon/#.Y4JL_-zMJb8.

still placed overall restrictions on that right to know.⁹⁸ Consumer interests might hold some legislative importance, but the general impression is that the interest must still succumb to external factors that likely prevent full disclosure to enhance consumer knowledge. The consumer is not without recourse, because their voices can be heard through both purchase power and voter power. Consumer votes have the deliberate ability to enact or represent change that can come from the state's legislature.

B. The Commerce Clause

Although other states are free to follow Maine's lead, they will still face pressure to comply with the Commerce Clause. Found in Article 1, Section 8 of the Constitution, the Commerce Clause gives sole power to Congress to regulate "commerce among the states."⁹⁹ Additionally, the Dormant Commerce Clause is the judicially created doctrine that even if Congress has not enacted a law, even if its powers lie "dormant," states cannot enact laws that unduly burden interstate commerce.¹⁰⁰ Like many protected constitutional rights, the U.S. Supreme Court handed down several cases that ensure that the federal authority these doctrines grant to Congress can still simultaneously restrict state authority.

While the Commerce Clause impacts a variety of industries, many cases specifically involve agricultural products. One of the earliest examples is *Wickard v. Filburn*, when an Ohio wheat farmer violated federal regulations around allotment proportions because he

⁹⁸ See *Grocery Mfrs. Ass'n v. Sorrell*, No. 5:14-cv-117, 2014 U.S. Dist. LEXIS 195138 (D. Vt. Oct. 7, 2014) (denying additional right to know food interest groups their motion to intervene because their interests were already represented by existing plaintiffs challenging state right to know laws); see also *Brown v. Peckman* (In re Title), 3 P.3d 1210 (holding that the titles and summaries of state legislation regarding genetically-engineered food labeling were not misleading and therefore not impeding a consumer's right to know in regards to genetically-engineered food). Overall, the intricacies of right to know legislation in connection to food law is beyond the scope of this article. For more information on how this type of legislation works, see generally Synder, *supra* note 90.

⁹⁹ See U.S. CONST. art. 1, § 8, cl. 3; see also Erwin Chemerinsky, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 290 (Dean Choper & Jesse H. Choper eds, 6th ed. 2019); Legal Information Institute, *Commerce Clause*, CORNELL L. SCH., https://www.law.cornell.edu/wex/commerce_clause (last updated July 2022). *Gibbons v. Ogden* is credited as one of the earliest cases to outline Commerce Clause parameters, holding that if activity within a state's borders has a role in larger interstate activities, it can be constitutionally regulated. See *Gibbons v. Ogden*, 22 U.S. 1, 194 (1824).

¹⁰⁰ Legal Information Institute, *supra* note 99.

held back additional acres of wheat for use on his farm.¹⁰¹ Filburn argued that because the wheat stayed on his farm, it never impacted interstate commerce and could not be regulated by the Commerce Clause.¹⁰² A unanimous court disagreed and found that even trivial acts, when aggregated, could substantially effect market pricing and availability,¹⁰³ which therein implicated interstate commerce.¹⁰⁴ This case ultimately signaled the start of a broader and more expanded power grant to Congress in regard to regulation of interstate commerce.¹⁰⁵

Wickard is not the only case where the U.S. Supreme Court promulgated guidelines that govern how the Commerce Clause should be interpreted. In 1970, the U.S. Supreme Court declared a rule in *Pike v. Bruce Church* known as the *Pike* Balancing Test.¹⁰⁶ This test takes the regulation at issue and weighs the burden on interstate commerce with the substantial local interest meant to be protected.¹⁰⁷ If the result is an off-balance burden between that local interest and interstate commerce, then the regulation must be struck down.¹⁰⁸

In 1977, shortly after *Pike*, Washington state brought suit against the North Carolina Department of Agriculture for in-state regulations that required all apples in North Carolina to be labeled with USDA grade-standards, standards lower than those in place in Washington.¹⁰⁹ Here, the U.S. Supreme Court ruled that even if a law appears facially neutral—meaning it does not explicitly affect interstate commerce—it cannot burden state markets from fairly competing in other state markets.¹¹⁰ Then in 1980, Minnesota enacted a prohibition on non-refillable or returnable plastic containers and Clover Leaf Creamery brought suit against the state in *Minnesota v. Clover Leaf Creamery Co.*¹¹¹ Here, the Supreme Court took a different position and held that because Minnesota’s

¹⁰¹ See *Wickard v. Filburn*, 317 U.S. 111, 133 (1942); see also *Wickard v. Filburn*, OYEZ, <https://www.oyez.org/cases/1940-1955/317us111> (last visited Oct. 27, 2023).

¹⁰² See *Wickard*, 317 U.S. at 119.

¹⁰³ See *id.* at 133.

¹⁰⁴ See *id.* at 125.

¹⁰⁵ See generally *Wickard*, 317 U.S. at 111.

¹⁰⁶ See generally *Pike v. Bruce Church*, 397 U.S. 137 (1970).

¹⁰⁷ See *id.* at 142-46.

¹⁰⁸ See *id.*

¹⁰⁹ See *Hunt v. Wash. State Apple Adver. Comm’n*, 432 U.S. 333, 336-39 (1977).

¹¹⁰ See *id.* at 352.

¹¹¹ See *Minnesota v. Clover Leaf Creamery Co.*, 449 U.S. 456, 471-72 (1980).

legislation held a rational relation to the purpose of resource conservation, while placing in- and out-of-state commerce on the same level, the law was not unconstitutional.¹¹²

IV. Balancing Constitutionality with Consumer Demand

A. California's Proposition 12

California recently found itself at the center of animal welfare controversy with the passing of Prop 12, a ballot initiative approved by 62% of California residents in 2018.¹¹³ The legislation required products from egg-laying hens, veal calves, and breeding pigs to be raised in a minimum square footage area that allowed for more freedom of movement, cage-free design (in the case of hens), and minimum floor space.¹¹⁴ The legislation outlined two deadlines, one in January 2020 that affected egg-laying hens and veal calves, and the second in January 2022 for breeding pigs and further regulations around egg-laying hens.¹¹⁵ In particular, the legislation stated that breeding pigs required at least 24 square feet of usable floorspace per pig.¹¹⁶ Further provisions within Prop 12 involve criminal and civil penalties, including jail-time, for non-compliant pork sold within the state.¹¹⁷ Prop 12 even goes so far as to permit on-site inspection audits by California officials to ensure proper compliance.¹¹⁸

¹¹² See *id.*

¹¹³ See Kenny Torella, *The Supreme Court is about to decide the fate of millions of pigs*, Vox (Oct. 9, 2022, 8:00 AM), <https://www.vox.com/future-perfect/2022/10/9/23393017/supreme-court-pork-pigs-prop-12-california-animal-welfare>.

¹¹⁴ See Jana Caracciolo, *What is Going on with Prop 12?*, NAT'L AGRIC. L. CTR. (Feb. 2022), <https://nationalaglawcenter.org/what-is-going-on-with-prop-12/>.

¹¹⁵ See *December 23, 2021 Update to Question 5*, CDFA|AHFSS (Mar. 5, 2021), https://s29.q4cdn.com/239956855/files/our_impact/animal/Grimmway-Farms_Press-Release.pdf.

¹¹⁶ See *id.*

¹¹⁷ See Brian Eyink et al., *Cal. issues proposed reguls. under the Farm Animal Confinement Initiative (Prop 12)*, JDSUPRA (June 10, 2021), <https://www.jdsupra.com/legalnews/california-issues-proposed-regulations-2964304/>.

¹¹⁸ See Rob Smith, *NPPC v. Ross – Supreme Court to Consider Whether Cal. Can Reg. Food Prod. for Entire Nation*, NFIB (Oct. 3, 2022), <https://www.nfib.com/content/legal-blog/legal/nppc-v-ross-supreme-court-to-consider-whether-california-can-regulate-food-production-for-entire-nation/>.

California currently imports 99.87% of pork sold within its borders but consumes about 13% of the nation's total pork supply.¹¹⁹ As of December 1, 2021, California housed 82,000 hogs and Iowa housed 23,900,000 hogs.¹²⁰ Current industry averages for sow gestation crates provide approximately 14 square feet of space per sow (typically arranged 24 inches wide by 7 feet long),¹²¹ far below the 24 square foot minimum. This implies that out of state pork producers will have to reconfigure existing barns, build new construction entirely, or reduce herd size to legally sell pork products in California, which is estimated to cost upwards of \$300 million dollars.¹²²

In December 2019, National Pork Producers Council (“NPPC”) and the American Farm Bureau Federation (“AFBF”) filed suit in the Southern District of California against the California Department of Agriculture and the California Department of Public Health.¹²³ The claim alleged that Prop 12 violated the Dormant Commerce Clause in two ways: 1) Prop 12 has an extraterritorial effect, meaning its effects are seen primarily out of state, and 2) that it fails the *Pike* Balancing Test because it unduly burdens interstate commerce.¹²⁴ Essentially, the complaint stated that the ballot initiative made it harder for Prop 12 compliant pork to enter California because of its significant ripple effect on producers not based in the state.¹²⁵ The District Court disagreed and held that Prop 12 “does not regulate extraterritorially because it does not target solely interstate commerce and it regulates in-state and out-of-state conduct equally.”¹²⁶

NPPC and AFBF appealed to the Ninth Circuit, which upheld the District Court's ruling, but added a threshold clarification and stated that if Prop 12 had out-of-state effects, those effects are not “impermissible” simply because it regulates pork sales only in

¹¹⁹ See Torella, *supra* note 113; see also Peggy Kirk Hall, *California farm animal welfare law heads to the Supreme Court*, FARM OFFICE (Oct. 4, 2022), <https://farmoffice.osu.edu/blog-tags/commerce-clause>.

¹²⁰ See *Hog Inventory*, *supra* note 76.

¹²¹ See John McGlone, *Gestation Stall Design and Space: Care of Pregnant Sows in Individual Gestation Housing*, NAT'L PORK BD. 2 (2013), <https://porkcheckoff.org/wp-content/uploads/2021/05/Gestation-Stall-Design-and-Space.pdf>.

¹²² See Torella, *supra* note 113.

¹²³ See Caracciolo, *supra* note 114.

¹²⁴ See *Nat'l Pork Producers Council v. Ross*, 456 F. Supp. 3d 1201, 1206-8 (S.D. Cal. 2020).

¹²⁵ See *id.*

¹²⁶ *Id.* at 1208.

California.¹²⁷ In other words, just because a statute regulates only in-state sales does not mean that the effects of that regulation are “impermissible” on the affected out-of-state markets. The Ninth Circuit said that Prop 12 “neither dictates the price of pork products nor ties the price of pork products sold in California to out-of-state prices.”¹²⁸ Even further, the Ninth Circuit said that increased costs to market participants and consumers do not constitute a significant burden on interstate commerce, and it is only in rare cases that a statute imposes a substantial burden via discrimination.¹²⁹ Because counsel for NPPC and AFBF did not allege discrimination, no substantial burden exists.¹³⁰ NPPC and AFBF appealed once again, and the U.S. Supreme Court granted certiorari and heard oral arguments on October 11, 2022.¹³¹

B. Proposition 12 Oral Arguments

During Oral Arguments to the U.S. Supreme Court, counsel for California and NPPC raised legal arguments implying that Prop 12 does more than set animal welfare standards, but exposes the overall consumer trend to make purchase choices based on animal welfare motivated morals.¹³² NPPC counsel argued that although California eluded to potential public health and welfare interest, the driving motivational factor came down to morality, which cannot stand as a legitimate public interest, especially weighted against its burden on interstate commerce.¹³³ Counsel for California counter-argued that the voting process cannot track voter motivations, but if morality was the sole motivator, the law itself does not stronghold out-of-state producers to comply and should be upheld.¹³⁴

When presented with this specific argument from California counsel, the Justices produced a line of questioning that focused on

¹²⁷ See *Nat'l Pork Producers Council v. Ross*, 6 F.4th 1021, 1029 (9th Cir. 2021).

¹²⁸ *Id.* at 1028.

¹²⁹ See *id.* at 1032-34.

¹³⁰ See *id.*

¹³¹ See *Supreme Court of the United States October Term 2022*, SUPREME COURT, https://www.supremecourt.gov/oral_arguments/argument_calendars/MonthlyArgumentCalOctober2022.pdf (last amended Sept. 28, 2022).

¹³² See Transcript of Oral Argument at 59-60, 74, 91, 94, *National Pork Producers v. Ross*, 598 U.S. 356 (2023) (No. 21-468); see also *Consumer Perceptions of Farm Animal Welfare*, ANIMAL WELFARE INST., https://awionline.org/sites/default/files/uploads/documents/fa-consumer_perceptionsoffarmwelfare_-112511.pdf (last visited Nov. 11, 2023).

¹³³ See *Lawrence*, 539 U.S. at 582.

