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## Practice What You Preach: Does the National School Lunch Program Meet Nutritional Recommendations Set by Other USDA Programs?

'Lizabeth DiSiena

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# PRACTICE WHAT YOU PREACH: DOES THE NATIONAL SCHOOL LUNCH PROGRAM MEET NUTRITIONAL RECOMMENDATIONS SET BY OTHER USDA PROGRAMS?

#### 'LIZABETH DISIENA

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#### I. INTRODUCTION

Billy and Jessica are two students who attend Riverside High School. Billy, who just turned eighteen and started his senior year of high school, stands six-foot-five, weighs around 230 pounds, and is the star center of his high school basketball team. He has practice after school, so he usually does not return home until around 7:30 in the evening. Jessica, like her brother Billy, is also a star, but her achievements are in academics. She studies for her classes during the after school care program that runs until 5:00 p.m. every day. Although athletic when she was younger, Jessica chooses to focus her attention on academics instead of sports, standing five-foot-three inches tall and 115 pounds, average for her age. For the purposes of this case study, we shall assume Billy and Jessica come from an underprivileged family.

On a typical school day, Billy and Jessica arrive at Riverside High School around 6:50 a.m. Before classes start, they eat a breakfast provided for them by the School Breakfast Program.<sup>1</sup>

Both students receive the lunch offered to them as part of the National School Lunch Program,<sup>2</sup> which is scheduled for Billy around 10:30 a.m. and for Jessica at 12:30 p.m. Around 2:30 p.m., after school ends for the day, Jessica picks up her after school snack provided by the Afterschool Nutrition Program<sup>3</sup> while Billy rushes to

The School Breakfast Program is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. It began as a pilot project in 1966, and was made permanent in 1975. The School Breakfast Program is administered at the Federal level by the Food and Nutrition Service. At the State level, the program is usually administered by State education agencies, which operate the program through agreements with local school food authorities. . . . The School Breakfast Program operates in the same manner as the National School Lunch Program." (2013), "The School Breakfast Program is a federally assisted meal program operating in public and nonprofit private schools and residential child care institutions. It began as a pilot project in 1966, and was made permanent in 1975. The School Breakfast Program is administered at the Federal level by the Food and Nutrition Service. At the State level, the program is usually administered by State education agencies, which operate the program through agreements with local school food authorities. . . . The School Breakfast Program operates in the same manner as the National School Lunch Program.

Id.

Id.

The afterschool snacks follow the same eligibility requirements as the National School Lunch Program meals. *Id.* Additionally, programs that operate in areas where fifty percent of the students are eligible for free or reduced-price meals, such programs may serve all their snacks for free. *Id.*; *see also* U.S. DEP'T OF AGRIC., NATIONAL SCHOOL LUNCH PROGRAM (2013), http://www.fns.usda.gov/sites/default/files/NSLPFactSheet.pdf [hereinafter NATIONAL

<sup>&</sup>lt;sup>1</sup> 7 C.F.R. § 220 (2013). *See also* U.S. DEP'T OF AGRIC., THE SCHOOL BREAKFAST PROGRAM (2013), http://www.fns.usda.gov/sites/default/files/SBPfactsheet.pdf.

<sup>&</sup>lt;sup>2</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>3</sup> 7 C.F.R. § 210.2 (2013). The afterschool snack is only available to qualified afterschool programs. *Id.* A qualified afterschool care program includes any "program providing organized child care services to enrolled school-age children after school hours for the purpose of care and supervision of children . . . distinct from any extracurricular program organized primarily for scholastic, cultural or athletic purposes.

basketball practice without a snack. Billy is not eligible for a snack because basketball at Riverside is organized solely for an athletic purpose and does not qualify under the Afterschool Nutrition Program.<sup>4</sup> Because of their family's limited financial means, neither Jessica nor Billy is able to eat anything outside of what is provided for them by the school's nutritional programs until they get home for dinner.<sup>5</sup>

Assuming that Riverside High School is in full compliance with the nutritional requirements of the National School Lunch Program,<sup>6</sup> School Breakfast Program,<sup>7</sup> and Afterschool Snack Program,<sup>8</sup> Billy would typically be served an average of 1,200-1,350 calories during a regular school day, while Jessica would normally be served 1,500-1,850 calories.<sup>9</sup> Considering the difference in gender and activity level

SCHOOL LUNCH PROGRAM]. While not the focus of this Note, it is worth noting that the afterschool snack option could better meet the goals National School Lunch Program by providing a snack to children who participate in physical activities after school.

<sup>&</sup>lt;sup>4</sup> See 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>5</sup> See NATIONAL SCHOOL LUNCH PROGRAM, supra note 3. The National School Lunch Program follows the United States Department of Agriculture's annual adjustments to the Income Eligibility Guidelines to determine eligibility for free and reduced prices meals and free milk. See id. The Guidelines are to be used by the schools, institutions, and facilities that are participating in the National School Lunch Program. See id. The annual adjustments are required under the National School Lunch Act. Child Nutrition Programs; Income Eligibility Guidelines, 78 Fed. Reg. 17,628 (Mar. 22, 2013); 42 U.S.C. § 1758(b)(1); 42 U.S.C. § 1766(c)(4); The National School Lunch program determines the cost for the family of a child on a sliding scale based on the family's annual income. See NATIONAL SCHOOL LUNCH PROGRAM, supra note 3.

<sup>&</sup>lt;sup>6</sup> See 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>7</sup> See 7 C.F.R. § 220 (2013).

<sup>&</sup>lt;sup>8</sup> See 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>9</sup> See id.; see 7 C.F.R. § 220.8 (2013). The following chart lists the calorie ranges and allotments required by the National School Lunch Program. 7 C.F.R. § 210.10 (2013).

of Jessica and Billy, the variation in the potential caloric intake of these two students relying on federally regulated nutrition programs is more concerning.

