

# Chapter 787: Reducing Food Waste with Fresh Food Date Labeling Terminology

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## Code Sections Affected

Food and Agricultural Code §§ 82000 (new) and 82001 (new).  
 AB 954 (Chiu); 2017 STAT. Ch. 787.

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I. INTRODUCTION

Jen Rustemeyer and Grant Baldwin know that farmers, manufacturers, retailers, and consumers discard copious amounts of edible food.<sup>1</sup> As part of a six-month challenge, Rustemeyer and Baldwin filmed a documentary capturing their “vow[] to eat only food entering the waste stream.”<sup>2</sup> The Canadian filmmakers mostly found this food in “dumpsters and behind wholesale warehouses” and discovered that these places were filled with discarded edible food “because [the food] was near [a] date label . . . [which] has absolutely nothing to do with safety.”<sup>3</sup> By the end of their challenge, they had taken home \$20,000 worth of wasted food and had so much leftover that their friends began “grocery shopping at [their] home all the time.”<sup>4</sup>

Sacramento may be “America’s Farm-to-Fork Capital,”<sup>5</sup> but in many instances, Sacramentans, Californians, and Americans are not fully or accurately informed about the food they are consuming, or refusing to consume, because of ambiguous food date labels.<sup>6</sup> In fact, up to “90 percent of consumers discard some food prematurely as a result of misinterpreting food date labels.”<sup>7</sup> This confusion and “[m]isinterpretation of the date labels on foods is a key factor leading to food waste in American households” and has crippling effects on society.<sup>8</sup> Specifically, “[f]our percent of the total energy budget, about 12 percent of the land, and 23 percent of all freshwater consumed in the United States is

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1. See In ‘Just Eat It,’ Filmmakers Feast for 6 Months on Discarded Food, NPR: THE SALT (Nov. 18, 2015), <http://www.npr.org/sections/thesalt/2015/11/18/456489490/in-just-eat-it-filmmakers-feast-for-6-months-on-discarded-food> (on file with *The University of the Pacific Law Review*) (discussing their experience with eating only discarded food for six months).

2. *Id.*

3. *Id.*

4. *Id.*

5. Visit, VISIT SACRAMENTO, <https://www.visitsacramento.com/visit/> (last visited Aug. 2, 2017) (on file with *The University of the Pacific Law Review*).

6. See 2017 Cal. Stat. ch. 787, § 1(f) (revealing how many consumers misinterpret food date labels).

7. *Id.*

8. *Id.*

used to grow food that goes uneaten.”<sup>9</sup> This uneaten food, which ends up in landfills, “releases more than 8.3 million tons of greenhouse gases each year in California, contributing 20% of the state’s methane emissions.”<sup>10</sup> Finally, from an economic perspective, food waste costs “consumers and industry \$162 billion each year nationally”<sup>11</sup> and “the average American family of four \$1,365 to \$2,275 per year.”<sup>12</sup>

Chapter 787 seeks to combat the food waste epidemic by requiring the Department of Food and Agriculture (DFA) to “publish information to encourage food manufacturers, processors, and retailers responsible for the labeling of food products to voluntarily use . . . uniform terms on food product labels to communicate quality dates and safety dates.”<sup>13</sup> Further, Chapter 787 strives to eliminate dates that are irrelevant to consumers from food product labels by “encourag[ing] food distributors and retailers to develop alternatives to consumer-facing ‘sell by’ dates.”<sup>14</sup> Finally, Chapter 787 authorizes the DFA to “accept nonstate [sic] funds from public and private sources to educate consumers about the meaning of the quality dates and safety dates.”<sup>15</sup>

If the food industry embraces the DFA’s published information, then Chapter 787’s influence could be widespread.<sup>16</sup> For example, “[r]educing food losses by just 15 percent would save the equivalent of enough food to feed more than 25 million Americans every year.”<sup>17</sup> The effectiveness of Assemblymember David Chiu’s legislation, however, depends on the DFA’s relationship with the food industry and the DFA’s commitment to consumer education efforts.<sup>18</sup> This article discusses the background of food date labeling laws, the need for a uniform food date labeling system, how Chapter 787 and the food industry help create this

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9. *Id.* § 1(b).

10. *Id.* § 1(e).

11. *Id.* § 1(c).

12. Press Release, Cal. Assemblymember David Chiu, Bill to Reduce Food Waste Passes Assembly (May 30, 2017), <https://a17.asmdc.org/press-releases/bill-reduce-food-waste-passes-assembly> (on file with *The University of the Pacific Law Review*).

13. CAL. FOOD & AGRIC. CODE § 82001(a) (enacted by Chapter 787).

14. *Id.* § 82001(c) (enacted by Chapter 787).

15. *Id.* § 82001(d)(1) (enacted by Chapter 787).

16. See EMILY BROAD LEIB ET AL., HARVARD FOOD LAW & POL’Y CLINIC & NAT. RES. DEF. COUNCIL, THE DATING GAME: HOW CONFUSING FOOD DATE LABELS LEAD TO FOOD WASTE IN AMERICA 27 (2013), available at <https://www.nrdc.org/sites/default/files/dating-game-report.pdf> (on file with *The University of the Pacific Law Review*) (“[I]mproving upon the convoluted and ineffective system of date labels is one of the more straightforward ways [to] address [food waste].”).

17. 2017 Cal. Stat. ch. 787, § 1(d).

18. See CAL. FOOD & AGRIC. CODE § 82001(b) (enacted by Chapter 787) (requiring the DFA to promote the date labeling terminology “in the course of its existing interactions with” the food industry); BROAD LEIB ET AL., *supra* note 16, at 26 (“[T]he success of any new standardized date label regime is contingent upon increased consumer awareness and education.”).

framework, and additional measures that important stakeholders should consider adopting to reduce food waste.<sup>19</sup>

## II. LEGAL BACKGROUND

The federal government has considered, but mostly failed at, legislating uniform food date labeling for over 40 years.<sup>20</sup> As a result, individual states and industry actors instituted inconsistent food date labeling regulations, contributing to consumer confusion about dates stamped on food products.<sup>21</sup> Section A describes the federal government's long-term inability to pass uniform food date labeling legislation and the influence this has on the food industry and consumers.<sup>22</sup> Section B highlights recent attempts in Congress and the California State Assembly to address the lack of food date labeling regulations.<sup>23</sup> Section B also examines the food date labeling initiative developed by the Food Marketing Institute (FMI) and the Grocery Manufacturers Association (GMA).<sup>24</sup> Finally, Section C details the existing framework for regulating food date labeling in California.<sup>25</sup>

### A. *Historical Struggles with Legislating Uniform Food Date Labeling*

Beginning in the 1950s, as the physical and temporal distance between consumers and food production rapidly increased, consumers became more interested in learning about the quality of the food they purchased and consumed.<sup>26</sup> Not only did the food industry respond to this trend, as “many supermarkets [began] voluntarily adopt[ing] open dating systems,” but the federal and state governments also got involved.<sup>27</sup> The federal government contemplated “a uniform date labeling system” as early as 1975, when Congress received a report from the General Accounting Office that urged its adoption.<sup>28</sup> Despite the benefits of “creat[ing] a uniform, nationwide [food date labeling] system,” such as “improv[ing] productivity and efficiency in the food industry,”

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19. *Infra* Part II–IV.

