



T H E  
GOOD FOOD  
I N S T I T U T E

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**RE: USDA Request for Information, FNS-2017-0044-0001**

## **I. Introduction**

### **A. The Good Food Institute**

The Good Food Institute (GFI) is a 501(c)(3) nonprofit organization dedicated to creating a healthy, humane, and sustainable food supply. GFI has a team of scientists, entrepreneurs, and policy experts who focus on using markets and food innovation to transform our food system to emphasize healthy, sustainable, and humane foods, including clean meat and plant-based alternatives. To learn more, please visit [GFI.org](http://GFI.org).

### **B. Consumer Interest in Plant-Based Foods**

Americans are increasingly incorporating a wide variety of plant-based foods into their diets. In recent years, there has been increased interest in plant-based eating, not only among vegetarians but also among “flexitarians” who incorporate a wide variety of plant-based foods into their diet in addition to sometimes consuming animal-based foods. Mintel’s 2017 report on meat alternatives (which includes plant-based meats like chicken and burger products, as well as traditional foods like tofu, tempeh, and seitan) found that the top reason US consumers eat meat alternatives is because they occasionally like to have meat-free days.<sup>1</sup> This same report found

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<sup>1</sup> Mintel, The Protein Report: Meat Alternatives - US - January 2017, Jan. 2017, at 23, available at <http://store.mintel.com/the-protein-report-meat-alternatives-us-january-2017> (as cited Mintel Press Team, *Meat-Free Days Is the Top Reason for Eating Protein Alternatives Among US Consumers*, Mintel (Feb. 16, 2017), <http://www.mintel.com/press-centre/food-and-drink/meat-free-days-top-reason-for-protein-alternative-use>).

that 11% of consumers eat tempeh and seitan at least weekly.<sup>2</sup> Therefore, it is clear that meat alternatives have broader appeal than the vegetarian market.

In terms of plant-based milk, research commissioned from Nielsen by GFI and the Plant Based Foods Association showed that plant-based milk comprises 9% of the overall fluid milk market.<sup>3</sup> According to Mintel, half of Americans consume plant-based milk, including 68 percent of parents and 54 percent of children under age 18.<sup>4</sup> According to the same study, nearly all plant-based milk drinkers (at least nine in 10) also drink dairy milk.<sup>5</sup> Thus, meat alternatives such as tempeh and seitan and dairy alternatives such as soy- and pea-based milks are no longer niche products intended only for vegetarians.

## **II. Food Credits**

### **A. General Principles**

GFI recognizes that the Child Nutrition Programs are intended to align with the Dietary Guidelines for Americans (DGAs),<sup>6</sup> which encourage incorporation of plant-based foods.<sup>7</sup> Moreover, we believe that because the United States “is a highly diverse nation, with people from many backgrounds, cultures, and traditions, and with varied personal preferences,”<sup>8</sup> the foods credited under the programs should be as broad as possible to allow schools and other institutions to offer diverse foods and meet the dietary and cultural preferences of the people they serve, so long as nutrition standards are met.

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<sup>2</sup> *Id.* at 23.

<sup>3</sup> Michele Simon, *Plant Based Foods Sales Experience 8.1 Percent Growth Over Past Year*, Plant Based Foods Association (Sept. 13, 2017), <http://www.prweb.com/releases/2017/09/prweb14683840.htm>.

<sup>4</sup> Mintel Press Team, *US Sales of Dairy Milk Turn Sour as Non-Dairy Milk Sales Grow 9% in 2015*, Mintel (Apr. 20, 2016), <http://www.mintel.com/press-centre/food-and-drink/us-sales-of-dairy-milk-turn-sour-as-non-dairy-milk-sales-grow-9-in-2015>.