In accordance with the United States Department of Agriculture (USDA) estimated caloric needs, Jessica, a sedentary thirteen-year-old female, should consume approximately 1,600 calories per day. 10 Comparing this recommended

Marianten	Lunch meal pattern			
Meal pattern	Grades K-5	Grades 6-8	Grades 9-12	
		Amount of food* per week (minimum per day)		
Fruts (cups) ** Vegetables (cups) ** Dark green ** Red-Grange ** Beens and peas (legumes) ** Starchy ** Other ** Additional Veg to Reach Total ** Grans (or eq!* Mosts/Most Alternates (or eq!* Put/ mik (cups) **	3% (%) % % % % % % % % % % % % % % % % % %	2½ (½) 3½ (½) ½ ½ ½ ½ ½ ½ 1= 8-10 (1) 9-10 (1)	5 (1 5 (1 7 1 / 1 7 1 / 2 10-12 (2 10-12 (2 5 (1	
Other Specifications: Daily Amount Bas	ed on the Average for a	5-Day Week		
Min-max calories (koal)"  Saturated fat (% of total calories)"  Sodium (mg)":	<10	600-700 <10 ≤710	750-856 < 10 ≤ 740	
Trans fath		Nutrition label or manufacturer specifications must indicate zero grams of trans fat per serving.		
*Food terms included in each group and subgroup and amount e *One quarter-out of drief that courts as % out of fault 1, our hand of the fluid or vegotable otherings may be in the form of juice, if *This category consists of *Their vegotables* as defined in § 1, *This particles are consisted in § 210.00(c)(2) as defined in § 1, *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to meet me total *Apply vegotable subgroup stay by edited to me total *Apply vegotable subgroup stay by edited to the total *Apply vegotable subgroup stay by edited to the total *Apply vegotable subgroup stay by edited to the subgroup stay of the total *Frail sodium targets must be met no later than July 1, 2022 (** *Frail sodium targets must be met no later than July 1, 2022 (**)	of leafly greens counts as All juice must be 100% it. 210,10(c)(2)(iii)(E). For it from the dark green, it by vegetable requirement offered must be whole jow-fat (1 percent or less may be added to the minutritional value and flu SY 2022–2023). The first	We cup of vegetabilities engine, it is seen and the seen and bear prain-rich. Beginning unflavored) or fatheral pattern if within id mik with fat contit intermediate target	NSLP, the "Other ns/peas (legumes g July 1, 2014 (\$) free (unflavored o in the specification tent greater than in must be met no	

The following chart outlines the calorie range and allotments for the School Breakfast Program. 7 C.F.R. § 220.8 (2013).

	Breakfast meal pattern		
	Grades K-5	Grades 6-8	Grades 9-12
Meal pattern	Am	ount of food - per we (Minimum per day)	sek
Fruits (cups)** Vegetables (cups)**  Vegetables (cups)**  Ped Officing  Beans and peas ((egumes)  Starchy  Other  Grains (oz eqi*  Meats/Meat Affernates (oz eqi*  Fluid mik* (cups)	5 (1) 0 0 0 0 0 0 0 7-10 (1) 0 5 (1)	5 (1) 0 0 0 0 0 0 0 8–10 (1) 0 5 (1)	5 (1) 0 0 0 0 0 0 0 9–10 (1) 0 5 (1)
Other Specifications: Daily Amount Based of	on the Average for	a 5-Day Week	
Min-max calories (xcal)+ <sup>3</sup> Saturated fat (% of total calories) <sup>3</sup> Sodium (mg) <sup>3</sup> Trans fat <sup>3</sup>		400–550 < 10 ≤ 470 or manufacturer specing grams of trans fat	
Food lams included in each group and subgroup and amount equi- or Don quarter rup of deef full contris as 1% rup of trul? 1 cop of the 1% rup	ualty greens counts is ince must be 100%; for full daily and 5 of fruit daily and 5 of fruit daily and 5 of settitution must be find 10.10(c)(2)(ii).  10.10(c)(2)(iii).  10.10(c)(2)(c)(2)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)(c)	is 1/2 cup of vegetab. uil-strength, ups of fruit weekly. No om the dark green perain-rich and scho- aris after the minima, hilk fat or less, unfli- bool week must be we meal pattern if within did milk with fat con- ti intermediate targe	ies. No more than legetables may be red/orange, beans olds must meet the and daily grains re- svored) or fat-free which the range (at the specifications ent greater than 1 is must be met no

<sup>10</sup> U.S. Dep't of Agric., ESTIMATED CALORIE NEEDS PER DAY BY AGE, GENDER, AND PHYSICAL ACTIVITY LEVEL, USDA FOOD PATTERNS, http://www.cnpp.usda.gov/sites/default/files/usda\_food\_patterns/EstimatedCalorieNeedsPerD ayTable.pdf (last visited Sept. 16, 2014) [hereinafter ESTIMATED CALORIE NEEDS]. A

caloric intake with the average caloric content derived from subsidized food at school, Jessica either has one hundred calories remaining for dinner, or exceeds her daily allowance by two-hundred and fifty calories before she even sits down to eat.<sup>11</sup>

Billy, on the other hand, has a different problem. According to the USDA, the estimated daily caloric need for Billy, an eighteen-year-old male with an active lifestyle, is approximately 3,200 calories. <sup>12</sup> Based on this recommendation, the star athlete receives fewer calories than recommended by 1,350 or 1,700 per day, seriously less than needed to be adequately nourished and with only one meal left in the day. <sup>13</sup>

Thus, the National School Lunch Program<sup>14</sup> does not adequately fulfill the caloric needs of all children who are participating in the program. This is surprising because the USDA specifically outlines distinct differences in caloric intake requirements between adolescent males and females.<sup>15</sup>

The dissimilar caloric requirements become even more apparent when viewing recommendations based on age and activity levels. The current School Breakfast Program, <sup>16</sup> National School Lunch Program, <sup>17</sup> and Afterschool Nutrition Program only consider the grade level of the child when determining caloric and nutritional allotments. <sup>18</sup> Based on these findings, the USDA would more effectively reach the

sedentary lifestyle is one that includes only the light physical activity associated with "typical day-to-day life." *Id.* The USDA Food Patterns is a part of the Center for Nutrition Policy and Promotion and is available to help individuals comply Dietary Guidelines for Americans recommendations. *USDA Food Patterns*, UNITED STATES DEPARTMENT OF AGRICULTURE CENTER FOR NUTRITION POLICY AND PROMOTION, http://www.cnpp.usda.gov/USDAFoodPatterns (last visited Sept. 14, 2014).

<sup>14</sup> 7 C.F.R. § 210 (2013).