20. *See* BROAD LEIB ET AL., *supra* note 16, at 6.

21. *Id.* at 8.

22. *Infra* Part II.A.

23. *Infra* Part II.B.1–2.

24. *Infra* Part II.B.3.

25. *Infra* Part II.C.

26. *See* BROAD LEIB ET AL., *supra* note 16, at 6–7 (describing how urbanization disconnected consumers from food production, leading consumers to question the quality and freshness of the food they purchased).

27. *Id.* at 6.

28. *Id.*

Congress failed to pass any of the many pieces of legislation that would have implemented one.<sup>29</sup>

One of the food industry's arguments against establishing a uniform food date labeling system focused on concerns about imposing higher costs on the industry, which consumers would likely pay for through price increases.<sup>30</sup> Others, such as food lawyers, had concerns about whether Congress would pass a necessary preemption provision "that would invalidate all state laws, and thus successfully achieve a uniform national date labeling regime consistently applied in all states."<sup>31</sup> As a result of Congress' inaction, state and local governments, along with other players in the food industry, began promulgating inconsistent food date labeling laws, guidelines, and practices.<sup>32</sup> This fostered confusion among consumers and, ultimately, exacerbated the food waste problem that continues to persist in the United States.<sup>33</sup>

### *B. Recent Attempts to Establish Uniform Food Date Labeling*

In 2016, federal and California state legislators introduced two landmark bills that would have made significant strides toward creating a nation- or statewide uniform food date labeling system, but both bills failed to pass their houses of origin.<sup>34</sup> Later, in February 2017, two major food organizations announced a voluntary food date labeling initiative seeking "to streamline the use of label dates on [food] products."<sup>35</sup> Subsection 1 explores Congresswoman Pingree's (D-ME) attempt to establish a national food date labeling regime, while Subsection 2 discusses California Assemblymember Chiu's similar legislation, AB 2725.<sup>36</sup>

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29. *See id.* at 6–7 ("At least 10 bills were introduced by the 93rd Congress (1973-1975)" that would have created "a uniform open code dating system on a nationwide scale.").

30. *See id.* (explaining that supermarket chains opposed uniform date labeling legislation because they believed it would result in "increased losses of outdated, but edible food, and thus forc[e] supermarkets to raise prices in order to account for the discarded products").

31. *Id.* at 7.

32. *See id.* at 8 (discussing how federal inaction on food date labeling leads to other entities attempting to fill the regulatory void in uncoordinated ways).

33. *See id.* at 8, 22 (describing how inconsistent policies and practices "can and do confuse and mislead [consumers]" and explaining that "date labels play a central role in generating food waste among U.S. consumers").

34. *See* Food Date Labeling Act of 2016, H.R. 5298, 114th Cong. § 4(a)–(b) (as introduced on May 19, 2016, but not enacted), available at <https://www.congress.gov/114/bills/hr5298/BILLS-114hr5298ih.pdf> (on file with *The University of the Pacific Law Review*) (proposing to regulate quality dates "[i]f a food labeler [voluntarily] includes [such] date on food packaging" and require safety dates on certain food products); AB 2725 §§ 2(b)(1), 3(b)(1), 2016 Leg., 2015–2016 Sess. (Cal. 2016) (as amended on Apr. 5, 2016, but not enacted) (proposing to regulate quality dates and elevated risk dates).

35. SENATE COMMITTEE ON AGRICULTURE, COMMITTEE ANALYSIS OF AB 954, at 4 (June 16, 2017).

36. *Infra* Part II.B.1–2.

Subsection 3 highlights the voluntary measure launched by the Food Marketing Institute and the Grocery Manufacturers Association.<sup>37</sup>

1. *H.R. 5298: The Food Date Labeling Act of 2016*

In 2016, Congresswoman Chellie Pingree introduced the Food Date Labeling Act,<sup>38</sup> which would have required food labelers to place safety dates on high-risk, ready-to-eat products, indicated by the uniform phrase “expires on.”<sup>39</sup> Additionally, the bill would have compelled food labelers that voluntarily include quality dates to begin using the uniform phrase “best if used by.”<sup>40</sup> Moreover, the bill would have specified parameters for the date label style, size, and location.<sup>41</sup> Finally, the bill would have required the Secretaries of Agriculture and Health and Human Services to “provide consumer education and outreach on the meaning of quality date and safety date food labels.”<sup>42</sup>

The House Committee on Agriculture and the Committee on Energy and Commerce never voted on Congresswoman Pingree’s legislation.<sup>43</sup> The legislation would have helped “resolve inconsistent state date labeling laws across the country,” but could have been more aggressive by “mandat[ing] that manufacturers put date labels on food.”<sup>44</sup>

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37. *Infra* Part II.B.3.

38. H.R. 5298. Sen. Richard Blumenthal (D-CT) also introduced an identical bill alongside Rep. Pingree’s bill. Food Date Labeling Act of 2016, S. 2947, 114th Cong. (as introduced on May 18, 2016, but not enacted), available at <https://www.congress.gov/114/bills/s2947/BILLS-114s2947is.pdf> (on file with *The University of the Pacific Law Review*).

39. H.R. 5298 § 4(b)(2). If this bill had passed, then the administering Secretaries would have been required to “describe criteria that determine what ready-to-eat products may have a high level of risk associated with consumption after a certain date.” *Id.* § 4(b)(3)(A). The Secretaries also would have had the authority to “list additional ready-to-eat products that are high risk, but [did] not meet the [above] criteria.” *Id.* § 4(b)(3)(B)(i). The ready-to-eat products satisfying the criteria or on the Secretaries’ list then would have been subject to having safety dates on them. *Id.* § 4(b)(1)(A)–(B).

40. *Id.* § 4(a)(2).

41. *See id.* § 4(c)(1)(A)–(C) (proposing to require labelers to use a “single easy-to-read type” that was “no smaller than 8 point” and “located in a conspicuous place on the package of the food”).

42. *Id.* § 4(f).

43. *See Complete Bill History of H.R. 5298*, U.S. GOV’T PUB. OFFICE, <https://www.gpo.gov/fdsys/pkg/HOB-2016/html/HOB-2016-hr5298.htm> (last visited July 5, 2017) (on file with *The University of the Pacific Law Review*) (showing Congress taking no action on this bill after Congresswoman Pingree introduced it).