<sup>5</sup> Mintel, *Non-Dairy Milk-US-April 2016 (2016)* (as cited Sidebar, *Breaking Down the Non-Dairy Category*, ESP Sponsorship Report (Jul. 10, 2017), <http://www.sponsorship.com/IEGSR/2017/07/10/Dairy-Alternatives-Take-Root-In-Sponsorship/Breaking-Down-The-Non-Dairy-Category.aspx>).

<sup>6</sup> 42 U.S.C. § 1758(a)(4) (requiring that school meals increase consumption of the foods recommended by the Dietary Guidelines for Americans); *id.* § 1766(g)(2) (requiring that USDA align the Child and Adult Care Feeding Program meal patterns with the Dietary Guidelines for Americans).

<sup>7</sup> U.S. Department of Agriculture and U.S. Department of Health and Human Services, *Dietary Guidelines for Americans 2015-2020 Eight Edition*, Dec. 2015, at 35, available at [https://health.gov/dietaryguidelines/2015/resources/2015-2020\\_Dietary\\_Guidelines.pdf](https://health.gov/dietaryguidelines/2015/resources/2015-2020_Dietary_Guidelines.pdf) (recommending 1.5-cup equivalents of legumes and 5-ounce equivalents of seeds, nuts, and soy products per week as part of the Healthy Mediterranean Eating Pattern and the Healthy U.S.-Style Eating Pattern, and 3-cup equivalents and 14-ounce equivalents, respectively for people following the Healthy Vegetarian Eating Pattern).

<sup>8</sup> *2015–2020 Dietary Guidelines for Americans* at 10.

## *Diversifying Menus*

The DGAs define “variety” as a “diverse assortment of foods and beverages across and within all food groups and subgroups selected to fulfill the recommended amounts without exceeding the limits for calories and other dietary components.”<sup>9</sup> Variety is encouraged across each of the eating patterns featured in the DGAs, including the Healthy U.S. Style Eating Pattern, the Healthy Mediterranean-Style Eating Pattern, and the Healthy Vegetarian Eating Pattern. With relation to protein foods, the DGAs recommend consuming a “variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products.”<sup>10</sup> Since the DGAs encourage variety in all eating patterns within each food group, giving schools the opportunity to increase the variety of protein foods available will help bring menus in alignment with the DGAs not only for vegans, vegetarians, and flexitarians, but for the population as a whole.

## *Meeting the Needs of Vegetarians and Culturally Diverse Groups*

According to the Academy of Nutrition and Dietetics, properly planned vegetarian and vegan diets are healthy and nutritionally adequate at all stages of life, including childhood and adolescence, and for athletes.<sup>11</sup> Furthermore, vegetarian and vegan diets may provide health benefits for the prevention and treatment of certain chronic conditions and diseases, including heart disease, type 2 diabetes, and obesity.<sup>12</sup> A 2014 nationally representative poll conducted by Harris Interactive on behalf of the Vegetarian Resource Group found that 4% of children and youth ages 8-18 are vegetarian or vegan.<sup>13</sup>

Whether they were raised vegetarian or decided to stop eating meat on their own, children and teens have various reasons for following vegetarian diets, ranging from concern for animals or the environment to allergies, ingredient sensitivities, and other health concerns. Another factor that often contributes is religion. Vegetarianism is practiced as a tenet of various religions, including Hinduism, Buddhism, and Christianity (specifically Seventh-Day Adventism). Allowing schools to serve a wider variety of plant-based protein foods enables schools to better meet the nutritional needs of these religious groups and vegetarians in general.

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<sup>9</sup> 2015–2020 Dietary Guidelines for Americans at 96.

<sup>10</sup> 2015–2020 Dietary Guidelines for Americans at 15.

<sup>11</sup> Vesanto Melina et al., *Position of the Academy of Nutrition and Dietetics: Vegetarian Diets*, Academy of Nutrition and Dietetics (Dec. 2016),

<http://www.eatrightpro.org/~media/eatrightpro%20files/practice/position%20and%20practice%20papers/position%20papers/vegetarian-diet.ashx>.