0

This calculation was reached through consideration of the average calorie requirements

from the School Breakfast Program, National School Lunch Program, and After School Nutrition Program subtracted from the USDA Food Patterns recommended caloric intake for individuals with similar age and activity level to Billy and Jessica. It should be noted that 7 C.F.R. § 210.10 states that "[t]he average daily amount for a 5-day school week must fall within the minimum and maximum levels." *Id.* 7 C.F.R. § 210.10 provides the minimum and maximum calorie allotments, measured in kcals, prescribed to primary, secondary and high school children. *Id.* Primary school children (kindergarten through fifth grade) are allowed 550-650 kcals, middle school children (grades six through eight) are allowed 600-700 kcals, and high school children (grades nine through twelve) are allowed 750-850 kcals. *Id.* 

<sup>&</sup>lt;sup>12</sup> See ESTIMATED CALORIE NEEDS, supra note 10. An active lifestyle is one that includes "physical activity equivalent to walking more than [three] miles per day at [three] to [four] miles per hour, in addition to the light physical activity associated with typical day-to-day life." *Id.* 

<sup>&</sup>lt;sup>13</sup> See id.

<sup>&</sup>lt;sup>15</sup> See ESTIMATED CALORIE NEEDS, supra note 10.

<sup>&</sup>lt;sup>16</sup> 7 C.F.R. § 220 (2013).

<sup>&</sup>lt;sup>17</sup> 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>18</sup> *Id*.

goals of these programs through consideration of gender, activity level, and individual age when formulating calorie requirements for the National School Lunch Program.<sup>19</sup>

Part II of this Note provides a historical background of the National School Lunch Program,<sup>20</sup> specifically analyzing the purpose, implementation, and current state of the program. Part III begins by explaining why consideration of calories plays an important role in achieving proper weight management. It then concludes with a comparison between the caloric intake requirements of the National School Lunch Program,<sup>21</sup> and the nutritional recommendations by other USDA government health initiatives,<sup>22</sup> and non-governmental programs.<sup>23</sup> Finally, Part IV proposes that the National School Lunch Program<sup>24</sup> provide nutrition options for students that appropriately consider age, gender, and activity level in determination of caloric limits for lunches served as a part of the nutrition program.

#### II. BACKGROUND

#### A. Early History of the National School Lunch Program

An analysis of the early history of the National School Lunch Program is essential to understanding the rationale behind the program's nutritional requirements. Although the National School Lunch Program was not officially created until 1946, such programs were conceptualized in late nineteenth and early twentieth centuries during the Progressive Era.<sup>25</sup> During this time there was a notable policy shift in education, requiring for the first time all children attend school.<sup>26</sup> Most children, including those born of wealthier families, were sent to school with little or no food.<sup>27</sup> Due to hunger, malnourished students had greater difficulty focusing in the classroom and, as a result, received lower grades than their well-fed counterparts.<sup>28</sup>

<sup>&</sup>lt;sup>19</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>20</sup> *Id*.

<sup>&</sup>lt;sup>21</sup> Id.

<sup>&</sup>lt;sup>22</sup> See ESTIMATED CALORIE NEEDS, supra note 10; see also U.S. DEP'T OF HEALTH & HUMAN SERVS., WE CAN! PARENT TIPS (2010), http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/downloads/calreqtips.pdf [hereinafter Parent Tips].

<sup>&</sup>lt;sup>23</sup> See Samuel S. Gidding et al., *Dietary Recommendations for Children and Adolescents:* A Guide for Practitioners, 117 Am. ACAD. PEDIATRICS 544 (2006).

<sup>&</sup>lt;sup>24</sup> 7 C.F.R. § 210 ( 2013).

<sup>&</sup>lt;sup>25</sup> See Janet Poppendieck, Free For All: Fixing School Food in America 47 (Darra Goldstein, ed., University of California 2010) (2010).

<sup>&</sup>lt;sup>26</sup> See id.

<sup>&</sup>lt;sup>27</sup> See id.

 $<sup>^{28}\,</sup>$  Susan Levine, School Lunch Politics: The Surprising History of America's Favorite Welfare Program 32 (William Chafe et al. eds., 2008).

Early school lunch programs seeking to curb childhood hunger were mainly local efforts supported by charity and women's organizations.<sup>29</sup> "During the late nineteenth century, voluntary organizations regularly operated free lunch programs for poor children in American cities."<sup>30</sup> Two specific groups of activists emerged to address the well being of impoverished children.<sup>31</sup> The first group included individuals who were involved with early education.<sup>32</sup> Those in direct contact with children on a regular basis in school became aware that many children from impoverished families were not receiving proper nutrition.<sup>33</sup> The second group was concerned with the quality of the food being fed to children.<sup>34</sup> The common interest of both groups of reformers, to better protect the well being of the country's children, sparked the creation of lunch programs in many of the country's largest cities.<sup>35</sup> The programs were purely local; the federal government did not become involved until after the Great Depression.<sup>36</sup>

The economic effect of the Great Depression led to food scarcity, causing a drastic increase in the number of hungry and malnourished people.<sup>37</sup> As a result:

In many communities, civic groups and PTAs started school lunch programs or expanded old ones. In New York City, teachers gave a portion of their salaries to fund such programs. In Chicago, the Board of Education started a lunch program in about half the city's schools that relied on donated food and volunteer labor. A dozen states enacted legislation authorizing cities to use tax funds for school meals, and in some cases added state funds to help meet the costs.<sup>38</sup>

One impetus for the creation of the school lunch programs was to prevent children from falling victim to hunger.<sup>39</sup> But while it was an interest in protecting hungry children in the aftermath of the Great Depression that pushed communities and states to develop lunch programs, the federal government's creation of a similar program was motivated by a desire to recycle agricultural surplus created by

<sup>30</sup> See LEVINE, supra note 28, at 33. An example of a charitable organization's local efforts to provide children with food is illustrated by the Women's School Alliance of Milwaukee that offered lunches to poor children using donations and the Home and School League from Philadelphia that sent home economists into high school to teach girls how to prepare meals and to feed children who could not afford to bring in their own lunches to school. *Id.* 

<sup>&</sup>lt;sup>29</sup> See id.

<sup>&</sup>lt;sup>31</sup> See POPPENDIECK, supra note 25, at 47.

<sup>32</sup> See id.

<sup>33</sup> See id.

<sup>&</sup>lt;sup>34</sup> *Id*.

<sup>&</sup>lt;sup>35</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> *Id*.

<sup>&</sup>lt;sup>37</sup> *Id*.