44. Press Release, Rep. Chellie Pingree, Pingree Applauds Release of New Industry Standards on Food Date Labeling (Feb. 15, 2017), <https://pingree.house.gov/media-center/press-releases/pingree-applauds-release-new-industry-standards-food-date-labeling> (on file with *The University of the Pacific Law Review*).

## 2. AB 2725

California Assemblymember David Chiu proposed legislation in 2016 aimed at standardizing food date labeling.<sup>45</sup> AB 2725 would have required food manufacturers who voluntarily choose to place quality dates on food products to adopt the “uniform phrase ‘best if used by’” to communicate those quality dates to consumers.<sup>46</sup> The legislation also would have required food manufacturers voluntarily placing elevated risk dates<sup>47</sup> on food products “that require time/temperature control for safety” to communicate the elevated risk date using “the uniform phrase ‘expires on.’”<sup>48</sup> Finally, the bill would have provided for “consumer guidance on the meaning of the quality date and safety date food labels,” and banned retail food facilities from “sell[ing] or offer[ing] for sale a food item that is labeled with a ‘sell-by’ date.”<sup>49</sup>

The legislation failed to pass in the Assembly Committee on Health amid arguments from parties such as the California Chamber of Commerce and California Grocers Association that this “‘California only’ labeling scheme [would] not help consumers or waste reduction.”<sup>50</sup> Assemblymember Chiu’s legislation had the potential to positively influence California’s food waste problems;<sup>51</sup> however, because the food industry strongly opposed this voluntary legislation, the industry would have likely avoided adopting the uniform practices AB 2725 set forth had the legislature passed the bill.<sup>52</sup>

## 3. *The Food Marketing Institute and the Grocery Manufacturers Association’s Initiative*

In February 2017, eight months before Governor Brown signed Chapter 787, the Food Marketing Institute and the Grocery Manufacturers Association

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45. AB 2725 §§ 2(b)(1), 3(b)(1), 2016 Leg., 2015–2016 Sess. (Cal. 2016) (as amended on Apr. 5, 2016, but not enacted).

46. *Id.* § 2(b)(1)(A).

47. *See id.* § 3(c) (defining “elevated risk date” as “the date indicated on the label affixed to the packaging or container after which there is a high level of risk associated with the consumption of the food product”).

48. *Id.* §§ 3(a), 3(b)(1)(A).

49. *Id.* §§ 4–5.

50. ASSEMBLY COMMITTEE ON HEALTH, COMMITTEE ANALYSIS OF AB 2725, at 5 (Apr. 15, 2016); *see also Complete Bill History of AB 2725*, [https://leginfo.legislature.ca.gov/faces/billHistoryClient.xhtml?bill\\_id=201520160AB2725](https://leginfo.legislature.ca.gov/faces/billHistoryClient.xhtml?bill_id=201520160AB2725) (last visited Aug. 4, 2017) (on file with *The University of the Pacific Law Review*) (showing Assemblymember Chiu canceling the bill’s second hearing).

51. *See* ASSEMBLY COMMITTEE ON HEALTH, COMMITTEE ANALYSIS OF AB 2725, at 5 (Apr. 15, 2016) (discussing the position held by Californians Against Waste that this bill would have “[led] not only to less food going in the trash but also increased consumer confidence in the safety of their food”).

52. *See id.* at 6–7 (listing 11 parties in opposition, including the California Manufacturers & Technology Association and the California Retailers Association).

announced an industry-wide initiative “to streamline the use of label dates on [food] products.”<sup>53</sup> This initiative calls on the industry to voluntarily “streamline[] the myriad date labels on consumer products packaging down to just two standard phrases.”<sup>54</sup> These phrases, “BEST If Used By” and “USE By,” denote product quality and product safety, respectively.<sup>55</sup> The FMI and the GMA also encourage retailers and manufacturers “to immediately begin phasing in the common wording with widespread adoption urged by the summer of 2018.”<sup>56</sup> Ultimately, while this industry-led initiative is an important step in fighting against food waste, it also significantly overlaps with Chapter 787, raising questions about the need for enacting Assemblymember Chiu’s legislation.<sup>57</sup>

### C. *California’s Food Date Labeling Regulations*

California implements all federal “food labeling regulations and any amendments to those regulations adopted pursuant to the [Food, Drug, and Cosmetic Act].”<sup>58</sup> Except for infant formula, however, federal law does not require dates on food labels, which leaves decisions regarding food date labeling regulation to the California state government.<sup>59</sup>

The California Department of Public Health also has the authority to “adopt additional food labeling regulations.”<sup>60</sup> Existing California law, though, requires food date labeling only for eggs,<sup>61</sup> raw shucked shellfish,<sup>62</sup> and certain dairy

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53. SENATE COMMITTEE ON AGRICULTURE, COMMITTEE ANALYSIS OF AB 954, at 4 (June 16, 2017).

54. Press Release, Food Mktg. Inst., Grocery Industry Launches New Initiative to Reduce Consumer Confusion on Product Date Labels (Feb. 15, 2017), <https://www.fmi.org/newsroom/news-archive/view/2017/02/15/grocery-industry-launches-new-initiative-to-reduce-consumer-confusion-on-product-date-labels> [hereinafter FMI Press Release] (on file with *The University of the Pacific Law Review*).

55. *Id.*

56. *Id.*

57. *Compare id.*, with CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787) (showing many similarities between the industry’s initiative and Chapter 787).

58. CAL. HEALTH & SAFETY CODE § 110100(a) (West, Westlaw with urgency legislation through Ch. 136 of 2017 Reg. Sess.).

59. *See* 21 C.F.R. § 107.20(c) (West, Westlaw through July 20, 2017) (requiring “[a] ‘Use by \_\_\_\_\_’ date, the blank to be filled in with the month and year selected by the manufacturer, packer, or distributor of the infant formula on the basis of tests or other information showing that the infant formula, until that date, under the conditions of handling, storage, preparation, and use prescribed by label directions, will: (1) when consumed, contain not less than the quantity of each nutrient, as set forth on its label; and (2) otherwise be of an acceptable quality (e.g., pass through an ordinary bottle nipple)”).

60. CAL. HEALTH & SAFETY CODE § 110100(b) (West, Westlaw with urgency legislation through Ch. 136 of 2017 Reg. Sess.).

61. *See* CAL. FOOD & AGRIC. CODE § 27644(b)(1)(A) (West, Westlaw with urgency legislation through Ch. 14 of 2017 Reg. Sess.) (“[I]t is unlawful for an egg handler to sell, offer for sale, or expose for sale eggs . . . unless each container intended for sale to the ultimate consumer is labeled on one outside top, side, or end with . . . [t]he words ‘Sell-by’ immediately followed by the month and day . . .”).