<sup>12</sup> *Id.*

<sup>13</sup> The VRG Blog Editor, *How Many Teens and Other Youth Are Vegetarian and Vegan? The Vegetarian Research Group Asks in a 2014 National Poll*, The Vegetarian Research Group Blog (May 30, 2014), <http://www.vrg.org/blog/2014/05/30/how-many-teens-and-other-youth-are-vegetarian-and-vegan-the-vegetarian-resource-group-asks-in-a-2014-national-poll/>.

Similarly, children and teens might have various reasons for avoiding milk, though this tendency is higher among certain racial and ethnic groups that have an increased prevalence of lactose intolerance and milk allergies. Lactose intolerance is characterized by a decreased ability to digest lactose, a sugar found in milk. While the prevalence of lactose intolerance in the U.S. is unknown, it is most common among people whose ancestry is African, Asian, Native American, Arab, Jewish, Hispanic, Italian, or Greek.<sup>14</sup> Globally, an estimated 65-70 percent of the population has a reduced ability to digest lactose after infancy.<sup>15</sup> In addition to lactose intolerance, milk allergy is also common among children. While lactose intolerance involves a gastrointestinal deficiency, milk allergy is characterized by an immune reaction to milk. Milk allergy accounts for one fifth (19.9%) of all food allergies among children, second only to peanut allergy (24.8%).<sup>16</sup> There are also racial and ethnic differences in prevalence of milk allergy, with one study finding that 55.5% of cases occurred in white children, 19.8% in Hispanic children, 16.6% in African American children, and 4.7% in Asian children.<sup>17</sup> Due to the differences in prevalence of lactose intolerance and milk allergy across groups, allowing schools to credit plant-based milks would help schools to better meet the nutritional needs of students from various racial and ethnic backgrounds.

### *Practical Application to the Child Nutrition Programs*

For these reasons, the programs should credit healthy plant-based foods, such as tempeh, seitan, and soy- and pea-based milks, which can contribute to the programs' critical role "in ensuring that America's children have access to the nutritious food they need to learn and succeed in the classroom, after school, and during the summer"<sup>18</sup> and accommodate the dietary and cultural preferences of vegetarians, flexitarians, and people who grew up eating these foods.

As we explain below, the presence or absence of a standard of identity for a food does not indicate the food's nutritional quality, its cultural acceptability, or its availability in the marketplace. Therefore, USDA should not rely on standards of identity to determine which foods are creditable. A better approach would be to set meaningful parameters for foods credited under the Child Nutrition Programs to ensure they make consistent contributions to meal patterns.

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<sup>14</sup> Mishkin S., *Dairy Sensitivity, lactose malabsorption, and elimination diets in inflammatory bowel disease*, U.S. National Library of Medicine National Institutes of Health (Feb. 1997), <https://www.ncbi.nlm.nih.gov/pubmed/9022546>.

<sup>15</sup> Theodore M. Bayless et al., *Lactase Non-persistence and Lactose Intolerance* (2017), <https://link.springer.com/article/10.1007%2Fs11894-017-0558-9>.

<sup>16</sup> Paul V. Williams, *The Epidemiology of Milk Allergy in US Children*, American Academy of Pediatrics (2013), [http://pediatrics.aappublications.org/content/132/Supplement\\_1/S17.2](http://pediatrics.aappublications.org/content/132/Supplement_1/S17.2).

<sup>17</sup> *Id.*

<sup>18</sup> USDA Food and Nutrition Service, "Requests for Information: Food Crediting in Child Nutrition Programs," 82 Fed. Reg. 58,792, 58,792 (Dec. 14, 2017).

These parameters can be set food-by-food to ensure that creditable foods make positive contributions to nutrition, such as providing adequate protein.