<sup>&</sup>lt;sup>38</sup> *Id.* at 47, 48.

<sup>&</sup>lt;sup>39</sup> See id. at 48.

farmers' attempts to compensate for declining food prices with larger production. As farmers increased production to try to offset the decrease in the market value of the goods they were trying to sell, surpluses of food commodities developed. President Franklin D. Roosevelt's New Deal programs sought to restore order to the markets by destroying the surpluses. In this policy caused a negative public reaction as many people were struggling to put food on the table. In negative public reaction caused President Franklin Roosevelt to "[o]rder the Secretary of Agriculture and the Federal Emergency Relief administrator to set up a program to purchase farm surpluses and distribute them to the needy unemployed. A program was implemented through the entity called the Federal Surplus Relief Corporation and was used primarily to recycle surplus farm commodities.

The program instituted by the Federal Surplus Relief Corporation ended in 1935 and the remaining resources were disbursed to the USDA, which in turn donated some of the surplus food to schools.<sup>45</sup> The relationship between the USDA and the schools was solidified through Section 32 of the Agricultural Adjustment Act (known to food assistance groups simply as "Section 32").<sup>46</sup> Section 32 was designed to boost the income of the farmers and increase the market opportunities for products that the farmers were trying to sell.<sup>47</sup> Essentially, Section 32 "authorized the Department of Agriculture to purchase surplus farm commodities and donate these goods to schools and welfare offices in every state."<sup>48</sup> Section 32 required that such donated surplus commodities not reenter the market and displace the sales of other foods.<sup>49</sup> Schools had to agree to not sell or exchange the foods that were received, lunches had to be operated on a nonprofit basis, and the meals had to be provided free to children who could not afford to pay for them.<sup>50</sup> "The focus was on using the available foods, *not* on a balanced diet."<sup>51</sup> For the first time, a federal welfare policy was directly linked to the agriculture sector.<sup>52</sup>

Like any federally administered program, the USDA needed a workforce to implement the requirements of Section 32. Specifically, Section 32 required workers to prepare school lunches. Free labor was provided for this purpose by the Works Progress Administration and an abundance of female workers without appropriate

<sup>41</sup> *Id*.

<sup>&</sup>lt;sup>40</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> *Id*.

<sup>&</sup>lt;sup>43</sup> *Id*.

<sup>&</sup>lt;sup>44</sup> *Id*.

<sup>&</sup>lt;sup>45</sup> *Id*.

<sup>&</sup>lt;sup>46</sup> *Id*.

<sup>&</sup>lt;sup>47</sup> *Id*. at 49.

<sup>&</sup>lt;sup>48</sup> LEVINE, *supra* note 28, at 46.

<sup>&</sup>lt;sup>49</sup> See POPPENDIECK, supra note 25, at 49.

<sup>&</sup>lt;sup>50</sup> *Id*.

<sup>&</sup>lt;sup>51</sup> *Id.* (emphasis added).

<sup>52</sup> LEVINE, supra note 28, at 46.

job placement.<sup>53</sup> The government believed female workers would be ideal for preparing lunches because "there were schools in every community, the projects required very little capital investment, and women were assumed to have cooking skills."<sup>54</sup>

When the United States entered World War II, the state of the country changed. There was a decrease in labor and an increase in food shortages.<sup>55</sup> Concern about malnutrition reemerged nationally with awareness of the correlation between childhood malnutrition and the failure rate of draft physicals for young men entering the armed forces.<sup>56</sup> Thus, through the lens of war, apprehension of malnutrition grew, prompting the Federal Security Agency to charge the Committee on Food and Nutrition of the National Research Council with making an appropriate determination of how many vitamins, minerals, and calories a person required to adequately maintain health and productivity.<sup>57</sup> This directive was issued in order to ensure that workers and soldiers were "well fed" in the event their service was needed. <sup>58</sup>

Farmers concerned with market instability, for whom the price collapse and market flux after World War I was in recent memory, lobbied for the implementation of the Steagall Act.<sup>59</sup> The Steagall Act<sup>60</sup> allowed the nation to support farm prices for two years after the end of World War II.<sup>61</sup> In order to guarantee that the school lunch programs would be in place to dispose of the inevitable surplus that would occur in light of the provisions of the Steagall Act, Congress passed legislation that would "[p]rovide a cash indemnity to reimburse schools for funds spent to procure

In 1935, emergency relief was supplanted by work relief, and the creation of the Works Progress Administration (WPA) added a new actor to the school food mix. About one-sixth of the applicants accepted for work relief by the WPA were women, but the agency's typical sites, construction projects, were deemed inappropriate for females. Many unemployed women had previously worked in factories, but the federal legislation prohibited the WPA from undertaking manufacturing projects that would compete with private industry. School lunch projects provided an ideal solution. There were schools in every community, the projects required very little capital investment, and women were assumed to have cooking skills.

Id.

<sup>54</sup> *Id*.

55 Id. at 50.

<sup>56</sup> *Id*.

<sup>57</sup> Id.

<sup>&</sup>lt;sup>53</sup> POPPENDIECK, supra note 25, at 49.

<sup>&</sup>lt;sup>58</sup> *Id.* This initiative developed the concept of Recommended Dietary Allowances (RDAs). *Id.* "The RDAs made sure that workers and soldiers were sufficiently well fed to wage effective war." *Id.* 

<sup>&</sup>lt;sup>59</sup> *Id.* "Congress passed the Steagall Act, committing the nation to support farm prices for two years after the end of hostilities, thus virtually guaranteeing that there would once again be large surpluses of food in federal hands at the end of the war." *See* 12 U.S.C. § 227 (2012).

<sup>60 12</sup> U.S.C. § 227 (2012).