62. *See* CAL. HEALTH & SAFETY CODE § 114039(a) (West, Westlaw with urgency legislation through Ch. 136 of 2017 Reg. Sess.) (requiring “a ‘sell by’ date or a ‘best if used by’ date for packages with a capacity of

products.<sup>63</sup> California has also heightened regulations for the food date labeling on infant formula and baby food.<sup>64</sup> Therefore, food date labeling “is optional for most food products”<sup>65</sup> in California, causing inconsistencies that subsequently lead to consumer confusion, misinterpretation of food date labels, and food waste.<sup>66</sup> While there is some valuable legislation in California concerning food date labeling, there is certainly some room for improvement.<sup>67</sup>

### III. CHAPTER 787

Assemblymember Chiu’s legislation strives to reduce food waste in California by compelling the DFA to publish information encouraging the food industry to voluntarily use uniform food date labeling practices.<sup>68</sup> Section A discusses how Chapter 787 defines “quality date,” “safety date,” and “sell by date.”<sup>69</sup> Section B explores the information the DFA must publish, highlights how the DFA must promote this new information, and examines Chapter 787’s provision for consumer education.<sup>70</sup>

#### A. “Quality Date,” “Safety Date,” and “Sell By Date” Definitions

Chapter 787 defines “quality date,” “safety date,” and “sell by date.”<sup>71</sup> Under Chapter 787, “‘quality date’ means a date on a label affixed to the packaging or a container of food that communicates to consumers the date after which the food quality may begin to deteriorate but the food may still be acceptable for

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less than one-half gallon, or the date shucked for packages with a capacity of one-half gallon or more”).

63. See CAL. FOOD & AGRIC. CODE § 36004(a) (West, Westlaw with urgency legislation through Ch. 136 of 2017 Reg. Sess.) (“[A]ny product designated in this section there shall appear upon the package or container of such product the date established by the processor as the date upon which, in order to insure quality, such product is normally removed from the shelf or similar location from which the product is offered for sale to the consumer.”).

64. See CAL. HEALTH & SAFETY CODE § 114094.5(a) (West, Westlaw with urgency legislation through Ch. 136 of 2017 Reg. Sess.) (“A retail food facility shall not sell or offer for sale after the ‘use by’ date, infant formula or baby food that is required to have this date on its packaging pursuant to the federal act, as defined in Section 109930, and federal regulations adopted pursuant to the federal act, including, but not limited to, Section 107.20 of Title 21 of the Code of Federal Regulations.”).

65. CAL. DEP’T OF PUB. HEALTH, FOOD & DRUG BRANCH, CLOSE UP ON FOOD LABELS: INFORMATION FOR CALIFORNIA FOOD PROCESSORS 2 (2013), available at <https://www.cdph.ca.gov/Programs/CEH/DFDCS/CDPH%20Document%20Library/FDB/FoodSafetyProgram/GeneralFoodLabelingRequirements.pdf> (on file with *The University of the Pacific Law Review*).

66. 2017 Cal. Stat. ch. 787, § 1(f).

67. E.g., CAL. FOOD & AGRIC. CODE § 36004(a) (requiring date labels on certain dairy products).

68. CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787).

69. *Infra* Part III.A.

70. *Infra* Part III.B.

71. CAL. FOOD & AGRIC. CODE § 82000(a)–(c) (enacted by Chapter 787).

consumption.”<sup>72</sup> Meanwhile, “‘safety date’ means a date on a label affixed to the packaging or container of food that communicates to consumers that the food should be consumed or frozen, if appropriate, by the date listed on the package that applies to perishable products with potential safety implications over time.”<sup>73</sup> Finally, Chapter 787 defines “sell by date” as “a date on a label affixed to the packaging or container of food that is intended to communicate primarily to a distributor or retailer for purposes of stock rotation and that is not a quality date or a safety date.”<sup>74</sup> The legislature defined these terms in Chapter 787 to establish consistent meanings for the dates appearing on food labels, thereby reducing consumer confusion.<sup>75</sup>

*B. The DFA’s Three Priorities: Publishing Information, Promoting the Terminology to the Industry, and Educating Consumers*

Chapter 787 requires the Department of Food and Agriculture to “publish information to encourage food manufacturers, processors, and retailers responsible for the labeling of food products to voluntarily use . . . uniform terms on food product labels to communicate quality dates and safety dates.”<sup>76</sup> These uniform terms include “‘BEST if Used by’ or ‘BEST if Used or Frozen by,’” which both “indicate the quality date of a product,” and “‘USE by’ or ‘USE by or Freeze by,’” which both “indicate the safety date of a product.”<sup>77</sup> The DFA, “in consultation with the State Department of Public Health,” must publish this information on or before July 1, 2018.<sup>78</sup> Chapter 787 also requires the DFA to “encourage food distributors and retailers to develop alternatives to consumer-facing ‘sell by’ dates.”<sup>79</sup>

Additionally, Chapter 787 discusses how the Department of Food and Agriculture must promote this terminology.<sup>80</sup> Chapter 787 requires the DFA to “promote the consistent use of the [quality date and safety date] terms . . . in the course of its existing interactions with food manufacturers, processors, and retailers.”<sup>81</sup>

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72. *Id.* § 82000(a).

73. *Id.* § 82000(b).

74. *Id.* § 82000(c).

75. See SENATE COMMITTEE ON AGRICULTURE, COMMITTEE ANALYSIS OF AB 954, at 3 (June 16, 2017) (explaining that this legislation will help consumers “know what . . . labels mean and whether or not . . . food is safe to eat”).

76. CAL. FOOD & AGRIC. CODE § 82001(a) (enacted by Chapter 787).

77. *Id.* § 82001(a)(1)–(2).

78. *Id.* § 82001(a).

79. *Id.* § 82001(c).

80. *Id.* § 82001(b).

81. *Id.*

Finally, the DFA “may accept nonstate [sic] funds from public and private sources to educate consumers about the meaning of the quality dates and safety dates.”<sup>82</sup> These funds are “continuously appropriated to the [DFA] without regard to fiscal years to carry out [this] purpose” and must “be deposited in the Consumer Education Account . . . in the Department of Food and Agriculture Fund.”<sup>83</sup>

#### IV. ANALYSIS

Chapter 787 could play a significant role in the fight against food waste in California.<sup>84</sup> Chapter 787’s enactment, however, comes after “the two major trade associations for retailers and consumer products manufacturing” developed an initiative “to reduce consumer confusion about product date labels.”<sup>85</sup> This industry initiative calls into question whether passing Chapter 787 was necessary.<sup>86</sup> Even so, the legislation’s effectiveness hinges on the DFA’s relationship with the food industry and the DFA’s consumer education efforts.<sup>87</sup> Regardless of Chapter 787’s influence, the industry, consumers, and government should continue adopting other feasible proposals to reduce food waste.<sup>88</sup>

Section A analyzes whether passing Chapter 787 was necessary to help reduce food waste in California.<sup>89</sup> Section B examines the existing interactions between the DFA and the food industry.<sup>90</sup> Section C discusses the importance of educating consumers about the changes to food date labeling and how Chapter 787 addresses this topic.<sup>91</sup> Finally, Section D explores additional measures the industry, consumers, and legislators should consider implementing to combat food waste.<sup>92</sup>

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82. *Id.* § 82001(d)(1).