### **B. Tempeh, Seitan, and Plant-Based Milks Should Be Creditable**

The 2016 USDA memo which allowed crediting tofu and soy yogurt stated, “The ability to offer tofu as a meat alternate allows meal providers in the School Meal Programs and [Child and Adult Care Feeding Program (CACFP)] to further diversify their menus and better meet the dietary needs of vegetarians and culturally diverse groups.”<sup>19</sup> By this same line of reasoning, we propose that tempeh, seitan, and soy- and pea-based milks should be creditable under the Child Nutrition Programs and CACFP to enable schools and other institutions to diversify their menus and better meet the dietary needs of vegetarians and culturally diverse groups. We also propose that if a food is creditable in one child nutrition program, it should be creditable in all. Thus, tofu and soy yogurt should be creditable in the Summer Food Service Program in addition to the School Breakfast Program, the National School Lunch Program, and CACFP.

#### *Tempeh*

Tempeh is a traditional Indonesian food composed of soybeans that have been bound into a cake form through a natural fermentation process.<sup>20</sup> Tempeh can be used as a meat analogue in a variety of dishes, including stir-frys, salads, sandwiches, and more. Like other meats and meat analogues, tempeh can be marinated to provide additional flavor, and can be prepared through a variety of methods, including steaming, boiling, baking, grilling, or sauteing.<sup>21</sup> Examples of tempeh manufacturers include Lightlife, Tofurky, Westsoy, SoyBoy, and Alive & Healing. According to the FDA, the Reference Amount Customarily Consumed (RACC) for tempeh is 85g, which is equal to 3 oz.<sup>22</sup> Based on this serving size, tempeh is an excellent source of protein with 17.25 g of protein<sup>23</sup> or 34.5% of the daily value (DV) per serving.<sup>24</sup> One serving of tempeh

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<sup>19</sup> Memorandum from USDA Food and Nutrition Service to Regional Directors of Special Nutrition Programs and State Directors of Child Nutrition Programs (Aug. 8, 2016), available at [https://fns-prod.azureedge.net/sites/default/files/cn/SP53\\_CACFP21\\_2016os.pdf](https://fns-prod.azureedge.net/sites/default/files/cn/SP53_CACFP21_2016os.pdf).

<sup>20</sup> Soyfoods Association of North America, *Soy Fact Sheets*, <http://www.soyfoods.org/soy-products/soy-fact-sheets/tempeh-fact-sheet>.

<sup>21</sup> *Id.*

<sup>22</sup> U.S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition, Reference Amounts Customarily Consumed: List of Products for Each Product Category: Guidance for Industry, Jan. 2017, at 20, available at <https://www.fda.gov/downloads/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/UCM535370.pdf>.

<sup>23</sup> U.S. Department of Agriculture Agricultural Research Service, National Nutrient Database for Standard Reference Release 28, May 2016, <https://ndb.nal.usda.gov/ndb/foods/show/4851>.

<sup>24</sup> U.S. Department of Health and Human Services, Food and Drug Administration, Center for Food Safety and Applied Nutrition, A Food Labeling Guide: Guidance for Industry, Jan. 2013, at 127, available at <https://www.fda.gov/downloads/Food/GuidanceRegulation/UCM265446.pdf> (DVs based on a caloric intake of 2,000 calories for people four years or older).

also contains 0.304 mg riboflavin, 2.244 mg niacin, 0.183 mg vitamin B6, 94 mg calcium, 2.29 mg iron, 69 mg magnesium, 226 mg phosphorus, and 350 mg potassium.<sup>25</sup>

The USDA's MyPlate website states that 1 oz cooked tempeh is equivalent to 1 oz equivalent meat alternate.<sup>26</sup> As such, we propose that 1 oz cooked tempeh should be creditable under the Child Nutrition Programs and CACFP as 1 oz equivalent meat alternate. This 1:1 conversion ratio is consistent with tempeh's high protein content at 5.75 g per 1 oz tempeh and relatively low water content (60%),<sup>27</sup> which is significantly lower than tofu's (85%),<sup>28</sup> and is even lower than typical meat products such as white meat chicken with skin (69%) and 85% lean ground beef (64%).<sup>29</sup>