<sup>&</sup>lt;sup>61</sup> POPPENDIECK, *supra* note 25, at 50.

foods locally." <sup>62</sup> Such a reimbursement-type payment schedule essentially constituted a subsidy program. <sup>63</sup> The federal government recognized the need for a standard to determine what food would qualify for the subsidy, and used the previously established dietary guidelines to create the "Type A" meal, which would endure with relatively little change until the late 1970s. <sup>64</sup> As World War II ended, and the benefit of federal support for the provision of lunch for children in schools became clear, supporters of the lunch programs began advocating for a permanent program. <sup>65</sup>

#### B. Implementation of the National School Lunch Program

On June 4, 1946, President Harry S. Truman signed the National School Lunch Act, <sup>66</sup> giving the United States its first permanent school lunch program. <sup>67</sup> Upon the signing of the National School Lunch Act, <sup>68</sup> President Truman stated, "today, as I sign the National School Lunch Act, I feel that the Congress has acted with great wisdom in providing the basis for strengthening the nation through better nutrition for our school children." <sup>69</sup> The National School Lunch Program <sup>70</sup> allowed the federal government to provide apportioned aid to states to assist school districts with food and equipment used to help serve free or reduced priced lunches to underprivileged

Today, as I sign the National School Lunch Act, I Feel that the Congress has acted

with great wisdom in providing the basis for strengthening the nation through better nutrition for our school children. In my message to Congress last January, I pointed out that we have the technical knowledge to provide plenty of good food for every man, woman, and child in this country, but that despite our capacity to produce food we have often failed to distribute it as well as we should. This action by the Congress represents a basic forward step toward correction that failure. In the long view, no nation is any healthier than its children or more prosperous than its farmers; and in the National School Act, the Congress has contributed immeasurably both to the welfare of our farmers and the health of our children. Under previous school lunch programs made possible by year-to-year authorization we have been able to provide as many as six million children with nutritious lunches at noon. This has laid a good foundation for the permanent program. In the future, increasing number will benefit—and on a permanent basis. I hope that all State and local authorities will cooperate fully with the United States Department of Agriculture in establishing the cooperative school lunch

in every possible community.

<sup>&</sup>lt;sup>62</sup> *Id*.

<sup>63</sup> See id.

<sup>64</sup> Id. at 50.

<sup>65</sup> *Id.* at 51.

<sup>66 42</sup> U.S.C. § 1751 (2012).

<sup>67</sup> See 7 C.F.R. § 210.1 (2013).

<sup>68 42</sup> U.S.C. § 1751 (2012).

<sup>&</sup>lt;sup>69</sup> Gerhard Peters & John T. Woolley, *Statement by President upon Signing the National School Lunch Act*, THE AMERICAN PRESIDENCY PROJECT http://www.presidency.ucsb.edu/ws/?pid=12410 (last visited Sept. 15, 2014).

Ιd

<sup>&</sup>lt;sup>70</sup> 7 C.F.R. § 210 (2013).

children.<sup>71</sup> The original nutritional requirements for the Type A lunch provided by the National School Lunch Act<sup>72</sup> called for a "one-half pint of whole milk, two ounces of a protein-rich food,<sup>73</sup> three-fourths cups vegetable or fruit, one portion of bread, and two teaspoons of butter."<sup>74</sup> This type of lunch was "designed to meet [the recommendations] of one-third to one-half of the minimum daily nutritional requirements of a child ten to twelve years old."<sup>75</sup> By the end of its first year, the National School Lunch Program<sup>76</sup> was providing lunches for approximately 7.1 million children.<sup>77</sup> The early years of the National School Lunch Program<sup>78</sup> occurred within the economic prosperity of the 1950s, allowing the program to nearly double by the 1960s.<sup>79</sup>

On October 11, 1966, President Lyndon B. Johnson signed the Child Nutrition Act of 1966<sup>80</sup> in a response to the War on Poverty. Based on the success of the National School Lunch Act, the Child Nutrition Act of 1966<sup>83</sup> established a federally assisted School Breakfast Program<sup>84</sup> and Special Milk Program. Upon signing the Child Nutrition Act of 1966, President Johnson stated, Good nutrition is essential to good learning. Congress decided that the School Breakfast Program<sup>88</sup> should be included in recognition of the demonstrated relationship

<sup>&</sup>lt;sup>71</sup> Gordon W. Gunderson, *National School Lunch Act*, United States Dep't of Agriculture Food and Nutrition Service, http://www.fns.usda.gov/nslp/history\_5 (last modified June 17, 2014).

<sup>&</sup>lt;sup>72</sup> 42 U.S.C. § 1751 (2012).

<sup>&</sup>lt;sup>73</sup> Gunderson, *supra* note 71. "Protein-rich" food includes fresh or processed meat, poultry meat, cheese, cooked or can fish. Other protein-rich foods include a half-cup of cooked peas, beans, or soy beans, four table spoons of peanut butter, and one egg. *Id*.

<sup>&</sup>lt;sup>74</sup> *Id*.

<sup>&</sup>lt;sup>75</sup> *Id*.

<sup>&</sup>lt;sup>76</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>77</sup> NATIONAL SCHOOL LUNCH PROGRAM, supra note 3.

<sup>&</sup>lt;sup>78</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>79</sup> POPPENDIECK, supra note 25, at 53.

<sup>80</sup> The Child Nutrition Act of 1966, Pub L. No. 89-642 § 2, 80 Stat. 885.

<sup>&</sup>lt;sup>81</sup> See Gunderson, *supra* note 71. "The Child Nutritional Act of 1996 was enacted in response to the War on Poverty and the recognition of the number of children in school without adequate food. The Act authorized a pilot School Breakfast Program, authorized funding for the Special Milk Program, provided funds to purchase equipment, and authorized funds for state administrative expenses." *Id.* 

<sup>82 42</sup> U.S.C. § 1751 (2012).

<sup>83 42</sup> U.S.C. § 1771 (2012).

<sup>84</sup> Gunderson, supra note 71.

<sup>&</sup>lt;sup>85</sup> *Id*.

<sup>86</sup> Child Nutrition Act § 2.

<sup>87</sup> See Gunderson, supra note 71.