83. *Id.* § 82001(d)(2)–(3).

84. See Press Release, Food Mktg. Inst., *supra* note 54 (“Clarifying and standardizing date label language is one of the most cost effective ways that we can reduce the 40 percent of food that goes to waste each year in the United States.”).

85. *Id.*

86. Compare *id.*, with CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787) (showing many similarities between the industry’s initiative and Chapter 787).

87. See CAL. FOOD & AGRIC. CODE § 82001(b) (enacted by Chapter 787) (requiring the DFA to promote the date labeling information “in the course of its existing interactions with” the food industry); BROAD LEIB ET AL., *supra* note 16, at 26 (“[T]he success of any new standardized date label regime is contingent upon increased consumer awareness and education.”).

88. BROAD LEIB ET AL., *supra* note 16, at 25 (“Congress, federal administrative agencies, state legislatures, state administrative agencies, the food industry, the non-governmental sector, and consumers all have a role to play in reducing food waste . . . and can start acting now.”).

89. *Infra* Part IV.A.

90. *Infra* Part IV.B.

91. *Infra* Part IV.C.

92. *Infra* Part IV.D.

A. *Was Passing Chapter 787 Necessary to Standardize Date Labeling and Reduce Food Waste?*

Confusing food date labels lead to food waste and cause many drains on society, but passing Chapter 787 as a measure to combat food waste became less necessary after an industry-led initiative to standardize food date labels emerged.<sup>93</sup> Subsection 1 demonstrates how various factors incentivizing the food industry to employ confusing date labeling procedures make establishing a uniform date labeling regime necessary to change industry behavior.<sup>94</sup> Subsection 2 explores the recent efforts by the Food Marketing Institute and the Grocery Manufacturers Association to create a standardized date labeling system, the core aspects of which overlap with Chapter 787.<sup>95</sup> Finally, Subsection 2 also describes Chapter 787's specific role in the fight against food waste.<sup>96</sup>

1. *The Food Industry's Incentives to Perpetuate Confusing Date Labels*

Because the food industry has many incentives to continue using confusing date labels, standardizing date labels and changing industry behavior requires either industry-wide agreement or government intervention.<sup>97</sup> Specifically, the food industry has an incentive to continue its confusing date labeling practices because adopting new terminology may increase the complexity of regulatory compliance and the cost of doing business.<sup>98</sup> For example, food labelers may have to purchase or develop new packaging lines to comply with new protocols.<sup>99</sup> Additionally, confusing consumers with unclear date labeling "creates the opportunity for an unscrupulous manufacturer to maximize profits at the expense of consumers' economic interests."<sup>100</sup> When "consumers and stores throw away products unnecessarily," manufacturers may realize higher profits "if consumers are purchasing more products and doing so more often."<sup>101</sup>

Finally, a food company may benefit from a consumer throwing away a food product prematurely because the premature disposal protects the company's product's reputation.<sup>102</sup> Disposing of food prematurely ensures a consumer eats

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93. 2017 Cal. Stat. ch. 787, § 1(b), (f); FMI Press Release, *supra* note 54.

94. *Infra* Part IV.A.1.

95. *Infra* Part IV.A.2.

96. *Infra* Part IV.A.3.

97. *E.g.*, BROAD LEIB ET AL., *supra* note 16, at 19.

98. *See id.* at 7 (discussing the industry belief that complying with additional "requirements would simply impose higher costs").

99. *Id.*

100. *Id.* at 19.

101. *Id.*

102. Dan Charles, *Don't Fear That Expired Food*, NPR: THE SALT (Dec. 26, 2012), <http://www.npr.org/sections/thesalt/2012/12/26/167819082/dont-fear-that-expired-food> (on file with *The University of the Pacific*)

food only at the product's optimum quality and freshness, which protects the food company's brand reputation and allows the company to "maintain [its] business and [its] market shares."<sup>103</sup> Therefore, companies have a significant interest in using confusing date labels as a way to protect brand reputation and market share.<sup>104</sup> Thus, industry-wide agreement or legislation is necessary to encourage the food industry to forgo these incentives and embrace standardized date labeling and socially responsible behavior.<sup>105</sup>

## 2. *The Industry-Led Date Labeling Initiative and What Chapter 787 Brings to the Table*

Many companies in the food industry agreed to forgo the incentives to use confusing date labeling practices when the Food Marketing Institute and the Grocery Manufacturers Association announced an industry-wide initiative "to streamline the use of label dates on [food] products."<sup>106</sup> This initiative is very similar to Chapter 787; it calls on the industry to voluntarily use the phrases "BEST If Used By" and "USE By" to denote product quality and product safety, respectively.<sup>107</sup> This measure is an important step to combat the food waste epidemic; however, because the FMI and GMA announced and began carrying out their initiative eight months before Governor Brown signed Chapter 787, Assemblymember Chiu's legislation plays a complementary, rather than a trailblazing, role in standardizing date labeling.<sup>108</sup>

That the industry's standardized date labeling initiative preceded Chapter 787 demonstrates that passing Chapter 787 was not necessary to prompt the food industry to change its date labeling practices.<sup>109</sup> Nonetheless, Chapter 787 remains significant because it contains some distinct features that will aid in the battle against food waste.<sup>110</sup> For example, Chapter 787 specifically requires the DFA to "encourage food distributors and retailers to develop alternatives to consumer-facing 'sell by' dates," while the industry-led initiative does not explicitly elaborate on whether the industry should continue using these dates.<sup>111</sup>

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*Law Review*) ("[S]ell by' dates are there to protect the reputation of the food.").

103. *Id.*

104. *Id.*

105. *E.g.*, BROAD LEIB ET AL., *supra* note 16, at 19.

106. SENATE COMMITTEE ON AGRICULTURE, COMMITTEE ANALYSIS OF AB 954, at 4 (June 16, 2017).

107. *Compare* Press Release, Food Mktg. Inst., *supra* note 54, with CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787) (showing many similarities between the industry's initiative and Chapter 787).

108. Press Release, Food Mktg. Inst., *supra* note 54.

109. *Id.*

110. *E.g.*, CAL. FOOD & AGRIC. CODE § 82001(d)(2) (enacted by Chapter 787) (creating the Consumer Education Account to help raise consumer awareness of Chapter 787's date labeling terminology).

111. *Id.* § 82001(c).