¹³⁴ See Transcript of Oral Argument, *supra* note 132, at 94.

a threshold definition around morality regulation.¹³⁵ For instance, Justice Amy Coney Barrett asked if the allowance of Prop 12 would potentially open the door to states banning products from companies that did not provide certain healthcare for its employees, or how a ruling in favor of Prop 12 may or may not strike down a multitude of existing state laws.¹³⁶ Even further, when Justice Neil Gorsuch questioned as to whether Prop 12 should be upheld if California consumers were willing to pay for the entire increase of production costs, NPPC counsel countered that if that were the case, then primary pork-producing states such as Iowa or North Carolina could say that they have a moral interest in providing affordable pork to consumers that do not want to pay that increased price.¹³⁷ Since states cannot argue morality as a basis for their legislation, neither of these moral interest arguments have plausible legal merit.¹³⁸

But these arguments beseech an analysis of human versus animal morality, and whether a state can cross the proverbial line of morality over existing precedent.¹³⁹ For example, the U.S. Supreme Court firmly held in *Lawrence v. Texas*¹⁴⁰ that states cannot regulate morality.¹⁴¹ In this landmark case, the U.S. Supreme Court held that “moral disapproval” alone cannot sufficiently stand as a legitimate state interest to be upheld under rational review, especially if that

¹³⁵ See Emily Hoeven, *California pig law exposes a divided America*, CAL MATTERS (Oct. 12, 2022), <https://calmatters.org/newsletters/whatmatters/2022/10/california-pig-law-supreme-court/>.

¹³⁶ See Transcript of Oral Argument, *supra* note 132, at 86, 97.

¹³⁷ See *id.* at 33-34, 79, 131.

¹³⁸ See generally *Pike*, 397 U.S. at 142.

¹³⁹ The currently seated U.S. Supreme Court appears to be moving strongly away from areas traditionally granted in the realm of civil rights. See generally Shay Dvoretzky & Emily Kennedy, *Key Trends to Watch as the Supreme Court Reopens its Doors*, REUTERS (October 17, 2022, 10:19 AM CDT), <https://www.reuters.com/legal/litigation/key-trends-watch-supreme-court-reopens-its-doors-2022-10-17/>. Therefore, an expansion of civil rights granted to animals seems highly unlikely. This line of thought is also likely strengthened by the lack of animals mentioned in the Constitution, the common-law principle of animals of property, and the commercially-valuable undertone of animals throughout history.

¹⁴⁰ For further analysis of the overall implications arising from the holding in *Lawrence v. Texas*, see generally Nicole Hart, *The Progress and Pitfalls of Lawrence v. Texas*, 52 Buffalo L. Rev. 1417 (2004) (examining further the expansions and limitations of the Supreme Court’s holding in *Lawrence v. Texas*); see also Justin Reinheimer, *What Lawrence Should Have Said: Reconstructing an Equality Approach*, 96 Calif. L. Rev. 505 (2008) (explaining the shortcomings of the holding in *Lawrence v. Texas* on subsequent gay rights litigation).

¹⁴¹ See *Lawrence*, 539 U.S. at 582 (explaining that prohibitions on homosexual relations violated the Equal Protection Clause).

moral disapproval unfairly disadvantaged a group of certain individuals.¹⁴² If a state, such as Texas, cannot force its moral views on its own citizens, can those citizens use the power of their vote to force their moral beliefs on other states? Prop 12 indicates that Californians seem to think so. But the majority of morality precedence comes from cases that regulated behaviors between humans,¹⁴³ not humans and animals. So, can animal welfare even find morality classification that arises to a legitimate state interest? This seems unlikely since animals are not mentioned in the Constitution and have a long-standing history of being seen as “commercially valuable” property.¹⁴⁴

Other Justices raised questions such as whether or not the burden should be on California to label non-compliant pork.¹⁴⁵ This creates additional means to achieve California’s claimed local interest of grocery store shelves with specific welfare standards as a purchase option, without an undue burden on interstate commerce.¹⁴⁶ This potentially raises the question of commercial free speech, preceded by the *Central Hudson* Test articulated by the U.S. Supreme Court in *Central Hudson Gas and Electric Corp. v. Public Service Comm’n*. This four-prong test sets regulations to determine just how far commercial speech can push the envelope before violating the First Amendment.¹⁴⁷ If California became responsible for labeling pork as non-compliant once it crosses into the state, the landmark *Central Hudson* Test could shift the labeling burden to producers; an action that California would rather put on producers anyway.

¹⁴² The court held that the anti-sodomy laws at issue were created solely for the purpose of criminalizing homosexual sodomy, and because that criminalized only homosexuals, it violated the Due Process rights afforded to all U.S. citizens. *See Lawrence*, 539 U.S. at 582-83.

¹⁴³ *See generally* *Brown v. Bd. of Educ.*, 347 U.S. 483, 495 (1952) (holding that segregated schools based on race are unconstitutional); *see also* *Gideon v. Wainwright*, 372 U.S. 335, 344-45 (1963) (holding that indigent defendants must be provided representation without charge); *see also* *Griswold v. Connecticut*, 381 U.S. 479, 485-86 (holding that a state-wide ban on contraceptives violated marital right to privacy).

¹⁴⁴ *See generally* Kelch, *supra* note 5, at 355.

¹⁴⁵ *See* Oral Argument – Audio, *supra* note 132.

¹⁴⁶ *See id.*

¹⁴⁷ *See* David Schultz, *Commercial Speech*, THE FIRST AMEND. ENCYCLOPEDIA, <https://www.mtsu.edu/first-amendment/article/900/commercial-speech> (last updated Sept. 19, 2023).

C. *A Tale of Precedence*

However, Prop 12 is not the first instance in which a clear line between consumers and producers, or producer interest groups, stood firmly. In *Int'l Dairy Foods Ass'n. v. Amestoy*, the plaintiff, a third-party dairy interest group, sued the state of Vermont for statutory labeling of milk produced with bST.¹⁴⁸ Plaintiffs argued that because the Food and Drug Administration (“FDA”) did not require such labeling, the state labeling requirement violated the First Amendment under the *Central Hudson* Test. On appeal, the Second Circuit agreed with the plaintiffs, finding strong evidence in the fact that the FDA scientifically proved milk composition with and without bST could not be differentiated between consumers and scientists alike.¹⁴⁹ Vermont in turn could not prove a real harm to consumers that signaled a need for public interest protection and awareness.¹⁵⁰

Additionally, the Second Circuit held that the producer-plaintiffs in this case did not need to prove that their speech was commercial, because the labeling requirement alone justified First Amendment implication, as it “requires them to speak when they simply rather would not.”¹⁵¹ It could be argued that this holding indicated any labeling burden should fall on California once pork enters the state, rather than on the pork producer during production. So, if Iowa or North Carolina producers do not want to speak, California then has the requirement to speak because its consumer-voters requested as such.

Courts have held that disclosure through product labeling generally applies to mandates, not just those intended to prevent deceptive labeling.¹⁵² This holding applies to uncontroversial mandates and a company’s obligation not to participate in misleading

¹⁴⁸ See *Int'l Dairy Foods Ass'n. v. Amestoy*, 92 F.3d 67, 69 (1996). bST is an FDA-approved growth hormone for bovines that increases milk production in cows. *Bovine Somatotropin (bST)*, See U.S. FOOD AND DRUG ADMIN., <https://www.fda.gov/animal-veterinary/product-safety-information/bovine-somatotropin-bst> (last updated Apr. 11, 2023).

¹⁴⁹ See *Int'l Dairy Foods Ass'n*, 92 F.3d at 73.

¹⁵⁰ See *id.*

¹⁵¹ *Id.* at 72.

¹⁵² See The Harvard Law Review Association, *Commercial Speech — Compelled Disclosures* — D.C. Circuit Applies Less Stringent Test to Compelled Disclosures. — *American Meat Institute v. USDA*, 760 F.3d 18 (D.C. Cir. 2014) (*en banc*), 128 HARV. L. REV. 1526, 1526 (2015).

advertising.¹⁵³ Here, the subject of animal welfare is highly controversial, and it is likely that livestock welfare practices could not be defined “generally” to prevent deception, because the USDA has not federally regulated standard welfare practices.¹⁵⁴ Prop 12 is strictly a mandate by California alone and is not a means of misleading advertising, because no other state or federal mandate sets the withholding of animal welfare production methods as misleading.

The *Int’l Dairy Foods Ass’n* majority even went so far as to note that “were consumer interest alone sufficient, there is no end to the information that states could require manufacturers to disclose about their production methods.”¹⁵⁵ Comparing the court’s opinion in *Int’l Dairy Foods Ass’n* with the facts presented in Prop 12, can California really prove that their interest in removing a product they feel is morally inferior is substantial enough to be legally upheld? And even further, if the court in *Int’l Dairy Foods Ass’n* says that consumer interest alone cannot be sufficient for disclosure, it seems likely that the mandated disclosure of animal welfare practices because of consumer interest is a prime example of required disclosures that open the no-end floodgates mentioned by the Second Circuit.

The dissent in *Int’l Dairy Foods Ass’n* recognized that the First Amendment favors the free flow of accurate and relevant information, and withholding a label on milk with bST did not encourage that concept.¹⁵⁶ This implies that consumers, like those in California, have a constitutional right to accurate and truthful information. It seems hard to reconcile this line of thought when Americans do *not* have a constitutional right to food but *do* have a First Amendment right to know what is in food because withholding such information bars free flow of truth.

Another case that adds a layer of complexity is the previously mentioned *Minnesota v. Clover Leaf Creamery Co.*¹⁵⁷ Clover Leaf claimed a violation of the Commerce Clause, but the

¹⁵³ See *id.* at 1527.

¹⁵⁴ See *id.* However, the en banc review suggested that courts recognize the complexity and general controversy around this issue could vary greatly and on review, the divided court affirmed. *Id.*

¹⁵⁵ *Int’l Dairy Foods Ass’n*, 92 F.3d at 74.

¹⁵⁶ See *id.*

¹⁵⁷ See *Minnesota*, 449 U.S. at 458.

U.S. Supreme Court in a 7-1 majority disagreed.¹⁵⁸ The court held that because the state legislature had a legitimate interest of resource conservation, a law can still be upheld, even if that interest creates an incidental shift in interstate commerce.¹⁵⁹ However, is there a point when resource conservation also crosses into morality? Taking a line from the Prop 12 playbook, if one state argues that in-state legislation to go green should still be upheld, if it affects out-of-states markets, could an affected state argue that it has an equal moral interest in providing affordable resource conservation methods for those that do not choose the high price of “green values?”

In contrast, the D.C. Court of Appeals suggested an overall consumer interest in the right to know production methods in *Am. Meat Inst. v. U.S. Dep’t of Agric.*¹⁶⁰ In this case, the court upheld country-of-origin labeling for beef, stating that health and market concerns were enough of a substantial interest to warrant the labeling, and that this information has a “historical pedigree that lifts it well above ‘idle curiosity.’”¹⁶¹ So even though the D.C. Court of Appeals indicated the world-wide geographical location within production methods warranted a consumer’s right to know, does this mean that welfare practices within U.S. borders also rise to a level above idle curiosity? And does it change the analysis if consumers are willing to pay the price for their idle curiosity, as Justice Gorsuch questioned?

All the above-mentioned cases indicate a trend that while a consumer may have the right to define standard welfare practices, this does not mean that regulatory bodies and producer definitions fall out of the picture entirely. If a court can consider scientific proof from the FDA as sufficient evidence to warrant a withholding of on-farm production methods, then the result is reduced consumer input about those methods. So how does a consumer truly find a way to insert their morality-driven welfare preferences when making purchase decisions?

¹⁵⁸ See *Minnesota v. Clover Leaf Creamery Co.*, OYEZ, <https://www.oyez.org/cases/1980/79-1171> (last visited Nov. 11, 2022).

¹⁵⁹ See *id.*

¹⁶⁰ See *Am. Meat Inst. v. U.S. Dep’t of Agric.*, 760 F.3d 18, 20 (2014).

¹⁶¹ See *id.* at 23.

D. Ballot Initiative Effectiveness

Consumers can express their purchase power as voters when they vote in favor of a ballot initiative, but is that the most effective way to express that power without violating well-established and foundational constitutional principles? Because consumers are involved in ballot initiatives, the Commerce Clause is automatically triggered. California is not the only state that enacted ballot initiatives to express morality preference in animal welfare practices. For example, Massachusetts put on its ballot Question 3, a welfare statute that nearly mirrors Prop 12.¹⁶² Currently, the enactment of Question 3 is on hold until the U.S. Supreme Court holding in *Nat'l Pork Producers Council v. Ross* is released. Arizona¹⁶³ and Florida¹⁶⁴ also have similar statutes that found their standing through ballot initiatives.

But consumers have a “brand choice” in nearly every other consumer product category, so why is the right to how food is produced excluded? Consumers are free to walk into a retail store and choose Kraft or Hidden Valley ranch dressing, or Levi or Faded Glory jeans. When consumers choose any particular brand, they can make that choice based upon personal values that guided their purchase power.¹⁶⁵ A willing consumer can take their personal values, pay a premium price, and expect that premium price automatically means animal welfare practices are above and beyond the standard definition of humane.¹⁶⁶

However, a plethora of complicated factors that many consumers may not even consider sit on the horizon when it comes

¹⁶² See Chris Lisinski, *Mass. Legislature passes animal welfare law changes, set to ease egg supply fears*, GHB (Dec. 20, 2021), <https://www.wgbh.org/news/politics/2021/12/20/mass-legislature-passes-animal-welfare-law-changes-set-to-ease-egg-supply-fears>; see also Brian Eyink et al., *Massachusetts Agrees to Stay Question 3 Pork Enforcement Pending Supreme Court Proposition 12 Decision*, JDSUPRA (Aug. 12, 2022), <https://www.jdsupra.com/legalnews/massachusetts-agrees-to-stay-question-3-9178329/>.

¹⁶³ See *Pork Production Practice Banned in Arizona*, THE PIG SITE (Nov. 9, 2006), <https://www.thepigsite.com/news/2006/11/pork-production-practice-banned-in-arizona-1>.

¹⁶⁴ See FLA. CONS. art X, § 21.