<sup>88 7</sup> C.F.R. § 220 (2013).

between food and good nutrition and the capacity of children to develop and learn."89 Prior to the passage of the Child Nutrition Act of 1966,90 educators urged Congress to include a breakfast component in the National School Lunch Program.91 Educators argued that the school lunch came too late in the day for the many poor children who arrived at school hungry and unable to concentrate during the morning hours.92

In the late 1960s, a Senate Select Committee on Nutrition and Human Needs was formed to develop the Dietary Goals for the United States, <sup>93</sup> a publication that preceded the Dietary Guidelines for Americans. <sup>94</sup> The creation of the new Senate committee illustrated a larger shift in how Americans viewed federal food assistance programs. The Senate committee created an opportunity for hunger-activists, concerned with creating updated nutritional standards, to work together to implement change. <sup>95</sup> Coincidently, the National School Lunch Program <sup>96</sup> did not escape criticism, as advocates became concerned with the quality of the food served to children enrolled in the program. <sup>97</sup>

In 1970, the National School Lunch Act<sup>98</sup> was reformed through Public Law 91-248, <sup>99</sup> which attempted to transform the focus of the school lunch program to one which emphasized child nutrition. <sup>100</sup> During the 1980s, advocacy organizations began raising awareness of the discrepancy between the USDA's dietary advice and their own food assistance program. <sup>101</sup> And in 1994, the Healthy Meals for Healthy Children Act<sup>102</sup> was passed as a result of pressure from support organizations highlighting the grave nutritional profile of the meals served through National School Lunch Program. <sup>103</sup> The Healthy Meals for Healthy Children Act<sup>104</sup> required

 $^{93}$  Select Comm. On Nutrition and Human Needs, 95th Cong., Dietary Goals for the United States (Comm. Print 1977).

<sup>89</sup> See Gunderson, supra note 71.

<sup>90</sup> Child Nutrition Act § 2.

<sup>91</sup> See POPPENDIECK, supra note 25, at 55.

<sup>&</sup>lt;sup>92</sup> *Id*.

<sup>&</sup>lt;sup>94</sup> See POPPENDIECK, supra note 25, at 63–4.

<sup>95</sup> See id.

<sup>&</sup>lt;sup>96</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>97</sup> See POPPENDIECK, supra note 25, at 65.

<sup>98</sup> Child Nutrition Act § 2.

<sup>99</sup> Act of May 14, 1970, Pub. L. No. 91-248, 84 Stat. 209 (1970).

<sup>100</sup> See POPPENDIECK, supra note 25, at 64; see also Child Nutrition Act § 2. Senator Herman Tallmadge, Chairman of the Senate Agriculture Committee, referred to Public Law 91-248 as the bill that transformed the school lunch program into a child nutrition program and established school meals as a right for all children.

<sup>&</sup>lt;sup>101</sup> POPPENDIECK, supra note 25, at 77–78.

<sup>&</sup>lt;sup>102</sup> Healthy Meals for Healthy Americans Act of 1994, Pub. L. No. 103-448, 108 Stat. 4699 (1994).

<sup>&</sup>lt;sup>103</sup> See POPPENDIECK, supra note 25, at 78–79.

schools participating in the National School Lunch or School Breakfast Programs<sup>105</sup> to update their nutritional requirements and to serve meals in compliance with the Dietary Guidelines for Americans.<sup>106</sup>

#### C. Current State of the National School Lunch Program

Since its creation, the National School Lunch Program<sup>107</sup> has provided more than 224 billion lunches to schoolchildren.<sup>108</sup> The Program<sup>109</sup> operates as a federally assisted meal program that provides reduced cost or free lunches to students.<sup>110</sup> The USDA administers the National School Lunch Program<sup>111</sup> at the federal level.<sup>112</sup> State agencies then operate the program in accordance with the terms of the state's contract with the USDA.<sup>113</sup> Participating school districts and independent schools

In 1946, the National School Lunch Act created the modern school lunch program, though USDA had provided funds and food to schools for many years prior to 1946. About 7.1 million children were participating in the National School Lunch Program by the end of its first year, 1946-47. By 1970, 22 million children were participating, and by 1980 the figure was nearly 27 million. In 1990, over 24 million children ate school lunch every day. In Fiscal Year 2012, more than 31.6 million children each day got their lunch through the National School Lunch Program. Since the modern program began, more than 224 billion lunches have been served . . . . The National School Lunch Program cost \$11.6 billion in FY 2012. By comparison, the lunch program's total cost in 1947 was \$70 million; in 1950 \$119.7 million; in 1960 \$225.8 million; in 1970, \$565.5 million; in 1980, \$3.2 billion; in 1990, \$3.7 billion; and in 2000, 6.1 billion.

Id.

To the extent funds are available, FNS will make cash assistance available in accordance with the provisions of this section to each State agency for lunches and meal supplements served to children under the National School Lunch and Commodity School Programs. To the extent donated food are available, FNS will provide donated food assistance to distributing agencies for each lunch served in accordance with the provisions of this part and part 250 of this chapter.

*Id.*; see also 7 C.F.R. § 210.3 (2013). "FNS will act on behalf of the Department in the administration of the Program. Within FNS, the CND will be responsible for Program administration;" see also 7 C.F.R. § 210.2 (2013). "FNS means the Food and Nutrition Service, United States Department of Agriculture."

<sup>&</sup>lt;sup>104</sup> Healthy Meals for Healthy Americans Act of 1994, Pub. L. No. 103-448, 108 Stat. 4699 (1994).

<sup>&</sup>lt;sup>105</sup> 7 C.F.R. § 210 (2013); 7 C.F.R. § 220 (2013).

<sup>&</sup>lt;sup>106</sup> POPPENDIECK, supra note 25, at 79.

<sup>&</sup>lt;sup>107</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>108</sup> NATIONAL SCHOOL LUNCH PROGRAM, *supra* note 3.

<sup>&</sup>lt;sup>109</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>110</sup> NATIONAL SCHOOL LUNCH PROGRAM, *supra* note 3.

<sup>&</sup>lt;sup>111</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>112</sup> 7 C.F.R. § 210.4 (2013).

<sup>113</sup> See Ayala v. District 60 School Bd., 327 F. Supp. 980, 983 (D. Col. 1971).

receive subsidies and certain food commodities from the USDA for each meal served in compliance with federal requirements.<sup>114</sup>

For a child to be eligible for free meals, their family income must be at or below 130 percent of the poverty level.<sup>115</sup> A child from a family with an income between 130 percent and 185 percent of the poverty level is eligible for reduced-price meals.<sup>116</sup> A child who qualifies for a reduced price meal cannot be charged more than forty cents for his or her lunch.<sup>117</sup> From July 1, 2013 to June 30, 2014, an annual income of \$30,615 constituted 130 percent of the poverty level for a family of four, whereas a salary of \$43,568 was 185 percent of the poverty level for that same family.<sup>118</sup> A child whose family income is over 185 percent of the poverty level may still purchase a meal from the National School Lunch Program,<sup>119</sup> but he or she would have to pay full price.<sup>120</sup> This payment schedule is explained as the result of social change:

[W]orking mothers, consolidation of schools, greater travel time to schools, and rising scale of food costs, together with fixed incomes for many larger groups, make the school-lunch program, in which those who can pay are permitted to pay and those who cannot pay need not pay, the appropriate answer.<sup>121</sup>

The most recent changes to the National School Lunch Program<sup>122</sup> have been made in accordance with the Healthy, Hunger-Free Kids Act 2010.<sup>123</sup> The Healthy,

<sup>116</sup> *Id*.