Further, Chapter 787 creates another avenue for consumer education through the establishment of the Consumer Education Account “in the Department of Food and Agriculture Fund.”<sup>112</sup>

Finally, and most importantly, while the Food Marketing Institute and the Grocery Manufacturers Association are “two major trade associations for retailers and consumer products manufacturing,” not every manufacturer, processor, or retailer is a member.<sup>113</sup> Therefore, Chapter 787 provides standardized date labeling guidance and information to companies that belong to other trade associations.<sup>114</sup> Thus, passing Chapter 787 serves an important purpose: establishing a more detailed and comprehensive standardized date labeling system that all manufacturers, processors, retailers, and consumers in California can benefit from.<sup>115</sup>

*B. What are the Existing Interactions Between the DFA and the Food Industry?*

To ensure the food industry adopts the Department of Food and Agriculture’s published information, Chapter 787 requires the DFA to leverage its relationship with the industry and “promote the consistent use of the terms . . . in the course of its existing interactions with food manufacturers, processors, and retailers.”<sup>116</sup> This language indicates that the DFA may have a difficult time persuading the food industry to adopt its terminology if its existing interactions with the food industry are infrequent or superficial.<sup>117</sup> Thus, the DFA’s existing relationship with the food industry is critical to Chapter 787 achieving its stated goals.<sup>118</sup>

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112. *Id.* § 82001(d)(2).

113. Press Release, Food Mktg. Inst., *supra* note 54; *see also Who We Are*, NAT’L GROCERS ASS’N, <https://www.nationalgrocers.org/home> (last visited July 5, 2017) (on file with *The University of the Pacific Law Review*) (“The National Grocers Association (NGA) is the national trade association representing the retail and wholesale grocers that comprise the independent sector of the food distribution industry,” a sector that accounts for “25% of the retail grocery industry sales.”).

114. *See* NAT’L GROCERS ASS’N, NGA RETAIL MEMBERSHIP LIST–SUMMER 2017 (2017), *available at* <http://www.nationalgrocers.org/docs/default-source/membership/nga-retail-membership-list-summer-2017.pdf> (on file with *The University of the Pacific Law Review*) (listing Raley’s Supermarket Inc. as a member); *Our Facts*, RALEY’S FAM. FINE STORES, <http://raleysnewsroom.com/our-facts/> (last visited July 5, 2017) (on file with *The University of the Pacific Law Review*) (demonstrating that a large company like Raley’s, which is “the seventeenth largest private company in California,” is a member of the National Grocers Association).

115. *Compare* Press Release, Food Mktg. Inst., *supra* note 54, with CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787) (showing that while there are many similarities between the industry’s initiative and Chapter 787, the legislation is more comprehensive and applies to companies that do not belong to the FMI or the GMA).

116. CAL. FOOD & AGRIC. CODE § 82001(b) (enacted by Chapter 787).

117. *See* SENATE COMMITTEE ON APPROPRIATIONS, COMMITTEE ANALYSIS OF AB 954, at 3 (July 17, 2017) (explaining that because the DFA “generally does not interact with food manufacturers,” the DFA “would likely need to establish a dissemination plan that would be beyond the scope of existing interactions, the costs of which are unknown”).

118. *Id.*

Currently, the Department of Food and Agriculture interacts with the food industry by “play[ing] both a regulatory and advisory role to producers and processors of meat, eggs, dairy products, and produce.”<sup>119</sup> The DFA performs its regulatory role through its Meat and Poultry Inspection Programs, Animal Health Programs, Milk and Dairy Food Safety Programs, and Inspection Service Programs.<sup>120</sup>

Meanwhile, the DFA advises the industry through its Animal and Plant Production Food Safety Programs and its Marketing Branch.<sup>121</sup> The DFA’s Animal and Plant Production Food Safety Programs allow the DFA to “work directly with the State’s agricultural trade groups and associations as well as individual producers, processors, and shippers of fresh produce and animal products to promote development and implementation of voluntary on-farm quality assurance programs.”<sup>122</sup> The Marketing Branch also interacts with the food industry by “provid[ing] an organizational structure, with governmental oversight, for agricultural producers and handlers that allows them to collectively solve production and marketing problems that they could not effectively address individually.”<sup>123</sup>

The Department of Food and Agriculture appears to have a multifaceted relationship with many entities in the food industry.<sup>124</sup> Because the DFA frequently collaborates with the industry on a diverse range of topics, it should be able to leverage these connections and encourage the food industry to adopt the uniform food date labeling terms Chapter 787 establishes.<sup>125</sup>

### *C. Who Will Educate Consumers About the New Date Labeling Terminology?*

Chapter 787 could institute the most understandable and effective date labeling practices in the country, but if the DFA does not educate consumers on what the new labels mean, consumers will continue throwing away food prematurely and Chapter 787 will have little impact on reducing food waste.<sup>126</sup>

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119. *Producer and Processor*, CAL. DEP’T OF FOOD & AGRIC., [https://www.cdfa.ca.gov/ahfss/Animal\\_Health/Producer\\_and\\_Processor.html](https://www.cdfa.ca.gov/ahfss/Animal_Health/Producer_and_Processor.html) (last visited June 29, 2017) (on file with *The University of the Pacific Law Review*).

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.* But see SENATE COMMITTEE ON APPROPRIATIONS, COMMITTEE ANALYSIS OF AB 954, at 3 (July 17, 2017) (revealing that, except for dairy manufacturing facilities, the DFA “generally does not interact with food manufacturers”).

125. See *Producer and Processor*, *supra* note 119.

126. See Meghan Stasz, *A Need to Educate and Collaborate on Food Waste; Reflections from Last Week’s FWRA Food Waste Stakeholder Convening*, GROCERY MANUFACTURERS ASS’N: GMA BLOG (Oct. 13, 2015), <http://www.gmaonline.org/blog/a-need-to-educate-and-collaborate-on-food-waste-reflections-from-last>

Chapter 787 addresses this issue by giving the Department of Food and Agriculture the authority to “accept nonstate [sic] funds from public and private sources to educate consumers about the meaning of the quality dates and safety dates.”<sup>127</sup> How much funding the DFA will receive is difficult to project,<sup>128</sup> but the DFA should invest any funds it does collect in collaborative consumer education campaigns.<sup>129</sup>

Other industry actors’ consumer education campaigns serve as examples of effective ways to educate consumers about the new date labeling framework.<sup>130</sup> For example, in 2015, Walmart educated consumers by “[running] a video campaign in checkout lanes across the country explaining ways shoppers could save money by reducing food waste at home.”<sup>131</sup> With assistance from the DFA, retailers could develop similar campaigns to raise awareness about Chapter 787’s food date labeling framework.<sup>132</sup> Food companies could also provide “informational pamphlets and online resources” as educational tools and have an incentive to do so; the companies can use their socially responsible campaigns “as a promotional strategy to attract customers.”<sup>133</sup> The DFA should work with food companies to brainstorm consumer education initiatives that explain Chapter 787’s date labeling regime.<sup>134</sup>

Nonprofits can also play a role in consumer education by developing campaigns.<sup>135</sup> In 2016, the National Resources Defense Council collaborated with the Ad Council to launch a national public service initiative that strives to change “social norms and behaviors around food waste.”<sup>136</sup> This multifaceted

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weeks-fwra-food-waste-stakeholder-convening/ (on file with *The University of the Pacific Law Review*) (“[Consumer education] is instrumental in getting the message out and helping U.S. households save money and reduce food waste and its environmental impact.”).