¹⁶⁵ See generally William F. Brown, *The Determination of Factors Influencing Brand Choice*, 14 J. OF MKTG. 699 (1949) (explaining generally the various factors that can influence consumer brand choice).

¹⁶⁶ See *Ctr. for Env't. Health v. Perdue*, No. 18-CV-01763-RS, 2018 U.S. Dist. LEXIS 229877, at *5 (N.D. Cal. 2018).

to the effectiveness of ballot initiatives. For example, California released research results from on-site visits by a veterinarian, Dr. Cox, that examined the capacity and ability of out-of-state producers to raise “Prop-12 compliant pork.”¹⁶⁷ Interestingly enough, there are no financial statistics included in the report, nor are there any statistics around the number of out-of-state producers that would need to become compliant.¹⁶⁸ An additional twist is that Dr. Cox visited a Smithfield processing plant, which announced in June 2022 that it is closing a Vernon, California plant due to the increased costs of conducting business in the state.¹⁶⁹ If a consumer expressed their animal welfare choice through a ballot initiative, a potential repercussion of that choice is businesses such as Smithfield leaving that state’s market to find more affordable markets in other states where consumers likely have not defined standard welfare practices.

If a consumer, through voter-power, dictates a preferred choice in animal welfare practices, producers are still burdened with tracing the animal back to those same consumer-preferred welfare practices. Vertical integration is currently at an all-time high in the livestock and poultry industry, yet nation-wide traceability remains low.¹⁷⁰ Factors such as input costs (especially in the 2022 economic climate¹⁷¹), the off-set ratio of farm-share to market-share in a

¹⁶⁷ See Elizabeth Cox, *Lessons About Proposition 12 from Recent Pork Producer Visits*, ANIMAL CARE PROGRAM 1 (July 2022), https://www.cdffa.ca.gov/AHFSS/pdfs/prop-12_pork_producer_visits.pdf.

¹⁶⁸ See *id.*

¹⁶⁹ See News Desk, *Smithfield plans to close California plant over costly red tape and regulations*, FOOD SAFETY NEWS (June 13, 2022), <https://www.foodsafetynews.com/2022/06/smithfield-plans-to-close-california-plant-over-costly-red-tape-and-regulations/>.

¹⁷⁰ See generally Harrison M. Pittman, *Market Concentration, Horizontal Consolidation, and Vertical Integration in the Hog and Cattle Industries: Taking Stock of the Road Ahead*, THE NAT’L AGRIC. LAW CTR. (Aug. 2005), <https://nationalaglawcenter.org/publication/download/pittman-market-concentration-horizontal-consolidation-and-vertical-integration-in-the-hog-and-cattle-industries-taking-stock-of-the-road-ahead-national-aglaw-center-publications-2005/> (explaining generally the trends in vertical integration in the livestock and poultry industry in recent decades); see also Ag. Law in the Field, *Beth Rumley (Animal Confinement Statutes)*, TEX. AGRILIFE EXTENSION (Nov. 11, 2021), <https://aglaw.libsyn.com/episode-118-beth-rumley-animal-confinement-statutes>.

¹⁷¹ See Samuel Fromartz, *USDA projects farm income to rise around 5% in 2022*, SUCCESSFUL FARMING (Sept. 2, 2022), <https://www.agriculture.com/news/business/usda-projects-farm-income-to-rise-around-5-in-2022>.

production dollar,¹⁷² and federal regulations, all play significant roles in determining whether the producer finds profit in their livestock operation. Analyzed with Prop 12, 99.87% of pork is produced outside of California. This means out-of-state producers have no choice but compliance if they want the California market, simply because a voter-consumer preferred certain animal welfare practices. If a producer cannot profit from raising their livestock, then that producer falls out of the market which could implicate market prices and consumer demand across the United States or the globe.

Even if a state had a genuine concern for the ballot initiative, just as the court in *Int'l Dairy Foods Ass'n* recognized from Vermont, that genuine concern could still be held inadequate.¹⁷³ Most ballot initiatives are likely to be deemed inadequate, unless they meet already existing standards proven through extensive research.¹⁷⁴ While that research could come from congressional findings or federal regulatory bodies, a Wisconsin Court of Appeals suggested that states already have qualified experts on hand that can attest to quality animal welfare practices as a genuine concern.¹⁷⁵ In that case, the court held that because the alleged state expert had university training, years of on-farm experience including a childhood upbringing on a farm, and held a humane officer license for three years, she rightfully qualified as an expert to testify against the defendant's inhumane treatment of farm animals.¹⁷⁶

The reality is that ballot initiatives hold less credibility because they were created by the general voting population rather than legislation. Courts are more likely to favor well thought-out legislative intent over consumer votes because "it is not the function of the courts to substitute their evaluation of legislative facts for that of the legislature."¹⁷⁷ So, if clearly laid-out legislative intent reasonably supports congressional motivation, potential litigators cannot state that Congress mistook that legislative intent or findings.¹⁷⁸ California voters did not have to conduct research to get

¹⁷² See *Farm share of U.S. food dollar rose one cent in 2020, largest increase in nearly a decade, as food-at-home spending increased*, U.S. DEP'T OF AGRIC. ECON. RSCH. SERV. (Mar. 21, 2022), <https://www.ers.usda.gov/data-products/chart-gallery/gallery/chart-detail/?chartId=103547>.

¹⁷³ See *Int'l Dairy Foods Ass'n.*, 92 F.3d at 73.

¹⁷⁴ See generally *id.* at 74.

¹⁷⁵ See *State v. Drew*, 2004 WI App, ¶5, 275 Wis. 2d 277, 683 N.W.2d 94.

¹⁷⁶ See *id.* at ¶4.

¹⁷⁷ See *Minnesota*, 449 U.S. at 470.

¹⁷⁸ See *id.* at 464.

Prop 12 on the ballot. As indicated in oral arguments, if morality is what prompted Prop 12 to become a ballot initiative, it cannot stand. Morality, unlike public safety, cannot be researched. If it could, courts would still likely not deem this a legitimate interest, due to existing precedent from cases such as *Lawrence v. Texas*.¹⁷⁹ While courts acknowledge the challenge of balancing state interest with interstate commerce, truly legitimate interests, such as conservation or environmental concerns, backed by legislative processes simply hold more weight.¹⁸⁰

V. Blending Consumer and Producer Definitions

A. *Maintaining the Police Power in the States*

Ultimately, the answer lies not in creating one set of standard definitions, but rather understanding that a place for both producer and consumer definitions exist. Consumer demand drives producer output, even outside of the livestock and poultry industry. For instance, the significant increase in household cleaning products and soap during the 2020 COVID pandemic drove consumer demand that companies like Lysol had to fill.¹⁸¹ But the uniqueness of the livestock and poultry industry makes nationwide standardization incredibly difficult.¹⁸²

Some may argue that uniform inclusion of livestock in the Animal Welfare Act may be the answer, but the sharp reality is that producers in Florida are subject to much different geographic conditions, including temperature and even available land space, than producers in Oregon. Even though this inclusion would create an easy preemption argument by which Prop 12 would clearly be struck down,¹⁸³ producers are limited by a plethora of factors that vary by region. This means welfare standards would likely end up being so malleable that courts would spend too much time interpreting whether a specific practice qualified as inhumane. As seen in cases such as *Int'l Dairy Foods Ass'n*, courts are not willing to substitute

¹⁷⁹ See *Lawrence*, 539 U.S. at 578.

¹⁸⁰ See *Minnesota*, 449 U.S. at 469

¹⁸¹ See *How Covid-19 has transformed consumer spending habits*, J.P. MORGAN (Nov. 23, 2020), <https://www.jpmorgan.com/insights/research/covid-spending-habits>.

¹⁸² See Jennifer Alyson, *Vertical Integration in the Beef Industry*, SMALL BUS. CHRON., <https://smallbusiness.chron.com/vertical-integration-beef-industry-14614.html>, (last visited Nov. 17, 2022).

¹⁸³ See Legal Information Institute, *supra* note 99.

their judgment for the judgment of those more skilled in a particular area.¹⁸⁴

Given that the Constitution does not mention animals, the power to address animal cruelty has been left to the states. Any federal preemption arguments must have a particularly strong reason for intervention,¹⁸⁵ and the lack of animal inclusion in the Constitution only strengthens this argument.¹⁸⁶ For instance, Michigan enacted “Generally Accepted Agricultural and Management Practices” (“GAAMPS”) that became law as part of the Michigan Right to Farm Act that defines “Care of Farm Animal” practices.¹⁸⁷ Nebraska enacted the Livestock Animal Welfare Act with misdemeanor charges for “intentionally, knowingly, or recklessly abandoning or cruelly neglecting a livestock animal” and includes felony charges if the animal dies.¹⁸⁸

While federal uniformity may not be the answer, perhaps a cohesion between state legislation and USDA guidelines could be a viable solution. If state legislatures modeled livestock welfare practices from the general welfare certifications offered by the USDA, an indirect but noticeable effect is that states would appear to have similarities in their statutes, without the additional complications of federal implications. In *Int’l Dairy Foods Ass’n*, even though the court ruled against the state, Vermont took the time to come up with an economic impact statement to show the reasoning behind the milk labeling requirement.¹⁸⁹ If a state does take its time to come up with facts tied to a particular interest, the court usually will recognize and potentially honor that particular interest.¹⁹⁰ States should have the power to balance the interests of producers within their borders, while still being able to clearly define standard

¹⁸⁴ See *Int’l Dairy Foods Ass’n*, 92 F.3d at 74.

¹⁸⁵ See *Ass’n des Eleveurs de Canards et d’Oies du Quebec v. Becerra*, 870 F.3d 1140, 1146 (2017).

¹⁸⁶ See Favre, *supra* note 18.

¹⁸⁷ *Generally Accepted Agricultural and Management Practices for the Care of Farm Animals*, MICH. DEP’T OF AGRIC. & RURAL DEV. (2022), <https://www.michigan.gov/mdard/-/media/Project/Websites/mdard/documents/environment/rtf/2022-GAAMPS/2022-Care-of-Farm-Animals-GAAMPS.pdf?rev=7032f74127e943848d0d358f529a05b9&hash=FFF9C23F99FA756667E8E500B653157E>.

¹⁸⁸ NEB. REV. STAT. § 54-903 (2010).

¹⁸⁹ See *Int’l Dairy Foods Ass’n*, 92 F.3d at 75.

¹⁹⁰ See generally *id.*

practices and align them with current USDA standards so that a path towards uniformity could be seen without federal regulation.

B. Bridging the Gap Between Producers and Consumers

Another viable solution is to create accessibility between consumers who wish to define welfare practices with producers who are willing to meet that consumer definition. Room in the market for an increased consumer request for welfare definitions should be permitted, but that request must be met with the ability for the producer to reasonably produce that request, while still making a practical profit.

First, producers should be encouraged to explore additional unique diversification markets within their own operations.¹⁹¹ For instance, a cattle producer in Illinois should have more available access to metropolitan markets, such as Chicago, where consumers are willing to pay a high price for a premium cut of grass-fed steak raised without hormones. Or a producer in Texas should have the opportunity to connect with an investor that is willing to overhead costs of livestock production so that consumers have more morals-motivated choices on grocery shelves but does not want to manage the day to day of that operation. Solutions such as these allow a producer to continue to determine their own best animal husbandry practices, while still tailoring to consumers who would like to add additional considerations of best livestock welfare practices.

Next, is the encouragement of “Community Supported Agriculture” or niche farming. This is the practice of consumers engaging directly with producers and, ultimately, the animal they will consume through a direct-to-consumer business model, rather than through a traditional livestock auction, feed yard, or corporate contract.¹⁹² Because consumers have an increased desire to connect their morality choices of animal welfare with their purchase power, they are willing to pay a higher price for beef, pork, or chicken

¹⁹¹ See Blair Fannin, *Niche market for ranch-raised beef on the rise*, SW. FARM PRESS (June 24, 2021), <https://www.farmprogress.com/livestock/niche-market-ranch-raised-beef-rise>; see also Heather Smith Thomas, *Do Your Homework When Aiming For A Niche Market*, AM. CATTLEMAN (Dec. 14, 2020, 10:14 A.M.), <https://www.americancattlemen.com/articles/do-your-homework-when-aiming-niche-market>.

¹⁹² Fannin, *supra* note 191.

directly to the producer. The producer will more efficiently capitalize profits because those consumers pay more than a contract through an auction, feed yard, or corporation. This solution balances the consumer-defined welfare expectations with producer-defined welfare practices, without violating the Commerce Clause. With more niche farming operations, California does not need Prop 12 because consumers have the purchase power to access morality exactly as they have defined it.

Although this solution could likely be met with hesitation and market complications, acts such as the Butcher Block Act,¹⁹³ if enacted, could help alleviate these concerns. The USDA recently awarded over \$220 million to expand both livestock and poultry processing plants for increased producer competition, which is an incredibly helpful step in the right direction for a more available market for producers to thrive.¹⁹⁴ If producers had more reasonable access to more local processors, they therein have the capacity to supply an increased demand from consumers who believe they should define welfare practices of any animal they consume. And while the unique independence of the cattle industry is likely most subjective to a successful integration of this direct-to-consumer business,¹⁹⁵ state animal interest organizations could help forge a path to others. For instance, state or national, pork or poultry organizations could structure subsidies through checkoff programs that incentivize producers to raise animals for niche farming. These subsidies could forge a path for an increased direct-to-consumer retail model where consumers can more readily access pork or chicken that fits within their morally defined welfare standards.