### *Seitan*

Seitan is a meat substitute made from gluten, the main protein of wheat. Like tempeh, seitan is also a traditional food with a long-standing history in the human diet, especially among Asian cultures. Commercially-prepared seitan is now available in restaurants and grocery stores across the US, and it is commonly enjoyed in place of beef or chicken in stir-fries, curries, and noodle dishes. Examples of seitan manufacturers include Sweet Earth Natural Foods, Field Roast, Westsoy, Upton's Naturals, and Pacific Foods. One 3 oz (1/3 cup) serving of seitan is an excellent source of protein, with 21g-22.5g of protein (i.e., 42-45% DV) depending on the brand.<sup>30 31 32</sup> As an example, one 3 oz serving of Westsoy cubed seitan contains 21g of protein, 1.44 mg iron, 1 g of fiber, and no saturated fat, trans fat, or cholesterol.<sup>33</sup>

Although wheat gluten does not meet requirements for crediting as an alternate protein product (APP) due to its low Protein Digestibility Corrected Amino Acid Score (PDCAAS) of 0.25,<sup>34</sup> we do not believe this should prevent seitan from being creditable as a meat alternate. Studies have

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<sup>25</sup> National Nutrient Database for Standard Reference Release 28, *supra* note 23.

<sup>26</sup> U.S. Department of Agriculture, What foods are in the Protein Foods Group, Nov. 3, 2017, <https://www.choosemyplate.gov/protein-foods>.

<sup>27</sup> National Nutrient Database for Standard Reference Release 28, *supra* note 23.

<sup>28</sup> U.S. Department of Agriculture Agricultural Research Service, National Nutrient Database for Standard Reference Release 28, May 2016, <https://ndb.nal.usda.gov/ndb/foods/show/5014>.

<sup>29</sup> U.S. Department of Agriculture, Food Safety and Inspection Service, Water in Meat and Poultry, Aug. 6, 2013, [https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/water-in-meat-and-poultry/ct\\_index](https://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/meat-preparation/water-in-meat-and-poultry/ct_index).

<sup>30</sup> U.S. Department of Agriculture Agricultural Research Service, USDA Branded Food Products Database, Jan. 2018, <https://ndb.nal.usda.gov/ndb/foods/show/24459>.

<sup>31</sup> U.S. Department of Agriculture Agricultural Research Service, USDA Branded Food Products Database, Jan. 2018, <https://ndb.nal.usda.gov/ndb/foods/show/152216>.

<sup>32</sup> U.S. Department of Agriculture Agricultural Research Service, USDA Branded Food Products Database, Jan. 2018, <https://ndb.nal.usda.gov/ndb/foods/show/60269>.

<sup>33</sup> USDA Branded Food Products Database, *supra* note 30.

<sup>34</sup> Jay R. Hoffman & Michael J. Falvo, *Protein -- Which is Best?*, Journal of Sports Science and Medicine (Sept. 1, 2004), <http://www.jssm.org/vol3/n3/2/v3n3-2pdf.pdf>.

shown that proteins do not need to be complemented in every meal to reach the desired level of essential amino acids as long as diets are varied.<sup>35</sup> The Academy of Nutrition and Dietetics states, “The terms complete and incomplete are misleading in relation to plant protein. Protein from a variety of plant foods, eaten during the course of a day, supplies enough of all indispensable (essential) amino acids when caloric requirements are met.”<sup>36</sup> We will not propose a specific oz equivalence for seitan since we expect that the USDA will use its customary method for determining oz equivalence of meat alternate. However, since seitan can be easily, inexpensively, and safely prepared in-house by boiling a dough of vital wheat gluten, we propose that seitan may either be commercially or non-commercially prepared.