127. CAL. FOOD & AGRIC. CODE § 82001(d)(1) (enacted by Chapter 787).

128. See SENATE COMMITTEE ON APPROPRIATIONS, COMMITTEE ANALYSIS OF AB 954, at 3 (July 17, 2017) (explaining that Chapter 787 “does not include funding” for the DFA to “pursue [its] mandates and consumer education”).

129. See BROAD LEIB ET AL., *supra* note 16, at 26 (“[T]he success of any new standardized date label regime is contingent upon increased consumer awareness and education.”).

130. See *Consumer Education Campaigns*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/consumer-education-campaigns> (last visited July 1, 2017) (on file with *The University of the Pacific Law Review*) (providing examples of consumer education campaigns).

131. *Id.*

132. *Id.*

133. BROAD LEIB ET AL., *supra* note 16, at 26, 7.

134. See *id.* at 26.

135. See *Nonprofits and Academia*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/stakeholders/nonprofits-and-academia> (last visited July 1, 2017) (on file with *The University of the Pacific Law Review*) (Nonprofits can “launch widespread Consumer Education Campaigns and fill critical research gaps.”).

136. Press Release, Nat. Res. Def. Council, NRDC and Ad Council Launch New ‘Save the Food’ National Public Service Campaign (Apr. 20, 2016), <https://www.nrdc.org/media/2016/160420> (on file with *The University of the Pacific Law Review*).

campaign disseminates its messages through television advertisements, “print and web advertising,” and new communities on popular social media platforms.<sup>137</sup> Similar campaigns have successfully raised consumer awareness of the food waste epidemic.<sup>138</sup> For example, in the United Kingdom, “a national consumer awareness campaign that included print and web materials . . . successfully reduced consumer food waste by 21% in five years.”<sup>139</sup> Thus, the Department of Food and Agriculture should also partner with nonprofits and charities to educate consumers about Chapter 787’s approach to standardized date labeling.<sup>140</sup>

The DFA must use the funding Chapter 787 authorizes to collaborate with the food industry and nonprofits on effective consumer education campaigns.<sup>141</sup> Without these critical campaigns, Chapter 787 will likely have little tangible influence on food waste reduction.<sup>142</sup>

#### *D. What is Next? A Three Course Menu to Further Reduce Food Waste*

Chapter 787, along with the Food Marketing Institute and the Grocery Manufacturers Association’s initiative, form important steps in the battle against food waste not only in California, but across the nation.<sup>143</sup> According to some estimates, however, “addressing consumer confusion around product date labeling could reduce total national food waste by just 8 percent,” which indicates that implementing additional measures and legislation is necessary to significantly reduce food waste.<sup>144</sup> Subsections 1 through 3 examine additional measures consumer-facing businesses, consumers, and state governments can adopt to build on the momentum Chapter 787 creates.<sup>145</sup>

##### *1. Consumer-Facing Businesses: Waste Tracking and Imperfect Produce*

Consumer-facing businesses account for 40% of total food waste in the United States each year, slightly trailing the 43% attributable to consumers.<sup>146</sup>

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137. *Id.*

138. *See Consumer Education Campaigns, supra* note 130 (describing the success of “Love Food Hate Waste” in the United Kingdom).

139. *Id.*

140. *See Nonprofits and Academia, supra* note 135.

141. *See BROAD LEIB ET AL., supra* note 16, at 26.

142. *Id.*

143. *Id.* at 27.

144. FMI Press Release, *supra* note 54.

145. *Infra* Part IV.D.1–3.

146. *See RETHINK FOOD WASTE THROUGH ECON. & DATA*, <http://www.refed.com/?sort=economic-value-per-ton> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (describing the distribution of food waste across the food supply chain).

These businesses, such as restaurants and retailers, can reduce their food waste footprints in many ways.<sup>147</sup> For example, consumer-facing businesses can invest money and manpower in waste tracking and analytics and embrace using imperfect produce.<sup>148</sup>

Waste tracking and analytics arm “restaurants and food service providers with data on wasteful practices to inform behavioral and operational changes.”<sup>149</sup> Businesses can set up this food waste solution using analytics tools like “the public[ly] available Conserve program offered by the National Restaurant Association, private solutions such as LeanPath, and internally built business tools.”<sup>150</sup> Committing to this solution will not only “help[] businesses identify the volumes and types of food that are tossed out during food preparation,” but also will allow businesses to enjoy “increased profit margins and data reporting to show external stakeholders a path to lower overall waste levels.”<sup>151</sup> This solution could have a major influence by diverting 571,000 tons of annual food waste and reducing greenhouse gases by 2.3 million tons.<sup>152</sup>

Consumer-facing businesses can also “incorporate imperfect produce into menus [and product lines] to reduce costs.”<sup>153</sup> Farmers and businesses often discard imperfect produce, although edible and wholesome, because of superficial defects that cause the food to not “fit the standardized version of fruits and vegetables consumers have come to expect.”<sup>154</sup> According to one estimate, up to 30% of “produce ends up as waste in this country due to unsightliness.”<sup>155</sup> While some businesses may be wary of embracing this solution because of the risk of imperfect produce negatively impacting their brands, they can mitigate this risk by launching pilot programs “with individual farmers and distributors to assess the economics and culinary dynamics of utilizing imperfect produce.”<sup>156</sup>

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147. See *Restaurants & Foodservice Providers*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/stakeholders/restaurants-and-foodservice-providers> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (offering and explaining 13 key solutions for food service providers); *Grocery Retailers*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/stakeholders/retailers> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (detailing 11 key solutions for grocery retailers).

148. *Waste Tracking & Analytics*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/waste-tracking-and-analytics> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*); *Restaurants & Foodservice Providers*, *supra* note 147.

149. *Waste Tracking & Analytics*, *supra* note 148.

150. *Id.*

151. *Id.*

152. See *id.* (describing the benefits of the waste tracking solution).

153. *Restaurants & Foodservice Providers*, *supra* note 147.

154. Maria Godoy, *Think Nobody Wants to Buy Ugly Fruits and Vegetables? Think Again*, NPR: THE SALT (Mar. 26, 2015), <http://www.npr.org/sections/thesalt/2015/03/26/395160156/think-nobody-wants-to-buy-ugly-fruits-and-veggies-think-again> (on file with *The University of the Pacific Law Review*).