C. Certified Animal Welfare Programs

History indicates that producers remain in the driver's seat when it comes to defined standards of care, beyond just animal welfare. However, the law in recent years moved to a recognition of

¹⁹³ See H.R. REP. NO. 117-4140, at 1 (2022).

¹⁹⁴ See FERNS AG. INSIDER, *USDA awards \$223 million to expand meat processing capacity*, SUCCESSFUL FARMING (Nov. 3, 2022), <https://www.agriculture.com/news/business/usda-awards-223-million-to-expand-meat-processing-capacity>.

¹⁹⁵ See Rick Purnell, *Integration*, BEEF MAG. (Mar. 1, 1998), https://www.beefmagazine.com/mag/beef_integration [https://web.archive.org/web/20150428090111/https://www.beefmagazine.com/mag/beef_integration].

an overall right held by consumers, which is precisely the kind of right Prop 12 attempted to codify. But Prop 12, for many reasons, is not a workable answer. What could very well be workable is an expanded National Animal Welfare Program, much like the National Organic Program.¹⁹⁶ In 2016, the Agricultural Marketing Service introduced an expansion to organic livestock and poultry production that included provisions around livestock health care practices and living conditions.¹⁹⁷ The proposed expansion opened for public comment in August of 2022 and closed its 60-day commentary period after an extension in November 2022.¹⁹⁸ A National Animal Welfare Program such as this could develop and enforce consistent national standards for heightened welfare practices in the United States, with the relationship between producers and consumers being mediated by existing successful practices currently implemented in the National Organic Program. This kind of solution gives the government the chance to help consumers find the products they want, without putting consumers and producers at constitutional odds in a battle between state police power.

Another option is to simply add more certification programs to the current USDA Welfare Program List that qualify as heightened or specific standards of welfare practices. These certification programs “set standards and guidelines for the humane care of various livestock species such as cattle, swine, sheep, and poultry.” While the USDA does partner with various animal industry association groups to promulgate welfare standards, currently “A Greener World” is one of the only interest groups rated by Consumer Reports as one of the highest standards of Animal Welfare.¹⁹⁹

Because there is a place in the market for consumer-defined welfare standards, organizations with incredibly heightened welfare expectations could come up with their own certification programs in tandem with USDA experts. These programs would then be available for producers to partake in, if they so choose, with regular inspections

¹⁹⁶ See *National Organic Program*, USDA: AGRIC. MKTG. SERV., <https://www.ams.usda.gov/about-ams/programs-offices/national-organic-program> (last visited, Nov. 17, 2023).

¹⁹⁷ See *National Organic Program (NOP); Organic Livestock and Poultry Standards*, 87 Fed. Reg. 48562 (proposed on August 9, 2022) (codified at 7 C.F.R. pt. 205).

¹⁹⁸ See *id.*

¹⁹⁹ See *Certified Animal Welfare Approved by AGW, A GREENER WORLD*, <https://agreenerworld.org/certifications/animal-welfare-approved/> (last visited Nov. 17, 2023).

to ensure those standards are met. This bypasses constitutional violations that could arise with ballot initiatives and still gives the consumer the choice to express their morality through purchasing meat only from operations under a certain program. This also balances the acknowledgement of experts in regulatory bodies found by the court in *Int'l Dairy Foods Ass'n* with standards from welfare interest groups. Ultimately, the onus then falls on these interest groups to highlight which products on shelves meet their standards and which do not. Moreover, certain farms can elect to participate in that market, rather than be forced to participate in the market for profitability because of an enacted ballot initiative.

D. The Eternal Power of Litigation

Because of competing tensions between consumer and producer defined welfare standards, the ultimate power of the court to litigate between disagreeing parties should not be tossed aside. Courts can serve two purposes: 1) determine the more knowledgeable party, and 2) provide accountability checks for promulgated regulations. Courts often demonstrate an aversion to substitute their judgement for those that know how to raise an animal according to best husbandry practices.²⁰⁰ Ultimately, courts recognize the superior knowledge of producers as the ultimate determinative source by which to best determine how to practice safe animal husbandry.²⁰¹ Additionally, courts hold accountability power to ensure any promulgated agency regulations are carried out accordingly.

A prime of example of the court's accountability power is the current litigation between Farm Sanctuary²⁰² and the USDA. In two separate lawsuits, Farm Sanctuary and the Animal Welfare Institute asserted violations of the Poultry Products Inspection Act and the Humane Slaughter Act, alleging unusually cruel high-speed practices in poultry slaughterhouses and a lack of downed pig regulations in humane slaughter.²⁰³ Even though the federal

²⁰⁰ See *Seale v. Mckennon*, 336 P.2d 340, 346 (1959) (explaining that the Oregon Dep't of Agric. cannot do everything in its power to eradicate disease in cattle, and some management decisions should be left to the producers).

²⁰¹ See *id.* at 574.

²⁰² See *About Us*, FARM SANCTUARY, <https://www.farmsanctuary.org/about-us/> (last visited Oct. 25, 2023).

²⁰³ See *Farm Sanctuary v. U.S. Dep't of Agric.*, 545 F. Supp. 3d 50, 52-53 (W.D.N.Y. 2021); see also *Animal Welfare Inst. v. Vilsack*, No. 20-CV-6595 (CJS), 2021 U.S. Dist. Lexis 261189, at *2-6 (W.D.N.Y. Oct. 13, 2021).

government expressed congressional values through these two acts, Farm Sanctuary, as an animal welfare activist group with heightened morality agendas, expressed a desire to hold the USDA accountable to higher humane slaughter practices.²⁰⁴ From this litigation, various uncovered factors demonstrated that the USDA did in fact need to be held accountable to their own promulgated welfare rules.²⁰⁵ This case serves as a prime example of why litigation should not be discarded entirely, but rather serve as a needed step to ensure the continued success of regulations post-implementation.

Another instructive accountability case comes from *N.J. Soc’y for Prevention of Cruelty to Animals v. N.J. Dep’t of Agric.*, where the court held that a regulatory department must first determine if routine husbandry practices are humane before promulgating any regulatory agency standards around those practices.²⁰⁶ The court’s holding was motivated largely in part by the statute’s lack of clear definitions and measurability around the term “knowledgeable individual.”²⁰⁷ The court balanced this holding with a recognition of producer interests because the law stemmed from New Jersey’s extensive research into the issue.²⁰⁸ The court stated in its opinion that the regulations promulgated by the state did not solely come from economic motives, like the petitioner animal welfare interest group suggested.²⁰⁹ The “regulations reflect[ed] that the Department took seriously its mandate to identify humane practices, but did so in recognition of the need to balance those concerns with the interests of the farmer whose livelihood depends on such techniques and whose existence would be threatened were they to be

²⁰⁴ See generally *Farm Sanctuary* 545 F. Supp. 3d.

²⁰⁵ For instance, the USDA did not prepare an Environmental Impact Statement for National Environmental Policy Act before issuing regulations, and that the Food Safety Inspection Service was “categorically excluded from having to perform a NEPA review.” *Farm Sanctuary*, 545 F. Supp. 3d at 55. It should be noted that the opening line of Judge Wolford’s opinion from the case filed in New York’s Western District said, “Plaintiffs are nonprofit organizations working to protect animals, people, and environments from industrial animal agriculture, and to ensure that laws intended to regulate industrial animal agriculture are properly implemented.” *Id.* at 52. Contrasted with the group’s self-description in the original submitted complaint, “industrial animal agriculture” is not used once through the entirety of the document. This suggests that although courts do, and should, have an ultimate power to litigate, judges may always have an opportunity to flex their personal opinions on whatever matter might be before them.

²⁰⁶ See *N.J. Soc’y for Prevention of Cruelty to Animals v. N.J. Dep’t of Agric.*, 955 A.2d 886, 912 (2008).

²⁰⁷ *Id.*

²⁰⁸ See *id.* at 914-15.

²⁰⁹ See *id.*

banned.”²¹⁰ The court here demonstrated that a producer should have a very serious voice in defining animal welfare standards.²¹¹ *N.J. Soc’y for Prevention of Cruelty to Animals* acknowledged the rights of state agricultural regulatory agencies to emphasize producer-defined welfare practices, if they so choose.²¹²

While case law over time established that animals deserve quality care from humans, courts still routinely uphold early societal views that animals are “commercially valuable” property not subject to legal rights equal to humans.²¹³ For example in *Nonhuman Rights Project, Inc. v. Breheny*, a New York court found that Happy the Elephant was not a legal person and therefore not subject to illegal detention at the New York Zoo.²¹⁴ Additionally, in *Justice v. Vercher*, an Oregon court held that under common law, animals cannot sue on their own behalf because they are personal property, and therefore the plaintiff could not sue a former abusive owner on behalf of a rescued horse.²¹⁵ While these cases could be distinguished from those involving animals for human consumption, they represent fact patterns courts could use to litigate disputes as to whether or not animals have welfare rights that could be defined by consumers.

Lastly, courts can define who, if anyone, is most appropriately situated to care for any livestock entrusted to their care. For example, a Criminal Appeals Court in Tennessee settled a dispute around an animal cruelty statute that the defendant allegedly violated.²¹⁶ Not only did the Court hold that the animal cruelty statute provided “fair notice” to individuals regarding an obligation to care for animals, it also held that the defendant’s employment as a horse trainer placed him in the best position to reasonably determine the basic care needs of animals subjected to his care. While the facts of

²¹⁰ *Id.*

²¹¹ *See id.*

²¹² *Id.* at 415, 955 A.2d at 915.

²¹³ *See generally* Favre, *supra* note 18.

²¹⁴ *See Nonhuman Rights Project, Inc. v. Breheny*, 38 N.Y.3d 555, 575 (N.Y. June 14, 2022). Even with the majority holding, two justices wrote fairly lengthy dissents claiming that Happy the Elephant should indeed have legal rights. *Id.* at 578.

²¹⁵ *See Justice v. Vercher*, 518 P.3d 131, 132 (2022).

²¹⁶ *See State v. Broyles*, No. E2019-01033-CCA-R3-CD, 2021 Tenn. Crim. App. LEXIS 234, at *2 (Tenn. Crim. App. May 27, 2021) (examining whether the defendant violated Tenn. Code Ann. § 39-14-202 when he unreasonably failed to provide adequate access to pasture, confined horses without food and water, failed to feed appropriate ration diets to horses, and failed to seek veterinary or other expert advice when the horses’ malnourishment became pronounced).

this case involved an animal not intended for human consumption, the court here still demonstrated an unwillingness to substitute its knowledge for that of the animal caretaker.²¹⁷ This shows that if a producer should hold the superior position of defining animal welfare standards, the state has capacity to directly hold those producers to those standards, with criminal enforcement, based on a morality argument that animals deserve a greater status than just property for human gain.²¹⁸

The power of the court, although beastly, should not be ignored. Litigation can be timely, costly, and even frustrating. The eventual outcome of litigation is to seek answers by which other courts, and ultimately the public or even the relevant administrative agency, can easily interpret and abide by. Litigation should continue to be a method by which interest groups on both sides of the consumer and producer aisle resolve disputes. Ultimately, litigation can establish standards and rules that guide the minutia naturally found within the complexities between animal welfare practices and morality.

V. Conclusion

While the discussion of animal welfare standards will likely continue long into the future, the ability to welcome varied definitions into the marketplace is justifiably reasonable. Both federal and state courts recognize that consumer and producer interest should be protected, each in their respective ways. Although ballot initiatives likely prove an ineffective means for consumers to define standard welfare practices due to triggered Commerce Clause issues, the consumer is not without a voice. And if the consumer has the means to speak based on morality preferences, producers are still the most apt to define welfare practices. This ensures that producer interests are not sacrificed or lessened because of those morally-driven consumer definitions. An amendable solution for all parties is likely not feasible, because the connection between humans and animals runs centuries deep. To bridge the welfare gap most effectively between consumers and producers, a place in the market

²¹⁷ See *id.* at *51-52.

²¹⁸ While an unreported criminal case does not create strong binding or persuasive legal precedent, the importance of this case as an example comes from the court's recognition to hold an owner of an animal to a basic welfare standard that could be recognized simply through direct ownership of that animal.

for both definitions must be welcomed and encouraged. Because as Farmer Hoggett says to Babe after his astonishing and winning sheepdog pattern, “that’ll do pig. That’ll do.”

Free for All: Eliminating Food Insecurity and Stigma in Arkansas Public Schools

A. Mills Bryant

I. Introduction

Schools serve millions of students daily as one of the largest food distribution sites in the United States.¹ However, more than 13.1 million children in the United States, and almost 150,000 in Arkansas, are food insecure.² Before the COVID-19 pandemic, most Arkansas schools offered free and reduced lunch to students at or below the poverty line through participation in the National School Lunch Program (“NSLP”).³ While schools, and indirectly the Federal Government, using the NSLA provided free or reduced

* J.D. Candidate, University of Arkansas School of Law, 2024. Lead Note and Comment Editor of the *Journal of Food Law and Policy*, 2023-2024. The author would like to first thank God, with whom all things are possible. Second, thanks to his wife Mary Hannah Bryant for her encouragement, love, and support throughout this process along with his Mother, Dr. Lisa Bryant and Father, Dr. Bruce Bryant for their constant love and support in his pursuit of higher education. The author would also like to thank Professor Danielle Weatherby and Professor Margie Alsbrook, without whom this Comment would have been impossible. Finally, the author thanks Tori Moore, Brandon Hartman, and Caitlin Robb, the editors responsible for this Comment, as well as the rest of the 2023-2024 *Journal of Food Law & Policy* team for their hard work in getting this note to the finish line.