<sup>117</sup> *Id*.

<sup>118</sup> *Id*.

<sup>119</sup> 7 C.F.R. § 210.10 (2013).

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<sup>114</sup> NATIONAL SCHOOL LUNCH PROGRAM, *supra* note 3. Support to schools in the National School Lunch Program provided by the USDA can take the form of cash reimbursement for each meal served. Id. Currently, the "basic cash reimbursement rates if school food authorities served less than 60% free and reduced price lunches during the second preceding school year are: free lunches at \$2.93, reduced-price lunches at \$2.53, and paid lunches at \$0.28." Id. As stated previously, in order for the schools to get reimbursement the lunches that are served must be in compliance with the meal requirements. Id. However, "food authorities that are certified to be in compliance with the updated meal requirements will receive an additional six cents of federal cash reimbursement for each meal served . . . . Higher reimbursement rates are also in effect for Alaska and Hawaii, and for schools with high parentages of low-income students." Id. "States select entitlement foods for their schools from a list of various foods purchased by USDA and offered through the school lunch program. Bonus foods are offered only as they become available through agricultural surplus. The variety of both entitlement and bonus USDA foods schools can get from USDA depend on quantitates available and market prices." Id. There are other programs implemented by the USDA that promote local farmers who may be able to provide fresh produce to schools in their areas. *Id.* 

<sup>&</sup>lt;sup>115</sup> *Id*.

<sup>&</sup>lt;sup>120</sup> See National School Lunch Program, supra note 3.

<sup>&</sup>lt;sup>121</sup> Ayala, 327 F. Supp. 980, 984 (D. Col. 1971).

<sup>&</sup>lt;sup>122</sup> 7 C.F.R. § 210 (2013).

Hunger-Free Kids Act 2010<sup>124</sup> made the first major changes to school meals in more thirty years. This law, for improved access to nutrition assistance through program expansion, outreach, and modifications in administration of the National School Lunch Program. 127

The Healthy, Hunger-Free Kids Act of 2010<sup>128</sup> was a component of First Lady Michelle Obama's "Let's Move" campaign, <sup>129</sup> which prompted USDA to strengthen the federal nutritional standards for school meals. <sup>130</sup> The law reauthorized funding for the federal school meal and child nutrition programs, providing \$4.5 billion in new funding for these programs over ten years. <sup>131</sup> The nutritional requirements must align with the Dietary Guidelines for Americans 2005. <sup>132</sup> To that end, most schools are required to:

[I]ncrease the availability of fruits, vegetables, whole grains and fat-free and low-fat fluid milk in school menus; reduce the levels of sodium, saturated fat and *trans* fat in meals; and meet the nutritional needs of school children within their calorie requirements.<sup>133</sup>

. . .

<sup>&</sup>lt;sup>123</sup> See School Nutrition Ass'n, School Lunch Programs Encourage Proper Nutrition, in Nutrition: Opposing Viewpoints 148 (David Haugen and Susan Musser eds., Greenhaven Press 2012).

<sup>&</sup>lt;sup>124</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat. 3183 (2010).

<sup>&</sup>lt;sup>125</sup> See U.S. DEP'T OF AGRIC., SCHOOL MEALS, HEALTHY HUNGER-FREE KIDS ACT, http://www.fns.usda.gov/school-meals/healthy-hunger-free-kids-act (last modified Mar. 3, 2014); see also 78 Fed. Reg. 39,068 (June 28, 2013) (Interim Final Rule, amending 7 CFR Parts 210 and 220).

<sup>&</sup>lt;sup>126</sup> Healthy, Hunger-Free Kids Act of 2010.

<sup>&</sup>lt;sup>127</sup> Child Nutrition Programs: Nondiscretionary Amendments Related to the Healthy, Hunger-Free Kids Act of 2010, 78 Fed. Reg. 13,443 (Feb. 29, 2013).

<sup>&</sup>lt;sup>128</sup> Healthy, Hunger-Free Kids Act of 2010.

<sup>&</sup>lt;sup>129</sup> See About Let's Move, http://www.letsmove.gov/about (last visited Sept. 20, 2014).

<sup>130</sup> See Press Release, USDA Unveils Historic Improvements to Meals Served in America's Schools (Jan. 25, 2012), available at http://www.fns.usda.gov/sites/default/files/28\_PR0023.12.pdf. The Healthy, Hunger-Free Kids Act of 2010 also made notable changes to the School Breakfast Program, the Special Supplemental Nutrition Program for Women, Infants and Children, the Summer Food Service Program, and the Adult Care Food Program. Id. The Health Hunger-Free Kids Act of 2010 will implement "new standards for school meals that will result in healthier meals for kids across the nation. The new meal requirements will raise standards for the first time in more than fifteen years and improve the health and nutrition of nearly 32 million kids that participate in school meal programs every school day. The healthier meal requirements are a key component of the Healthy, Hunger-Free Kids Act, which was championed by the First Lady as part of her Let's Move! campaign and signed into law by President Obama." Id.

<sup>&</sup>lt;sup>131</sup> CHILD NUTRITION REAUTHORIZATION HEALTHY, HUNGER-FREE KIDS ACT OF 2010, http://www.whitehouse.gov/sites/default/files/Child Nutrition Fact Sheet 12 10 10.pdf.

<sup>&</sup>lt;sup>132</sup> See SCHOOL NUTRITION ASS'N, supra note 123, at 149.