155. *Id.*

156. *Produce Specifications (Imperfect Produce)*, RETHINK FOOD WASTE THROUGH ECON. & DATA,

By adopting these feasible solutions, consumer-facing businesses can become more profitable and do their part to reduce food waste in the United States.<sup>157</sup>

## 2. *Consumers: Purchasing Behavior Changes and Home Composting*

Consumers can change their purchasing and consumption behavior to reduce food waste.<sup>158</sup> For example, consumers can purchase products that come in spoilage prevention packaging and avoid other products without this packaging.<sup>159</sup> Additionally, consumers can embrace tray-less dining and smaller plates at dining establishments, as these measures can “reduce over-portioning by consumers” and “minimize consumer food waste.”<sup>160</sup> Lastly, consumers can address the environmental aspect of food waste through home composting.<sup>161</sup> Home composting is an inexpensive way to “[r]educe[] methane emissions from landfills.”<sup>162</sup> While drastically altering consumer behavior is a lengthy process requiring significant investments in educational efforts, consumers stand to “reap the biggest economic benefit . . . by cutting unnecessary spending on food that is never eaten.”<sup>163</sup> Therefore, consumers should eagerly embrace these and other food waste reduction measures.<sup>164</sup>

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<http://www.refed.com/solutions/produce-specifications> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*).

157. See *Restaurants & Foodservice Providers*, *supra* note 147 (“Restaurants and foodservice providers can save up to \$1.6 billion in food purchasing costs.”).

158. *Consumers*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/stakeholders/consumers> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (describing some “key consumer actions” to reduce food waste).

159. See *Spoilage Prevention Packaging*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/spoilage-prevention-packaging> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (explaining that this consumer solution could divert 72,000 tons of annual waste from landfills).

160. *Food Waste is a Solvable Problem*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/?sort=economic-value-per-ton> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*).

161. See *Home Composting*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/home-composting> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*) (Home composting involves “[k]eeping a small bin or pile for on-site waste at residential buildings to be managed locally.”).

162. *Composting at Home*, U.S. ENVTL PROTECTION AGENCY, <https://www.epa.gov/recycle/composting-home> (last visited July 5, 2017) (on file with *The University of the Pacific Law Review*).

163. See *Consumer Education Campaigns*, *supra* note 130 (“[Consumer education] requires a long time horizon, which can inhibit investment.”); *Consumers*, *supra* note 158.

164. See *Consumers*, *supra* note 158 (offering community composting as another solution consumers can embrace).

3. *State Governments: Imperfect Produce and Donation Transportation*

Finally, state governments can encourage the food supply chain to embrace imperfect produce and subsidize donation transportation ventures to support food waste reduction.<sup>165</sup> For example, a state government can award grants that “can cover initial costs and farm labor training” to make it easier for businesses and consumers to divert imperfect produce from landfills.<sup>166</sup> Further, these grants can “support marketing and educational efforts to farmers and consumers to stimulate adequate supply and demand for imperfect produce.”<sup>167</sup> California’s government can include stipulations in purchasing contracts “to support the purchase of cosmetically imperfect products.”<sup>168</sup>

A state government can support donation transportation efforts by “provid[ing] grants or low-cost loans for transportation financing, especially for physical assets such as trucks and the cost of trucking services.”<sup>169</sup> Government intervention may be necessary to support donation transportation because “[t]ransportation costs are typically covered by food recovery organizations, which often operate with small budgets.”<sup>170</sup> Further, transportation is the food industry’s “most often cited barrier to donating,” indicating that government transportation grants and loans could effectively increase food donation and reduce waste.<sup>171</sup>

If Chapter 787 generates the momentum needed to encourage important stakeholders to introduce these solutions, in addition to standardizing date labeling, the legislation will have a profound influence on the food supply chain’s fight against food waste.<sup>172</sup>

V. CONCLUSION

Food waste is one of the most critical social, environmental, and economic issues facing the world today.<sup>173</sup> After decades of unstandardized food date

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165. *Produce Specifications (Imperfect Produce)*, *supra* note 156; *Donation Transportation*, RETHINK FOOD WASTE THROUGH ECON. & DATA, <http://www.refed.com/solutions/donation-transportation> (last visited June 30, 2017) (on file with *The University of the Pacific Law Review*).

166. *Produce Specifications (Imperfect Produce)*, *supra* note 156.

167. *Id.*

168. *Id.*

169. *Donation Transportation*, *supra* note 165.

170. *Id.*

171. SENATE COMMITTEE ON HEALTH, COMMITTEE ANALYSIS OF AB 954, at 3 (July 3, 2017).

172. See RETHINK FOOD WASTE THROUGH ECON. & DATA, *supra* note 146 (“ReFED’s analysis of the top prevention, recovery, and recycling solutions shows that 13.2 million tons – over 20% of annual food waste – can be reduced over the next decade in cost-effective and scalable ways.”).

173. See Sally Greenberg, *Reducing Food Waste in America: The Next Hot Consumer Issue*, HUFFPOST (May 10, 2017), [http://www.huffingtonpost.com/sally-greenberg/reducing-food-waste-in-am\\_b\\_9874248.html](http://www.huffingtonpost.com/sally-greenberg/reducing-food-waste-in-am_b_9874248.html)

labeling, the Food Marketing Institute and Grocery Manufacturers Association implemented a straightforward solution that Chapter 787 reinforces and expands to companies that are not members of these organizations.<sup>174</sup> Together, the industry-led initiative and Chapter 787 can profoundly influence food waste reduction efforts by encouraging the voluntary use of uniform date labeling terminology.<sup>175</sup>

Standardized food date labeling, though, should be just one of many efforts to reduce food waste.<sup>176</sup> The food industry, consumers, and governments should continue to research and implement other cost effective solutions, such as embracing imperfect produce, practicing home composting, and subsidizing donation transportation.<sup>177</sup> In combating the problems food waste causes, the food supply chain will be most effective by undertaking a collaborative approach and attacking food waste from multiple angles.<sup>178</sup> If this occurs, perhaps Jen Rustemeyer and Grant Baldwin can begin working on a new documentary illustrating how consumers, industry, and governments united to eradicate a rotten epidemic.<sup>179</sup>

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(on file with *The University of the Pacific Law Review*) (“Food waste is a pocketbook problem, a poverty, hunger, and health problem.”).

174. See BROAD LEIB ET AL., *supra* note 16, at 6–7; FMI Press Release, *supra* note 54; CAL. FOOD & AGRIC. CODE §§ 82000–82001 (enacted by Chapter 787).

175. BROAD LEIB ET AL., *supra* note 16, at 27.

176. *Id.* at 25.

177. See *Restaurants & Foodservice Providers*, *supra* note 147; *Home Composting*, *supra* note 161; *Donation Transportation*, *supra* note 165.

178. See BROAD LEIB ET AL., *supra* note 16, at 25.

179. See generally In ‘Just Eat It,’ Filmmakers Feast for 6 Months on Discarded Food, *supra* note 1.