¹ See Robbie Economou, *States Step in as Free School Meal Waivers Looms*, NAT’L CONF. STATE LEGISLATURES (July 29, 2022), <https://www.ncsl.org/news/details/states-step-in-as-end-of-free-school-meal-waivers-looms>.

² See *The Lasting Impact of Food Insecurity on Children*, MOVE FOR HUNGER, https://moveforhunger.org/just-hunger-lasting-impact-food-insecurity-children?gclid=CjwKCAiA2fmdBhBpEiwA4CcHzSf1miyCGhRT2so_xHc6rlagzSMIIHzBXUf_ZQ5kvAlK2T9RiG8-nhoCRjEQAvD_BwE (last visited Dec. 19, 2023); *What Hunger Looks Like in Arkansas*, FEEDING AM., <https://www.feedingamerica.org/hunger-in-america/arkansas> (last visited Dec. 19, 2023).

³ See *National School Lunch Program*, ARK. DEP’T HUM. SERV., <https://dhs.arkansas.gov/dcece/snp/NSLPInfoM.aspx#:~:text=The%20National%20School%20Lunch%20Program%20is%20a%20federally%20assisted%20meal, and%20residential%20child%20care%20institutions> [<https://web.archive.org/web/20220625154145/https://dhs.arkansas.gov/dcece/snp/NSLPInfoM.aspx>] (Last visited Dec. 19, 2023).

lunch for a great number of students, the program fell well short of eliminating food insecurity in Arkansas schools.⁴

During COVID-19, Congress passed The Families First Coronavirus Response Act (“FFCRA”) and The Coronavirus Aid, Relief, and Economic Security Act (“CARES”) (hereinafter “**The Acts**”).⁵ This legislation effectively eliminated food insecurity in participating American public schools, including many in Arkansas, as it provided free lunch to all students, regardless of household income.⁶ During the pandemic, families no longer had to contemplate financial hurdles in order to ensure their children were fed and nourished at school. Families no longer had to decide whether to provide money to feed their kids because Congress effectively eliminated the need for that decision. These COVID nutrition waivers allowed by The Acts were created by the USDA to help schools and youth organizations feed children amidst stressful financial burdens at home.⁷ Families who commonly faced insurmountable financial issues were given significant reprieve by The Acts. For roughly the past two years, before the expiration of The Acts, meals at school were completely free for every public-school student.⁸

Now, as COVID-19 has largely subsided, Congress has eliminated the funding allowed by The Acts and many states, including Arkansas, have reverted to pre-COVID-19 funding mechanisms using the NSLP.⁹ This reversion unfortunately re-introduces numerous student food insecurity problems in Arkansas schools. These problems include increased hunger, re-introduction of social stigma, decreased academic performance, and economic

⁴ See Tiffany Lee, *Arkansas families having to apply for free lunch program*, 5 NEWS ONLINE (July 21, 2022, 5:55 PM CDT), <https://www.5newsonline.com/article/money/families-having-pay-school-lunches-again/527-7b61f62f-ae88-4405-9448-f8edf1fdc810>.

⁵ See *School Meals*, U.S. DEP’T OF AGRIC., <https://www.usda.gov/coronavirus/school-meals#:~:text=The%20Families%20First%20Coronavirus%20Response,children%20to%20receive%20these%20meals> (last visited Dec. 19, 2023).

⁶ See *id.*

⁷ See Ashley Godwin, *Federal pandemic food waivers set to expire leaving Arkansas students without free meals*, 5 NEWS ONLINE, <https://www.5newsonline.com/article/life/food/federal-pandemic-food-waivers-set-to-expire-free-meals/91-38d34e98-0912-4afa-bea0-4618cb65ccfc> (last updated March 8, 2022, 10:21 PM CST).

⁸ See Lee, *supra* note 4.

⁹ See *id.*

downturn. Once again, parents and families must balance their children's nourishment at school with significant financial burdens at home. "Do I send the kids with lunch money or use it to pay the bills?" is a question completely within the realm of possibility for lower-income Arkansas families. Inevitably, some students' nourishment will take a back seat to other costs and will not get past monthly budget cuts. This significant burden on Arkansas families, when viewed alongside the capability of the Arkansas General Assembly to act, is largely unnecessary.

School lunches in Arkansas currently cost anywhere from \$3.50 to \$3.75 per student per day.¹⁰ Breakfast costs \$2.50 per day per student.¹¹ The maximum annual household income to qualify for reduced price meals under the NSLP for a family of four is \$51,338.¹² Essentially, children whose parents' income does not fall beneath this line are required to pay full price for their children's breakfast and lunch every day.¹³ Essentially, a plausible scenario includes a single mother with three children who earns slightly above this threshold being required to pay almost \$16.00 per day for her children to eat at school. Budgeting for that expense requires a \$320.00 a month, or over \$3,000.00 per year to feed her children one meal a day. Additionally, if her children eat breakfast at school, that adds an additional \$7.50 per day, \$150.00 per month, and \$1,500.00 per year. This would accrue to a total of \$4,500.00 per year to feed her children two meals a day, but does not include costs for weeknights, weekends, holidays, and summer break. Broken down, the reduced lunch income level requires those close, but slightly over the line, to expend almost 10% of their yearly gross income exclusively on feeding their children at school.

Students who exclusively rely on but are totally incapable of controlling their parents' financial decisions remain largely unprotected by the Arkansas General Assembly. Because Arkansas

¹⁰ See *Meal Prices*, PULASKI CNTY. SPECIAL SCH. DIST., <https://www.pcssd.org/page/meal-prices> (last visited Dec. 19, 2023) (showing a large Arkansas school district's current charge for school breakfast and lunch based on the purchaser's status in the district).

¹¹ See *id.*

¹² See *School Meal Changes are Coming in the 2022-23 School Year*, U.S. DEP'T OF AGRIC. FOOD AND NUTRITION SERV. (Jun. 29, 2022), <https://www.fns.usda.gov/cn/2022-23-parent-faqs> [<https://web.archive.org/web/20230728064158/https://www.fns.usda.gov/cn/2022-23-parent-faqs>].

¹³ See *id.*

public schools' participation in the NSLA is funded solely by the Federal Government, the requirement of parents to pay for school lunch evidences the Arkansas General Assembly's unwillingness to step in and fill the gap. Students who do not receive free or reduced lunch through the NSLP effectively have two ways to receive nourishment at school: (1) bring it from home, or (2) purchase it from school. There are no other options. Both situations present insurmountable roadblocks for families who lack financial resources, including (1) students lacking access or ability to prepare food at home because of financial constraints, and (2) lack of funds to purchase food at school.

These problems are completely contingent on parents' financial decisions and evidence an inevitable effect: the Arkansas General Assembly's allowance of students to remain food insecure. The wider consequence of allowing this problem to persist is simple: students remain hungry, food insecurity is perpetuated, and social stigma continues, which has devastating effects on children and families. There is no safeguard for this commonly occurring situation in Arkansas. Students are suffering the consequences of food insecurity and paying the price that should be covered by the Arkansas General Assembly. At least, a conservative view of this problem is that this gap places the burden on Arkansas' families, and the cost is evaded by the Arkansas General Assembly. The problem and solution, simply put, is this: Arkansas families are financially strained by school lunch costs, and the Arkansas General Assembly should relieve that strain by absorbing these costs and making school lunch free for all students.

The Arkansas General Assembly must utilize its current tax surplus, or alternatively increase taxes to fund a state-wide subsidy to the NSLP. In turn, the subsidy will decrease the negative effects of ineligibility under the NSLP, eliminate food insecurity for Arkansas students, and eliminate large school lunch debts many Arkansas schools have incurred. The focus of this legislation must be to feed students and take partisan and financial decisions out of the hunger equation. This is a call for the Arkansas General Assembly to act to care for its most vulnerable citizens: hungry school children.

The remainder of this article provides an overview of federal school lunch laws and how those laws changed over the pre-pandemic, pandemic, and post-pandemic periods. It lays out the

status quo for states concerning school lunch funding and delves into the attitudes of Congress, the Arkansas General Assembly, and civilians concerning who should bear the cost of school lunch. Lastly, it highlights various states, other than Arkansas, which are implementing state-funded subsidies to the NSLP that provide free school lunch to all children and proposes the same remedy to the Arkansas General Assembly.

II. Background

A. Overall Food Insecurity and Social Stigma Problems that Improved During the Pandemic

COVID-19 caused major financial, physical, and mental hardship for children and families.¹⁴ However, concerning school lunch and food insecurity, it created a necessity that produced great headway towards providing nourishment for all students in public schools.¹⁵ The Acts providing school lunch indiscriminately to all students during COVID proved to eliminate social stigma and food insecurity, and improved academic performance. Allowing food insecurity to persist by reverting to pre-COVID mechanisms, when the positive effects of providing free lunch to all students were evident during COVID-19, inadequately serves those in society's most vulnerable population.

Food insecurity problems that were present before the pandemic were significantly reduced when Congress passed The Acts, providing sweeping legislation to respond to worsening effects of food insecurity caused by the pandemic.¹⁶ By passing The Acts, Congress demonstrated its belief that food insecurity should not be a problem families should have to worry about during a nationwide crisis.¹⁷ While that is true, a further contention should be that food insecurity of children is *never* worth taking a chance on, and any action necessary to prevent it should be taken. The global pandemic

¹⁴ *The Financial Impact of the Pandemic on Families with Children*, AM. ACAD. OF PEDIATRICS (Mar. 24, 2021), <https://www.aap.org/en/patient-care/family-snapshot-during-the-covid-19-pandemic/the-financial-impact-of-the-pandemic-on-families-with-children/>.

¹⁵ See Lestina Dongo & Lindsay Monte, *Less Hunger in At-Risk Households During Pandemic Expansion of School Meals Program*, U.S. CENSUS BUREAU (Apr. 4, 2022), <https://www.census.gov/library/stories/2022/04/less-hunger-in-at-risk-households-during-pandemic-expansion-of-school-meals-program.html>.

¹⁶ See *id.*

¹⁷ See *id.*

did exacerbate financial, physical, and mental hardship but it definitely did not create these problems, nor did it create food insecurity. Such problems existed long before and will continue to exist without intervention.

If hunger itself were not a high enough price to pay, there are significant problems presented to children by food insecurity at school concerning learning.¹⁸ Students are severely limited in their capacity to learn when they are hungry.¹⁹ Students that are not fed at school can experience devastating, long-term effects, and going hungry for significant periods of time can cause permanent damage.²⁰ The effects of food insecurity are particularly alarming in children as they include severe developmental, behavioral, and psychological impacts.²¹ When children are hungry it can curb their physical development, inhibit their ability to focus and perform, and negatively affect brain development.²² Children who do not have access to, or who cannot afford, nutritious foods are more likely to develop slowly, have problems learning, and experience depression due to social stigma.²³ These devastating effects occur because these children do not have fuel to allow their bodies to grow or their brains to think.

Unfortunately, health and development concerns are not the only worries of food insecure children in schools. Food insecurity also causes changes in behavior, causing students to act out in class which tends to isolate them socially.²⁴ Students who are hungry and act out in class are commonly labeled “bad kids” which is a label that sticks permanently. These socioeconomic and social barriers, all remnants of food insecurity, limit students’ ability to participate in activities in and outside of school.²⁵ Students with frequent disciplinary action are likely unable to participate in sports or extracurricular activities, and, even if they could, would lack

¹⁸ See *Child hunger keeps kids from reaching their full potential*, FEEDING AM., <https://www.feedingamerica.org/hunger-in-america/child-hunger-facts> (last visited Dec. 19, 2023).

¹⁹ See *id.*

²⁰ See Alyssa Cogan, *How Does Hunger Affect Learning?*, HEIFER INT’L (Oct. 29, 2021), <https://www.heifer.org/blog/how-does-hunger-affect-learning.html#:~:text=This%20can%20have%20devastating%20%E2%80%94%20and,limiting%20their%20future%20achievements>.

²¹ See *The Lasting Impact of Food Insecurity on Children*, *supra* note 2.

²² See Cogan, *supra* note 20.

²³ See *id.*

²⁴ See *id.*

²⁵ See *The Lasting Impact of Food Insecurity on Children*, *supra* note 2.

nutrition and energy to perform adequately. The costs of remedying food insecurity in schools are far outweighed by the costs hungry students in public schools will and do pay. By requiring students to sacrifice their health and long-term wellbeing, the Arkansas General Assembly is merely able to cut its costs.

Congress and state legislatures have had differing responses to the end of the pandemic and the expiration of The Acts. Congress's response has caused some states to act while others lay idly by.

B. General Legislative Responses

During the pandemic, Congress's passage of The Acts afforded free lunch to all public-school students nationwide, including all Arkansas public schools.²⁶ The Acts' program that eliminated widespread food insecurity by providing students free lunch expired on September 30, 2022.²⁷ This abrupt ending caused families, school districts, and legislators to scramble to deal with new financial burdens and allowed pre-pandemic food insecurity problems to resurface.²⁸ This scramble caused undue financial burdens, which coupled with lingering pandemic burdens, created even greater hardships for families.²⁹ Without these extra federal school lunch funds, and without subsidy from the Arkansas General Assembly, public schools in Arkansas had no choice but to return to charging families for school meals.³⁰

Though the Arkansas General Assembly has not passed a comprehensive school lunch bill, multiple states have legislated to combat this issue of food insecurity.³¹ California and Maine understood the importance of free lunch and proactively passed bills in 2021 ensuring students had free school meals permanently.³² Now

²⁶ Ivy Winfrey & John Daley, *End of nationwide federal free lunch program has some states scrambling*, NPR (Oct. 26, 2022, 5:00 AM ET), <https://www.npr.org/2022/10/26/1129939058/end-of-nationwide-federal-free-lunch-program-has-some-states-scrambling#:~:text=Massachusetts%2C%20Vermont%2C%20and%20Nevada%20have,Colorado%20is%20trying%20to%20do.>

²⁷ *See id.*

²⁸ *See id.*

²⁹ *See id.*

³⁰ *See Lee, supra* note 4.