### *Plant-Based Milks*

Plant-based milks, also known as non-dairy milk alternatives, include products such as almond, soy, rice, cashew, coconut, pea, hemp, and flax milks. Plant-based milks can be used interchangeably with dairy milk in most recipes, and consumers also enjoy them in cereal or smoothies or as a standalone beverage.

Due to the high prevalence of lactose intolerance and milk allergy, USDA currently allows schools to credit soymilk for students with health conditions that require it, though a doctor’s note is required to make this substitution.<sup>37</sup> For students without such health conditions who wish to have access to milk alternatives for other reasons, a parent or guardian may submit a note permitting the school to make the substitution.<sup>38</sup> We believe that the requirements for students to obtain either a doctor’s note or a parent/guardian note presents an unnecessary administrative barrier that restricts schools’ ability to offer foods that are nutritionally equivalent to dairy milk. Schools should have the flexibility to serve foods that are nutritionally equivalent to dairy milk without the need for a physician or parent/guardian note.

According to the DGAs, “Soy beverages fortified with calcium, vitamin A, and vitamin D, are included as part of the dairy group because they are similar to milk based on nutrient composition and in their use in meals.”<sup>39</sup> Since the DGAs recognize that soymilk is nutritionally equivalent to dairy milk and the RACC for milk and non-dairy milk alternatives is equivalent (8 fl oz), we propose that 8 oz soymilk should be creditable as one serving of fluid milk under the Child Nutrition Programs and CACFP without the need for a parent/guardian or doctor’s note.<sup>40</sup>

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<sup>35</sup> Young VR & Pellett PL, *Plant proteins in relation to human protein and amino acid nutrition*, U.S. National Library of Medicine National Institutes of Health (May 1994), <https://www.ncbi.nlm.nih.gov/pubmed/8172124>.

<sup>36</sup> Vesanto Melina et al., *supra* note 11.

<sup>37</sup> 42 U.S.C § 1758(a)(2)(A)

<sup>38</sup> Id. § 1758(a)(2)(B)(i)

<sup>39</sup> *2015–2020 Dietary Guidelines for Americans*, *supra* note 7, at 23.

<sup>40</sup> Reference Amounts Customarily Consumed, *supra* note 22, at 14.

The DGAs also specify that, “Other products sold as ‘milks’ but made from plants (e.g., almond, rice, coconut, and hemp ‘milks’) may contain calcium and be consumed as a source of calcium, but they are not included as part of the dairy group because their overall nutritional content is not similar to dairy milk and fortified soy beverages (soymilk).”<sup>41</sup> While almond, rice, coconut, and hemp milks are lower in protein than soy and dairy milks, fortified pea-based milks are nutritionally similar to soy and dairy milks in terms of their protein, calcium, vitamin A, and vitamin D content. For example, 8 oz of Ripple Original includes 100 calories, 8g of protein, and twice as much calcium compared to 2% dairy milk.<sup>42</sup> Ripple Original also contains 10% DV of Vitamin A and 30% DV of Vitamin D per 8 oz serving.<sup>43</sup> Bolthouse Farms’ Plant Protein Milk Original contains even more protein than Ripple Original, with 10g of protein, 35% DV calcium, 10% DV Vitamin A, and 20% DV Vitamin D and 110 calories per 8 fl oz serving.<sup>44</sup> In comparison, Dean Foods’ 1% lowfat strawberry milk, which is creditable according to a November 2017 USDA ruling,<sup>45</sup> contains 130 calories, 8g protein and 18g sugars per cup.<sup>46</sup> Thus, in addition to soymilk, we believe that 8 oz pea-based milk should be creditable as one serving of fluid milk under the Child Nutrition Programs and CACFP without the need for a parent/guardian or doctor’s note.