³¹ *See Winfrey & Daley, supra* note 26.

³² *See id.*

nine other states are working to do the same.³³ Massachusetts, Nevada, and Vermont are providing free meals for every student for the current school year and will exercise their discretion in extending the program in the future.³⁴ Colorado voters approved a voluntary free school lunch measure that takes effect this year, leaving the choice with each school district whether to accept or decline state funds for school lunch.³⁵

Lawmakers in twenty states have considered expansions to school lunch programs, but many have been met with significant costs.³⁶ While some states have made progressive headway towards free lunch, some legislatures' fires have fizzled out because of uncertainty about how to pay for school lunches.³⁷ The consequence in states like Arkansas that have not proactively legislated to combat food insecurity is that families must start paying for school breakfast and lunch again, many for multiple students.³⁸ It is inevitable that this burden will go unmet for many children, rendering them food insecure once again. Legislators have implied that the reversion to pre-COVID funding mechanisms will mean not all students will have access to meals, and there will be unequal access in school cafeterias to nutrition.³⁹ This reversion means students will go hungry, experience developmental delays, face social stigma, and will overall cause financial burdens on families.

While we know that the NSLP does not cover costs for all children, it does serve a necessary purpose of providing free and reduced lunch to children from low-income families. Next, the way school lunches are funded in America is laid out.

³³ See *id.* (Washington, Minnesota, Wisconsin, Ohio, Pennsylvania, New York, Massachusetts, North Carolina, and Colorado are all currently seeking to or have successfully passed legislation to subsidize the National School Lunch Program and provide free school lunch to all students).

³⁴ Daniel C. Vock, *Kids Eat Free! States Push to Make School Meals Available to All*, ROUTE FIFTY (Mar. 15, 2023), <https://www.route-fifty.com/health-human-services/2023/03/kids-eat-free-states-push-make-school-meals-available-all/384030/>.

³⁵ See *id.*

³⁶ See *id.*

³⁷ See *id.* (Oregon and Washington, despite attempting to begin drafting free school lunch legislation, have stopped their efforts).

³⁸ See *id.* (As California and Maine are the only states that have proactively subsidized school lunch funding, and Arkansas is a state that has not proactively legislated to subsidize free school lunch funding, the only option for Arkansas was to return to pre-COVID-19 eligibility requirements).

³⁹ See Vock, *supra* note 33.

C. The National School Lunch Act (“NSLA”) and Program

i. Administration

The NSLP was enacted in 1946 by President Harry Truman and federally assists over 100,000 public and non-profit private schools in the United States.⁴⁰ Its goal is to provide nutritionally balanced, low-cost, or free lunches to many children in public schools.⁴¹ The NSLP assists in serving millions of students free and reduced lunches each day when students meet certain household income criteria.⁴²

At the federal level, the Food and Nutrition Service administers the program, while state education agencies effectuate the NSLP in each specific state.⁴³ The program works to reimburse participating school districts by providing cash subsidies and USDA approved foods for each reimbursable meal they serve a student.⁴⁴ In exchange for the reimbursement, schools utilizing the NSLP must serve lunches that (1) meet federal meal pattern requirements, and (2) provide them at free or reduced cost to eligible students.⁴⁵ These school food authorities may also be reimbursed for snacks provided to children in after school programs.⁴⁶ There are various eligibility and verification requirements that must be met before a student can receive free or reduced price lunch under the NSLP.

ii. Eligibility and Verification Requirements

During execution of The Acts, eligibility and verification measures were unnecessary to receive free school lunch. However, the eligibility of students for free and reduced meals has returned to pre-pandemic requirements, which poses a significant risk of food insecurity for public school students.⁴⁷ Fort Smith Public Schools,

⁴⁰ See *Child Nutrition Unit*, DIV. OF ELEMENTARY & SECONDARY EDUC., <https://dese.ade.arkansas.gov/Offices/child-nutrition-unit> (last visited Dec. 19, 2023).

⁴¹ See *id.*

⁴² See *id.*

⁴³ See *id.*

⁴⁴ *The National School Lunch Program*, U.S. DEP’T OF AGRIC., <https://fns-prod.azureedge.us/sites/default/files/resource-files/NSLPFactSheet.pdf> (last updated Nov. 2017).

⁴⁵ See *id.*

⁴⁶ See *id.*

⁴⁷ See Winfrey & Daley, *supra* note 26.

among numerous others in Arkansas, requires each household to fill out an application and verification of data to determine their eligibility, which are subject to verification or re-verification at any time during the school year.⁴⁸ This application requirement presents problems for children and families. The fact that families are required to apply, wait for an eligibility determination, and are subject to further inquiry regarding verification presents a potential for children to remain hungry if any one step is not taken. The problem lies with parents being unable, unwilling, or uncomfortable to fill out the required eligibility paperwork. It is also possible that parents simply are unaware of eligibility or verification process and do not take action out of ignorance of the NSLP's eligibility and verification rules.

In Arkansas, the only assistance program that qualifies a student to be categorically eligible for free meals is the Supplemental Nutrition Assistance Program ("SNAP").⁴⁹ Despite being a part of any other federal assistance program, students and families are not categorically eligible for free lunch unless they also receive SNAP benefits.⁵⁰ If a student is not categorically eligible for free or reduced lunch, their parents' income must fall below a certain pre-tax annual household income rate in ratio to the number of persons living in the household.⁵¹ For a household with two people, the maximum income level is \$36,482.00 while a household with eight people cannot earn more than \$93,536.00.⁵² These amounts are subject to verification at any point during the year, and benefits may be cut if income levels rise above these lines.⁵³

⁴⁸ *Free and Reduced-Price Meals Application Now Open*, FORT SMITH PUB. SCHS., <https://www.fortsmithschools.org/site/default.aspx?PageType=3&DomainID=4&ModuleInstanceID=39&ViewID=6446EE88-D30C-497E-9316-3F8874B3E108&RenderLoc=0&FlexDataID=157576&PageID=1> (last visited Dec. 19, 2023).

⁴⁹ *Eligibility Manual for School Meals*, DIV. OF ELEMENTARY & SECONDARY EDUC. CHILD NUTRITION UNIT, <https://dese.ade.arkansas.gov/Offices/child-nutrition-unit/guidance/eligibility-manual-for-school-meals> (last visited Dec. 19, 2023).

⁵⁰ *See id.*

⁵¹ *See National School Breakfast and Lunch Program for Arkansas*, BENEFITS.GOV, <https://www.benefits.gov/benefit/1952> (last visited Dec. 19, 2023).

⁵² *See id.*

⁵³ *NSLP Resource Manual*, ARKANSAS.GOV, <https://dhs.arkansas.gov/dcece/snp/PDF/NSLP%20Training%20Materials/NSLP%20Resource%20Manual%20Chapter%205%20Determining%20Eligibility.pdf> [https://web.archive.org/web/20201017115729/https://dhs.arkansas.gov/dcece/snp/PDF/NSLP%20Training%20Materials/NSLP%20Resource%20Manual%20Chapter%205%20Determining%20Eligibility.pdf] (last visited Dec. 19, 2023).

Many Arkansas schools, such as Springdale High School, have had no choice but to require students and families to pay for school lunch if they do not meet free and reduced lunch requirements allocated by NSLP.⁵⁴ School districts are not even financially able to provide free or reduced lunch until a household's application has been processed with an eligibility determination and verification.⁵⁵ Regarding school lunch, most schools in Arkansas do not receive any federal or state funds outside from the NLSP and state that they cannot feasibly be financially responsible for meals that are unpaid, meaning that the student must be eligible for free or reduced-price meals or their parents must provide payment.⁵⁶

Overall, school districts are at the mercy of Congress and the NSLP concerning eligibility and verification requirements. They cannot foot the bill for ineligible or unverified students, even though those students may be food insecure. Eliminating or reducing the effect of this onerous application and verification process and crossing out arbitrary household eligibility requirements would significantly decrease student food insecurity.

iii. Congress and Arkansas General Assembly's Attitude Towards School Lunch Funding

Congress and state legislatures' attitudes concerning public school lunch funding have been perplexing, and while they all claim that children going hungry is unacceptable, their actions in response to food insecurity leave citizens wondering if that belief is true.⁵⁷ Historically, school lunch funding has not been treated favorably by Congress or the Arkansas General Assembly. Former Arkansas Attorney General Leslie Rutledge, in her official capacity, joined twenty-two other attorneys general from across the country in suing the Biden Administration for allegedly withholding school lunch program funding from schools that failed to comply with federal

⁵⁴ *Springdale Schools Child Nutrition*, SPRINGDALE PUB. SCHS., <https://www.sdale.org/page/food> (last visited Dec. 19, 2023).

⁵⁵ *See id.*

⁵⁶ *See id.*

⁵⁷ *See Bryce Covert, Shame, Stigma and Hunger Return as Congress Eliminates Free Meals for All in Public Schools*, EARLY LEARNING NATION (Oct. 20, 2022) <https://earlylearningnation.com/2022/10/shame-stigma-and-hunger-return-as-congress-eliminates-free-meals-for-all-in-public-schools/>; *Arkansas House: Thousands of Arkansans are "food insecure"*, MAGNOLIAREPORTER.COM (May 27, 2012), http://www.magnoliareporter.com/news_and_business/opinion/article_b6f3d572-a6ec-11e1-9d4f-0019bb2963f4.html.

guidance regarding gender identity and sexual orientation.⁵⁸ The federal approach towards feeding students has been to remove school lunch funding immediately after the pandemic and to hold school lunch funding over the heads of states to force compliance on hot button issues. Congress's threat to cut school lunch funding places student food insecurity as a bargaining chip to increase federal compliance. A Congress which believes children should be fed would not hang hunger in the balance to force compliance.

Some Arkansas legislators have similarly attempted to pit compliance against student food insecurity.⁵⁹ For example, an Arkansas legislator attempted to cut school lunch funding for schools that struggle with reading.⁶⁰ The proposed bill intended to reduce a district's national school lunch funding if they did not meet a certain standard in reading test scores over a period of time.⁶¹ The lack of any clear correlation between student reading proficiency being incentivized by cutting lunch funding exemplifies some members of the Arkansas General Assembly's lack of concern for students in schools and their wellbeing. Surely, there are other incentives that do not jeopardize the nourishment of students who are already set back in their academic proficiency. After Congress's mandated return to pre-COVID funding mechanisms, Arkansas child welfare activists and non-profit entities have reached out to state legislators for assistance in response to federal COVID lunch waivers ending, but the legislators' offices gave no response.⁶² Viewing this proposed legislation that would cut school lunch funding for school districts with poor reading levels alongside proven statistics that children's ability to learn and focus when they are hungry is incongruent. School districts with hungry students will likely produce much worse reading scores, as the food insecurity problem that decreases learning ability will be more prevalent. A concerned legislature would

⁵⁸ See Jack A. Webb, *Rutledge sues Biden Administration for withholding school lunches based on gender guidance*, KATV (July 27, 2022, 9:31 AM CDT), <https://katv.com/news/local/rutledge-sues-biden-administration-for-withholding-school-lunches-based-on-gender-guidance-arkansas-attorney-general-ag-leslie-title-ix-snap-sexual-orientation-alabama-alaska-arizona-georgia-indiana-kansas-kentucky-louisiana-mississippi-missouri-montana>.

⁵⁹ See Troy Washington, *Arkansas senator proposes bill to cut school lunch funding to improve reading*, WREG.COM, <https://wreg.com/news/arkansas-senator-proposes-bill-to-cut-school-lunches-to-improve-reading/> (last updated Feb. 26, 2019, 5:08 PM CST).

⁶⁰ See *id.*

⁶¹ See *id.*

⁶² See Godwin, *supra* note 7.

provide more food funding for students who struggle to learn, not less.

Senate Bill 477, now passed as Act 656 and codified as Ark. Code Ann. § 6-18-720, made its way up through the Arkansas General Assembly and is an affirmative step in the right direction for student lunch funding.⁶³ The bill's purpose is to keep more students fed, and, after making its first step on the way to the governor's desk, was eventually passed.⁶⁴ This bi-partisan bill provides *free* meals to students who are eligible to receive *reduced-price* meals under the NSLP's eligibility framework.⁶⁵ While this does not solve the application, eligibility, and household income barrier requirement, the effect is that more Arkansas students have free lunch. Essentially, this bill plans to use state funds to subsidize students who receive reduced-price meals under the NSLP. While it is a step in the right direction, subsidizing the NSLP to provide free lunch to *all* students, not just those eligible under the NSLP, would much more adequately serve Arkansas's children.

Members of Arkansas's legislature have stated that "a child who is hungry is a child who cannot learn" and that "we don't want to see kids in schools go hungry."⁶⁶ However, the caveat to Senate Bill 477 is that the Arkansas General Assembly anticipates that federal funds will fully compensate school districts for this funding change.⁶⁷ This means the Arkansas General Assembly is unlikely to be required to reimburse school districts that provide free lunch to the reduced-price eligible students, although the wording of the bill does place the legislature on the hook for costs uncovered by the NSLP.⁶⁸ While the bill likely eliminates food insecurity for nearly 49,000 students, it does not go far enough to eliminate food insecurity for all students.⁶⁹ The Arkansas General Assembly is attempting to provide assistance for school districts which have incurred debts by providing lunch to students who could not pay the reduced-price amount, but schools will likely still incur high debts in

⁶³ Austin Bailey, *Arkansas students who qualify for reduced school lunches will get free meals under bipartisan bill*, ARK. TIMES (Mar. 29, 2023, 4:49 PM), <https://arktimes.com/arkansas-blog/2023/03/29/arkansas-students-who-qualify-for-reduced-school-lunches-will-get-free-meals-under-bipartisan-bill>.

⁶⁴ *See id.*

⁶⁵ *See id.*

⁶⁶ *Id.*

⁶⁷ *See id.*

⁶⁸ *See Bailey, supra* note 63.

⁶⁹ *See id.*

attempting to combat food insecurity for students who are totally ineligible under the NSLP.⁷⁰

Absent help from the Arkansas General Assembly, if schools in Arkansas are to feed their students, they are on the hook for the cost whenever children cannot afford it.⁷¹ Inevitably, these schools' student meal debts have begun to climb after Congress's halt of federal school lunch funding covering all lunches, and some schools have student meal debts totaling up to \$200,000.⁷² The problem with this debt that Senate Bill 477 and Act 656 does not alleviate is that not all of these debts are for students who qualified for reduced-lunch but could not pay. The meal debt includes students who do not qualify at all for the NSLP, for which the Arkansas General Assembly is not on the hook to cover such costs. This leaves not only students, but Arkansas school systems, to fend for themselves in climbing out of crippling debt for attempting to feed their students.

It is likely that school lunch debt will only rise for school districts, as they are witnessing food costs increase at an alarming rate with inflation.⁷³ Schools are asking for help, citing that because students attend school for free, ride the bus for free, and get their books for free, it only makes sense that the Arkansas General Assembly makes sure they are fed without cost.⁷⁴ It is imperative that the Arkansas General Assembly wipe out school districts' student lunch debt totals and begin funding all school lunches to avoid these problems in the future.

iv. Support for Free School Lunch for All Children

Civilian support for universal free school lunch is widespread.⁷⁵ Congress and state legislatures, which bear the responsibility to reflect the values of the people, are commonly missing the mark on school lunch funding. While Republicans

⁷⁰ See *id.*

⁷¹ See Ian Russell, *Schools in Arkansas face issues due to high student meal debt*, THV 11 (Jan. 23, 2023, 6:16 PM CST), <https://www.thv11.com/article/life/food/arkansas-school-districts-overdue-meal-balance/91-e1fd8d6b-9481-493b-8f53-b71ce4f1c523>.

⁷² See *id.*

⁷³ See *id.*

⁷⁴ See *id.*

⁷⁵ Elizabeth Chuck, *School lunch is too costly for a growing number of families. Will a White House pledge help?*, NBC NEWS (Oct. 2, 2022, 6:00 AM CDT), <https://www.nbcnews.com/news/us-news/school-lunch-costly-growing-number-families-will-white-house-pledge-he-rcna49596>.

opposed federal spending of \$11 billion on free school lunch, the disdain for such spending is not widespread.⁷⁶ A majority of Americans support universal school meals with federal or state legislatures covering the expense.⁷⁷

According to the anti-hunger group, Food Research & Action Center, 63% of voters support legislation that would make free school meals permanently available to all students.⁷⁸ A 2021 poll by Data for Progress found that 74% of Americans support making universal free school meals permanent nationwide.⁷⁹ Further, a June 2022 poll found that 76% of adults living with children enrolled in public school and 67% of adults not living with children enrolled in public school support permanent free school meals for all children.⁸⁰

Those who are in favor of universal free lunch acknowledge its requirement of hefty funding by legislatures yet continue to say it should be a priority.⁸¹ They implore legislatures that the feeding of their children should not be political, and that if they continue to refrain from acting, school districts' meal debts will continue to climb, and children will continue to be food insecure.⁸² Amidst widespread support by voters, Congress and state legislatures have failed to implement sweeping legislation that would eliminate food insecurity.⁸³

v. Comparisons to Other Provisions by the Arkansas Legislature

Opponents of school lunch funding maintain that it amounts to an overreach of state power or that it would accrue substantial costs to the Arkansas General Assembly. However, the state and federal government provide funding for every aspect of the public school system except school lunch.⁸⁴ Students are required by law to attend school, yet the law does not necessarily afford them the opportunity to be nourished while they are there. In some similar situations where people are unable to pay, yet the government

⁷⁶ *See id.*

⁷⁷ *See id.*

⁷⁸ *See id.*

⁷⁹ *See* Winfrey & Daley, *supra* note 26.

⁸⁰ *See id.*

⁸¹ *See id.*

⁸² *See id.*

⁸³ *See* Lee, *supra* note 4.

⁸⁴ *See* Russell, *supra* note 71.

requires their attendance, the state covers the cost.⁸⁵ This is true in Arkansas prisons as quorum courts in each county are to prescribe the method and procedure for feeding and keeping prisoners in county jail and must provide payment for food and services concerning county prisoners.⁸⁶ These budgets are approved by the Arkansas General Assembly.⁸⁷

Further, state prisons are no different, as the Arkansas General Assembly provides funding for state prisoners.⁸⁸ Arguably, in both situations children and inmates have the same ability to pay for their meals, yet the inmates largely controlled the circumstances leading to their mandate. Children and families, the ones who cannot control their circumstances of being mandated to attend school, are required to pay for their own meals. In fact, some jails in Arkansas are allocated funding to provide three hot meals a day to inmates, while most children in schools are required to pay for their one lunch, whether it is hot or cold.⁸⁹ The fact that Arkansas affords more protection to prisoners concerning their nourishment than children is chilling, and funds should be dispersed to at least place children on a level playing field with inmates at our state's prisons.

Recently, Arkansas approved a \$6 billion spending budget that allocated \$330 million for new prison space and \$300 million for a new crime lab building yet continues to make students and families pay for lunch at government mandated education facilities.⁹⁰ These expenditure approvals evidence a serious oversight regarding school lunch funding and a disproportionality in priorities.

⁸⁵ Will Langhorne, *Sanders unveils wide-ranging criminal justice package addressing parole reform, prison expansions*, ARK. DEMOCRAT GAZETTE (Mar. 28, 2023, 7:17 AM), <https://www.arkansasonline.com/news/2023/mar/28/sanders-unveils-wide-ranging-criminal-justice/> (evidencing that Arkansas, under new Governor Sarah Huckabee Sanders has implemented a \$470 million prison reform bill with \$31 million in yearly operating costs to provide accommodations for state mandate prisoners).

⁸⁶ See ARK. CODE ANN. § 12-41-504.

⁸⁷ See generally *id.*

⁸⁸ See ARK. CODE ANN. § 12-29-505.

⁸⁹ See Chris Zoukis, *Arkansas Jail Finally Begins Serving Hot Meals*, ZOUKIS CONSULTING GRP. (August 27, 2016), <https://federalcriminaldefenseattorney.com/arkansas-jail-finally-begins-serving-hot-meals/>.

⁹⁰ See *Arkansas Legislature approves \$6.2B budget plan, sentencing overhaul*, FOX NEWS (Apr. 7, 2023, 8:42 PM EDT), <https://www.foxnews.com/politics/arkansas-legislature-approves-6-2b-budget-plan-sentencing-overhaul>.

Arkansas also recently passed the LEARNS Act, a 145-page omnibus bill that completely revamped the Arkansas education system, yet the provisions of the bill concerning school lunch stuck with the status quo.⁹¹ The new law refers to the NSLP and its free and reduced eligibility and verification requirements, leaving the current school funding mechanism undisturbed under Arkansas law.⁹² The LEARNS act was signed into law to include school vouchers, increase teacher pay, create higher literacy standards for elementary students, and repeal the Teacher Fair Dismissal Act.⁹³ It is unclear whether Arkansas will utilize state tax surplus money to fund the LEARNS act, but the bill will cost \$297.5 million in the first year, \$343.3 million in the second year, and \$175 million in the third year.⁹⁴ Assuming the LEARNS act is not repealed, as is possible under Article 5, Section 1 of the Arkansas Constitution if citizens attempt to repeal the law using a legal referendum, the bill will ensure Arkansas's legislature spending almost \$1 billion over the next three years.⁹⁵

Arkansas has unique circumstances in which it could fund a comprehensive school lunch subsidy act providing free lunch to all students. In August 2022, Arkansas announced that they had over \$1 billion dollars of surplus state tax money.⁹⁶ While it was debated about what it should be spent on, such as teachers' salaries, roads, children, and fair housing, it is unclear where all of the money has gone or will go.⁹⁷

It is clear that the Arkansas General Assembly is not afraid to spend. With the passage of a \$6 billion spending budget, approving new prisons and crime lab facilities, overhauling the Arkansas education system, and contemplating fair housing, the lack of sweeping school lunch funding is a gross oversight. While these expenditures are important in their own regard, child hunger,

⁹¹ See *What you need to know about the Arkansas LEARNS Act*, ARK. DEMOCRAT GAZETTE (Mar. 10, 2023, 2:18 PM), www.arkansasonline.com/news/2023/mar/10/what-you-need-to-know-about-arkansas-learns/; S.B. 294, 94th Gen. Assemb., Reg. Sess. (Ark. 2023).

⁹² S.B. 294, 94th Gen. Assemb., Reg. Sess. (Ark. 2023).

⁹³ *What you need to know about the Arkansas LEARNS Act*, *supra* note 91.

⁹⁴ See *id.*

⁹⁵ See *id.*

⁹⁶ See Ian Russell, *Lawmakers in Arkansas discuss what should be done with surplus money*, THV 11, <https://www.thv11.com/article/money/arkansas-lawmakers-discuss-surplus-money/91-d54eaf6e-1d5f-43b5-a771-a6d702fc4e7b> (last updated Aug. 11, 2022, 7:56 PM CDT).

⁹⁷ See *id.*

according to the Arkansas General Assembly, is a problem that should not exist. Sweeping school lunch subsidy to the NSLP is the solution to this problem. The Arkansas General Assembly must act to provide comprehensive school lunch funding to subsidize the NSLP not just for students eligible for free or reduced-price lunches, but for all students regardless of eligibility. Arkansas may look to other states for reference who are doing just that.

III. How Other State Legislatures are Subsidizing to Provide Free Lunch to All Students

Arkansas can learn from the approaches that other states have taken to subsidize the NSLP and provide free lunch to all students, regardless of household income categorization. These approaches will be useful in determining what Arkansas may do to implement, fund, and run its program. California and Maine are two states that have affirmatively legislated to ensure free lunch to all students.⁹⁸ California allocated \$650 million from its state budget to fund the program for the 2022-2023 school year, while Maine's program was estimated to cost \$34 million a year.⁹⁹ While Colorado's implementation of free school lunch that recently passed has not been implemented yet, Arkansas may look to Colorado for its approach in gaining political support and implementing the funding scheme to achieve a subsidy to the NSLP.¹⁰⁰

A. Maine's Funding Approach

Maine is a nationwide leader in the school lunch funding realm as it recently passed a bill providing school lunch funding for all of its students called the School Meals for All Act ("SMAA").¹⁰¹ The benefits of free school lunch have been evident in Maine.¹⁰² When Maine implemented free meals for all, one district served around 45% more meals than it did pre-pandemic and schools across

⁹⁸ Winfrey & Daley, *supra* note 26.

⁹⁹ See *id.*; Soumya Karlamangla, *What to Know About California's Free School Lunch Program*, N.Y. TIMES, <https://www.nytimes.com/2021/10/01/us/california-free-lunch.html> (last updated Nov. 4, 2021).

¹⁰⁰ Winfrey & Daley, *supra* note 26.

¹⁰¹ Chloe Teboe, *New law will require Maine public schools to provide free meals to all students*, NEWS CTR. ME. (July 13, 2021, 8:33 AM EDT), <https://www.newscentermaine.com/article/news/local/as-seen-on-tv/new-law-requires-free-school-meals-for-all-maine-public-students-regardless-of-family-income-starting-2022-2023/97-4e822474-cd25-4641-958e-c0c8599971c3>.

¹⁰² See *id.*

Maine have stated they have seen many more kids receiving school lunch.¹⁰³ This increase and the elimination of a barrier to receiving school lunch has effectively eroded the perception that free meals are only for low-income students.¹⁰⁴

The groundwork and path to Maine's SMAA began in 2014 when the Full Plates Full Potential legislative task force sought to combat Maine's high rate of student food insecurity.¹⁰⁵ Full Plates Full Potential saw a great need for a nonprofit and non-governmental organization dedicated to the purpose of addressing food insecurity.¹⁰⁶ The nonprofit's tasks included leading work, assembling coalition partners, and investigating best practices and sensible solutions to existing nutrition programs.¹⁰⁷ The first step in implementing sweeping school lunch funding mechanisms was to eliminate the reduced-price copay category for school breakfast and lunch created by the NSLP.¹⁰⁸ The passage of the SMAA took support from numerous nonprofits, legislators, lobbyists, and officials who stated that "feeding kids is not a partisan issue."¹⁰⁹ The SMAA passed with overwhelming bipartisan approval and the legislature allocated \$10 million in seed money to begin the operation.¹¹⁰

Starting this school year, Maine public schools were required to provide school meals to all students for free, regardless of family income and without eligibility and verification determinations.¹¹¹ In fact, an ultimate goal of the legislation is that no one needs to fill out a school meal application at all.¹¹² This was implemented with the realization that families under the poverty threshold are not the only

¹⁰³ Robbie Feinberg, *Maine makes free school lunches permanent after federal funding ends*, NPR (Aug. 31, 2022, 5:06 AM ET), <https://www.npr.org/2022/08/31/1120223479/maine-makes-free-school-lunches-permanent-after-federal-funding-ends>.