### **C. Standards of Identity Should Not Determine Whether Foods Are Creditable**

In the past, USDA has looked to standards of identity (SOIs) to determine whether foods such as tempeh and tofu are creditable under the Child Nutrition Programs.<sup>47</sup> In the current Request for Information, USDA explains this practice by stating that SOIs assist USDA in determining that “products from all manufacturers will have the same characteristics and, thus, make a consistent contribution to the meal patterns.”<sup>48</sup> However, relying on SOIs to determine which foods are creditable limits the ability of schools and other care facilities to offer a broad array of healthy and culturally diverse foods to the populations they serve and does not meaningfully advance the goals of the Child Nutrition Programs.

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<sup>41</sup> 2015–2020 Dietary Guidelines for Americans, *supra* note 7, at 23.

<sup>42</sup> Ripple, Ripple Foods (2017), <https://www.ripplefoods.com/kids/water/>.

<sup>43</sup> *Id.*

<sup>44</sup> Bolthouse Farms, Plant Protein Milk Beverages (2018), <https://www.bolthouse.com/product/plant-protein-milk-original/>.

<sup>45</sup> <https://www.gpo.gov/fdsys/pkg/FR-2017-11-30/pdf/2017-25799.pdf>.

<sup>46</sup> U.S. Department of Agriculture Agricultural Research Service, USDA Branded Food Products Database, Jan. 2018, <https://ndb.nal.usda.gov/ndb/foods/show/97393>.

<sup>47</sup> Memorandum from USDA Food and Nutrition Service to Regional Directors, *supra* note 19 (tofu); Food Crediting in Child Nutrition Programs, *supra* note 18 (tempeh).

<sup>48</sup> 82 Fed. Reg. at 58,793.

## *Standards of Identity Are Out of Sync with Child Nutrition Programs*

Standards of identity were established separately from the National School Lunch Program and other Child Nutrition Programs, and their purpose is completely different. Congress gave the Food and Drug Administration the authority to establish SOIs in the Food, Drug and Cosmetic Act of 1938 to prevent the sale of debased foods in the marketplace, *i.e.*, “foods from which traditional constituents had been removed or in which new, and frequently cheaper, ingredients had been substituted.” Where fraud existed—particularly in staple foods—the FDA would have the authority to fight it.<sup>49</sup> Similarly, Congress gave the USDA the authority to establish SOIs under the Federal Meat Inspection Act.<sup>50</sup>

The intent of SOIs is to prevent inferior products from misappropriating food names by enumerating what a food product must contain to be marketed under a certain name. Thus, while they can provide consistency for *the term* used for a food across manufacturers, they are not necessarily adequate to ensure that a food meets a particular nutritional standard. In fact, the Congressional Research Service recently found that SOIs “do not address quality issues, such as inadvertent adulteration, or whether the item meets the consumer’s individual nutritional needs.”<sup>51</sup>

This disconnect between the function of SOIs and their use in the food crediting system is further revealed by the language of the standards themselves. SOIs vary wildly in content and style depending on the food. Some standards like meat stew<sup>52</sup> are a couple of sentences in length, while others like sherbet<sup>53</sup> span paragraphs. These standards have little relation to the goals of the food crediting system. For example, the SOI for luncheon meat specifies that “Mechanically Separated (Species) may be used” and “water or ice may be used in the preparation of luncheon meat in an amount not to exceed 3 percent of the total ingredients.”<sup>54</sup> Similarly, turkey ham must be labeled “Chunked and Formed” if fabricated from pieces of turkey thigh meat “equivalent in size to a one-half inch cube or greater” and “Ground and Formed” or “Chopped and Formed” if the pieces are smaller than the equivalent of a one-half inch cube.<sup>55</sup> It is not clear that these specifications do anything to ensure that foods make consistent contributions to meal patterns. Moreover, some standards are completely subjective in nature, requiring that foods have a “fresh odor and appearance”<sup>56</sup> or the “usual characteristics of a barbecued article.”<sup>57</sup>

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<sup>49</sup> Merrill RA, Collier EM, “*Like Mother Used to Make*”: An Analysis of FDA Food Standards of Identity, 74 Colum. L. Rev. 561, 561 (1974).