¹⁰⁴ See *id.*

¹⁰⁵ See Justin Strasburger & Anna Korsen, *Maine's Path to Healthy School Meals for All*, FOOD RSCH. & ACTION CTR (Jan. 9, 2023), <https://frac.org/blog/maines-path-to-healthy-school-meals-for-all>.

¹⁰⁶ See *id.*

¹⁰⁷ See *id.*

¹⁰⁸ See *id.*

¹⁰⁹ See *id.* (Full Plates Full Potential worked with the Maine Department of Education, Maine School Nutrition Association, Good Shepherd Food Bank, Maine Farm to School Network, the Summer Food Service Program, Breakfast After the Bell and many others).

¹¹⁰ Strasburger & Korsen, *supra* note 105.

¹¹¹ See *id.*

¹¹² See Teboe, *supra* note 101.

families who experience hardship, especially in wake of the pandemic.¹¹³ Maine has taken responsibility for its citizens and placed the onus on the State legislature to cover the difference between the federal reimbursement for school meals after the free and reduced-price lunches have been covered by the NSLP.¹¹⁴

Even with a \$34 million per year price tag, advocates for Maine's children are in favor of the new groundbreaking legislation, because hungry children cannot learn, and the social stigma of socioeconomic classes should never be tied to an essential need of a student.¹¹⁵ Maine has already claimed to hear anecdotal evidence that the SMAA and school lunch funding is having an enormous impact in schools as it is eviscerating food insecurity.¹¹⁶ Maine lobbyists, including the School Nutrition Association, are advocating for Congress to provide free school meals to all students on a permanent basis nationwide as a service to care for families.¹¹⁷ While it seems to be a long road ahead, Maine has made great strides in moving to eliminate food insecurity for their students. Arkansas should implement similar measures that place high importance on student nutrition and an elimination of food insecurity.

B. California's Funding Approach

California was the first state to implement a statewide Universal Meals Program ("UMP") for school children as it built on the foundations of the NSLP and School Breakfast Program ("SBP") to subsidize food costs so that they are not passed on to students and families.¹¹⁸ The UMP requires schools to provide at least two nutritiously adequate school meals per day, with state taxpayers footing the bill.¹¹⁹

The California State legislature is filling in the gaps for which the NSLP does not provide for. They saw the importance of

¹¹³ See *id.*

¹¹⁴ See *id.*

¹¹⁵ See *id.*

¹¹⁶ See Strasburger & Korsen, *supra* note 105.

¹¹⁷ See *id.*

¹¹⁸ See *California Universal Meals*, CAL. DEP'T OF EDUC., <https://www.cde.ca.gov/ls/nu/sn/cauniversalmeals.asp> (last reviewed Aug. 16, 2023).

¹¹⁹ See Karen Garcia & Jon Healey, *Free for all California public school students: At least two meals a day*, L.A. TIMES (Aug. 15, 2022, 2:23 PM PT), <https://www.latimes.com/california/story/2022-08-15/free-for-all-california-public-school-students-at-least-two-meals-a-day>.

providing funding for all students to eat lunch at school, not just the ones who fall below an arbitrary poverty line.¹²⁰ California is not requiring any eligibility application or verification and is simply providing food to each of the six million children it serves, eviscerating the problem that one in six children in the United States faces hunger and food insecurity.¹²¹

School district officials stated that the eligibility rules and verification procedures in place before the UMP left cost of living unaccounted for and blocked too many families from receiving the help they needed.¹²² While students will not be required to participate, all students are automatically enrolled in the program and affirmatively receive at least two free meals at school, with no required payment from their parents.¹²³ By offering free meals to all with no strings attached, eligibility and verification roadblocks have been eliminated.¹²⁴

Even with the significant price tag of \$650 million per year, the State legislature committed to supplement federal meal reimbursements to all K-12 schools in California.¹²⁵ California's utilization of state tax dollars to ensure child nutrition evidences the California legislature's placing high importance on caring for its most vulnerable population. Arkansas can learn and implement their own provisions modeled after California's approach.

C. Colorado's Funding Approach

In Colorado, Proposition FF legislation which included the Healthy School Meals for All act ("**HSMA**") for permanent school lunch for all students recently passed.¹²⁶ It took many people, such as coalitions of parents, teachers, and anti-hunger advocates working with legislators, to get the HSMA proposal on the ballot.¹²⁷

¹²⁰ See *id.*

¹²¹ See Ali Tadayon, *Free school meals for all here to stay in California*, EDSOURCE (July 27, 2021), <https://edsources.org/2021/free-school-meals-here-to-stay-in-california/658564>.

¹²² See Garcia & Healey, *supra* note 119.

¹²³ See *id.*

¹²⁴ See Karlamangla, *supra* note 99.

¹²⁵ See *id.*

¹²⁶ See Sonia Gutierrez, *Colorado voter approve free school lunches for all students*, ROCKY MOUNTAIN PBS (Nov. 9, 2022), <https://www.rmpbs.org/blogs/news/free-school-lunch-colorado-november-election/>.

¹²⁷ See Winfrey & Daley, *supra* note 26.

Colorado's legislative measure to combat food insecurity essentially raises \$100 million a year by increasing taxable income for its citizens, but only for the three or four percent who make at least \$300,000.00 a year.¹²⁸ The bill works to reimburse school food authorities for free meals provided to students who are not eligible for free or reduced priced meals under the NSLP or other federal programs.¹²⁹

A school food authority who participates in the HSMA must provide free meals to all students the school serves, provide annual notice to the state department for participation, and maximize the amount of federal reimbursement by participating in the federal community eligibility provision to identify students who are eligible for the federal school meal programs.¹³⁰ This means that while eligibility and verification measures for the NSLP are not required to receive free lunch, the Colorado state legislature places the onus on the school district to identify and maximize those students who can receive federal reimbursement through the NSLP to decrease costs of the Colorado state legislature.

Washington, Minnesota, Wisconsin, Ohio, Pennsylvania, New York, Massachusetts, and North Carolina have all introduced bills similar to the one in Colorado, but they have not yet reached the ballot.¹³¹ While this is a minority of states, the importance that has been placed on free lunch for all students is clearly evidenced by HSMA legislation. It sends the message that the legislature cares about school children's wellbeing and nourishment, especially since they cannot control the financial situations of their parents. The HSMA funding mechanism is simple. It raises tax rates for a small minority of citizens, requires school districts to fully utilize the NSLP's eligibility status, and reimburses school districts for meals they provide to students who are ineligible after exhausting the NSLP's eligibility provisions. Colorado has found it to be a feasible approach, and other states are headed in that direction as well. Arkansas should take this approach and utilize it to provide free lunch to all students.

¹²⁸ *See id.*

¹²⁹ S.B. 22-087, 74th Gen. Assemb., 1st Reg. Sess. (Colo. 2022).

¹³⁰ *See id.*

¹³¹ *See* Winfrey & Daley, *supra* note 26.

IV. Proposed Funding Mechanism for the Arkansas General Assembly

As the voice of the citizens, the Arkansas General Assembly must legislate to provide free school lunch to all Arkansas students. It is imperative that Arkansas utilize bipartisan tactics to use its tax revenue surplus and provide nourishment for the most vulnerable population of its people: children. The Arkansas General Assembly has recently evidenced its willingness to make weighty fiscal decisions by making tax cuts, approving hefty budgets, and passing financially burdensome bills.¹³² This evidence shows that providing free school lunch to all children is within the realm of possibility for the Arkansas General Assembly. Further, implementing a subsidy to the NSLP can and has been done by multiple states.¹³³ States like Maine, California, and Colorado have exemplified the potential for states stepping in and taking responsibility for their citizens, most importantly their children.¹³⁴

Arkansas must implement legislation to provide free lunch to all students regardless of household income, and importantly must eliminate or reduce the eligibility and verification process. Arkansas should look to Colorado, Maine, and California to implement an elimination or reduction of the eligibility requirements for students to receive school lunch. In neither Maine, California, nor Colorado must a student fill out an eligibility form to receive free school lunch, however Arkansas's General Assembly would likely favor Colorado's HSMA when drafting free lunch legislation. Colorado's HSMA does not require students to be eligible under the NSLP to receive free lunch but requires school districts to utilize the NSLP's eligibility requirements to their fullest extent.¹³⁵ Under this type of legislation, the Arkansas General Assembly would subsidize and reimburse any student's lunch that falls outside the NSLP's eligibility requirements. However, the school must work to advertise and get as many people eligible and verified through the NSLP as possible to reduce the state legislature's potential reimbursement cost. This benefits students who receive free lunch, but also benefits the legislature's reduction in costs.

¹³² See Russell, *infra* note 96.

¹³³ See Winfrey & Daley, *supra* note 26.

¹³⁴ See *id.*

¹³⁵ See Gutierrez, *supra* note 126.

An obvious issue with this proposal is the prospective hit the Arkansas budget would take. If the State is going to provide free lunch to all students, it will inevitably cost more money. However, Arkansas's unique circumstances in which it could fund a comprehensive school lunch act is what must be used to achieve this goal. Arkansas's \$1 billion dollar surplus of state tax money could be the perfect funding mechanism, at least to get the subsidy off of its feet.¹³⁶ Therefore, one option to begin this free lunch subsidy is to utilize existing tax surplus dollars. Alternatively, like Colorado, Arkansas could choose to raise taxes to fund this legislation.¹³⁷ While raising taxes is not commonly supported by taxpayers, evidence from national polls shows that the majority of voters and taxpayers are in favor of sweeping school lunch legislation.¹³⁸ Therefore, an increase in taxes, even while not favorable to taxpayers, would at least be for a cause they have deemed favorable in the past.

Further, the wide range of funding schemes, from \$34 million a year in Maine to \$650 million a year in California, shows that Arkansas could implement a plan that works for its situation. Arkansas's population includes 3 million people, while Maine's population includes 1.3 million people, and California's population includes 39 million people.¹³⁹ Therefore, it is likely that Arkansas' costs would fall in between Maine and California and be closer to the \$34 million price tag than the \$650 million price tag. Even with tripling Maine's yearly costs, as Arkansas has three times the people Maine has, Arkansas' costs are around \$100 million, which could be reduced with school districts fully utilizing the NSLP. As long as children are fed indiscriminately, which aligns with citizens' and voters' viewpoints, there will likely be no great qualms from the general population. Further, Arkansas's passage of the LEARNS act allocates over \$200 million per year to education funding yet does not subsidize school lunch. A willingness to pass school lunch funding for another \$100 million is a logical following to the

¹³⁶ See Russell, *supra* note 96.

¹³⁷ See Winfrey & Daley, *supra* note 26.

¹³⁸ See Chuck, *supra* note 75.

¹³⁹ See *QuickFacts: Arkansas*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/AR> (last visited Dec. 19, 2023) (estimating Arkansas' current population at 3,067,732); *QuickFacts: Maine*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/maine> (last visited Dec. 19, 2023) (estimating Maine's current population at 1,395,722); *QuickFacts: California*, U.S. CENSUS BUREAU, <https://www.census.gov/quickfacts/CA> (estimating California's current population at 38,965,193) (last visited Dec. 19, 2023).

LEARNS act's passage, as it did not contemplate new school lunch measures.¹⁴⁰

The fact that Arkansas has effectively disregarded students and school lunch in previous legislation, incurred over \$1 billion in tax revenue surplus, and has approved almost \$1 billion in education funding to improve teacher salaries, yet still requires students to pay for their own lunches, evidences a severe inequity and oversight. Even with a \$100 million price tag, likely a high estimate, Arkansas would be well short of utilizing the \$1 billion tax revenue it incurred in a single fiscal year.

Overall, even with a large price tag, the benefits of implementing sweeping school lunch legislation far outweigh the costs. To eliminate food insecurity by providing free lunch to all Arkansas students would greatly benefit Arkansas, its taxpayers, and its education system.

V. Conclusion

Students are generally given everything they need at school, yet their most valuable asset, their brain, requires fuel to succeed. The one thing the Arkansas General Assembly continuously fails to provide students with is fuel for their most valuable asset. When this fuel is provided to students indiscriminately, like it is provided to inmates in state prisons, the food insecurity problem will be eviscerated, and school lunch will be one less thing for families and children to worry about. While the cost and allocation might prove to be cumbersome, burdensome, or time-consuming, it is clear that providing school lunch to all students at no cost will have a substantial impact and benefit the state of Arkansas. Further, it is feasible when looking to the successes of other states' legislation.

As stated in the introduction, the Arkansas General Assembly must utilize its current tax surplus, or alternatively increase taxes to fund a state-wide subsidy to the NSLP. In turn, the subsidy will decrease the negative effects of ineligibility under the NSLP, eliminate food insecurity for Arkansas students, and eliminate large school lunch debts many Arkansas schools have incurred. The focus of this legislation must be to feed students and take partisan and financial decisions out of the hunger equation. This is a call for

¹⁴⁰ See S.B. 294, 94th Gen. Assemb., Reg. Sess. (Ark. 2023) (implementing no changes in Arkansas student lunch funding under the LEARNS act).

the Arkansas General Assembly to act to care for its most vulnerable citizens: hungry school children.