<sup>50</sup> 21 U.S.C. § 621.

<sup>51</sup> U.S. Cong. Research Serv., Standards of Identity for Foods and Plant-Based Food Products (Jan. 18, 2018).

<sup>52</sup> 9 C.F.R. § 319.304.

<sup>53</sup> 21 C.F.R. § 135.140.

<sup>54</sup> 9 C.F.R. § 319.260.

<sup>55</sup> *Id.* § 381.171.

<sup>56</sup> *Id.* § 319.29.

<sup>57</sup> *Id.* § 319.80.

## *Standards of Identity Limit Participating Institutions' Ability to Serve Healthy and Culturally Diverse Foods*

As early as the 1970s, scholars recognized that standards of identity could inhibit competition and diminish consumer choice. Writing for the *Columbia Law Review* in 1974, Richard Merrill and Earl Collier, Jr. argued that standards of identity “impose additional social costs by discouraging the development of new food products.” They offered soy products as an example, reasoning that consumers may want to purchase soy versions of foods because of soy’s health benefits. However, they lamented that, to the extent that SOIs discouraged the sale of such foods, “such persons have had either to forego eating certain foods or to settle for less healthful alternatives.”<sup>58</sup>

This year, the FDA came to the same conclusion in its Strategic Policy Roadmap, which states that the agency will work toward modernizing certain standards of identity specifically to address “current barriers to the development of healthier products,” while ensuring accurate information for consumers.<sup>59</sup> The fact that its sister agency recognizes that SOIs are out-of-date is further evidence that USDA should not rely on SOIs (or wait for new ones) in expanding the list of creditable foods to include the healthy, plant-based foods we describe above.

Using SOIs, which do not relate to the nutrition goals of the program, as a means to determine whether a particular food is creditable is both under- and overinclusive. Certain foods that could make positive contributions to nutrition, such as tofu and tempeh, do not possess SOIs. Meanwhile, there are many foods with little to no nutritional value that do. (These foods, despite having SOIs, are not credited because they are nutritionally deficient.)

Given the diversity of the food supply and the rate of innovation,<sup>60</sup> SOIs cannot possibly keep up with the choices that the USDA, schools, and other institutions have available to them. USDA should not hobble its own ability to credit nutritious and diverse foods in Child Nutrition Programs by relying on the existence of SOIs. Instead, if USDA determines that there is variability across a food category, it can set common-sense nutrition parameters for creditable foods—such as a minimum amount of protein per oz equivalent for meat alternate foods. This approach will allow USDA to retain its focus on ensuring that creditable foods provide healthy and diverse options to the participants of the Child Nutrition Programs.<sup>61</sup>

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<sup>58</sup> Merrill *et al.*, 74 Colum. L. Rev. at 607-08.

<sup>59</sup> FDA, Healthy Innovation, Safer Families: 2018 Strategic Policy Roadmap (Jan. 2018), <https://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/UCM592001.pdf>.

<sup>60</sup> See, e.g., USDA Economic Research Serv., New Products, <https://www.ers.usda.gov/topics/food-markets-prices/processing-marketing/new-products/>.

<sup>61</sup> Child Nutrition Programs, of course, already set limits for calories, saturated fat, and sodium for the full meal, so food-specific limits for these nutrients are not necessary.

### **III. Conclusion**

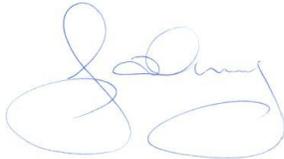
GFI appreciates the opportunity to provide this information to the USDA. If we can be helpful as you consider the issues we raise above, we would be happy to continue the discussion with you.

Please keep us informed about the next steps in this process, as well as future opportunities to engage with your agency to encourage the inclusion of plant-based foods in federal feeding programs.

Sincerely,



Brianna Cameron, M.P.H.  
Business Analyst



Jessica Almy, J.D.  
Director of Policy



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