<sup>&</sup>lt;sup>133</sup> See National School Lunch Program and School Breakfast Program: Nutrition Standards for All Foods Sold in School as Required by the Healthy, Hunger-Free Kids Act of

However, modifications made to the National School Lunch Program include a caloric limit component. This type of alteration to the National School Lunch Program<sup>134</sup> is the first of its kind and it is questionable whether the caloric limits meet the needs of all children who participate in the program.<sup>135</sup>

The Healthy, Hunger-Free Kids Act of 2010<sup>136</sup> also prompted the USDA to issue new regulations for school vending machines, à la cart lines and school stores.<sup>137</sup> Currently, "competitive foods" sold in à la cart lines, snack bars, school stores and other venues are not required to meet the federal nutritional standards to which the National School Lunch and School Breakfast Program are subject.<sup>138</sup> The Healthy, Hunger-Free Kids Act of 2010<sup>139</sup> was expected to "enhance the diet and health of school children, and help mitigate the childhood obesity trend."<sup>140</sup> The changes to the National School Lunch Program<sup>141</sup> are being implemented over a three-year period from 2012 to 2015.<sup>142</sup>

Janet Poppendieck, author of "Free For All: Fixing School Food in America" succinctly outlines the current state of the national school lunch program:

[T]he day-to-day impacts of policy decisions made in the early and mid 1970s, the early 1980s, and the mid-1990s have ripened into an almost impenetrable thicket of regulations and procedures. . . . [B]y the beginning of the twenty-first century, school food is simultaneously tasked with alleviating poverty, ending hunger, reducing waste, controlling spending, and overcoming childhood obesity, along with its original goal of safeguarding the health and well-being of the nation's

<sup>2010, 78</sup> Fed. Reg. 39,068 (June 28, 2013) (Interim Final Rule, amending 7 CFR Parts 210 and 220).

<sup>&</sup>lt;sup>134</sup> 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>135</sup> See Nutrition Standards in the National School Lunch and School Breakfast Programs, 77 Fed. Reg. 4,088 (Jan. 26, 2012). A description of the *Healthy, Hunger-Free Act of 2010* states that "[w]ith over seventeen million children living in food insecure households and one out of every three children in America now considered overweight or obese, schools often are on the front lines of our national challenge to combat childhood obesity and improve children's overall health," *available at* 

http://www.whitehouse.gov/sites/default/files/Child\_Nutrition\_Fact\_Sheet\_12\_10\_10.pdf.

<sup>&</sup>lt;sup>136</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat. 3183.

<sup>&</sup>lt;sup>137</sup> See School Nutrition Ass'n, supra note 123, at 148–49.

<sup>138</sup> See id. at 148. There is however a federal law that prohibits the sale of soft drinks in the cafeteria during the school lunch period. *Id.* at 151; see also The Healthy-Hunger-Free Kids Act of 2010, http://www.whitehouse.gov/sites/default/files/

Child\_Nutrition\_Fact\_Sheet\_12\_10\_10.pdf. The Act "[g]ives USDA the authority to set nutritional standards for all foods regularly sold in schools during the school day, including vending machines, the 'a la carte' lunch lines, and school stores." *Id.* 

<sup>&</sup>lt;sup>139</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat. 3183 (2010).

 $<sup>^{140}\,</sup>$  Nutrition Standards in the National School Lunch and School Breakfast Programs, 77 Fed. Reg. 17 (Jan. 26, 2012).

<sup>&</sup>lt;sup>141</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>142</sup> Healthy, Hunger-Free Kids Act of 2010, Pub. L. No. 111-296, 124 Stat. 3183 (2012).

children and encouraging the domestic consumption of nutritious agricultural commodities.<sup>143</sup>

Unfortunately, each decade has left its mark on the school program, creating countless new rules and rarely eliminating old ones.<sup>144</sup>

PART III. COMPARISON OF THE CALORIC REQUIREMENTS OF THE NATIONAL SCHOOL LUNCH PROGRAM TO GOVERNMENTAL AND NON-GOVERNMENTAL NUTRITIONAL RECOMMENDATIONS

The USDA provides nutritional recommendations for various government programs. As previously discussed, the USDA sets the guidelines for the National School Lunch Program. In addition to the National School Lunch Program, In addition to the National School Lunch Program, In the USDA publishes both the USDA Food Patterns In and the Dietary Guidelines for Americans, In a well as providing dietary recommendations to the National Institute of Health's *We Can!* program In and the American Academy of Pediatrics. Since the USDA specifies the nutritional standards for all of the previously mentioned programs, the recommend caloric intake for all programs should be the same. However, the National School Lunch Program does not incorporate nutritional standards promulgated by the USDA. In Specifically, the National School Lunch Program does not consider the age, gender, and activity level of children, and therefore fails to adequately ensure the caloric needs of all children are met.

 $^{147}\,$  U.S. Dep't of Agric., Center for Nutrition Policy and Promotion, USDA Food Patterns (2011),

 $http://www.cnpp.usda.gov/sites/default/files/usda\_food\_patterns/USDAFoodPatternsSummaryTable.pdf.\\$ 

<sup>&</sup>lt;sup>143</sup> See POPPENDIECK, supra note 25, at 83.

<sup>&</sup>lt;sup>144</sup> *Id.* at 259.

<sup>&</sup>lt;sup>145</sup> 7 C.F.R. § 210 (2014).

<sup>&</sup>lt;sup>146</sup> *Id*.

<sup>&</sup>lt;sup>148</sup> See U.S. DEP'T OF AGRIC., DIETARY GUIDELINES (2010), http://www.cnpp.usda.gov/sites/default/files/dietary\_guidelines\_for\_americans/PolicyDoc.pdf [hereinafter DIETARY GUIDELINES].

<sup>&</sup>lt;sup>149</sup> U.S. DEP'T OF HEALTH & HUMAN SERV., WE CAN!, http://www.nhlbi.nih.gov/health/educational/wecan (last visited Dec. 9, 2013). We Can! is a collaboration between four Institutes of the National Institutes of Health: The National Heart, Lung, and Blood Institute, the National Institute of Diabetes and Digestive and kidney Diseases, the Eunice Kennedy Shriver National Institute of Child Health and Human Development, and the National Cancer Institute. U.S. DEP'T OF HEALTH & HUMAN SERV., *About We Can!*, WE CAN!, http://www.nhlbi.nih.gov/health/educational/wecan/about-wecan/index.htm (last modified Aug. 26, 2014). It offers resources "to give parents, caregivers and communities to help children eight to thirteen years old stay at a healthy weight . . . . [by] encourage[ing] healthy eating, increased physical activity, and reduced time sitting in front of the screen." *Id*.

<sup>&</sup>lt;sup>150</sup> See Samuel S. Gidding et al., surpa note 23.

<sup>&</sup>lt;sup>151</sup> 7 C.F.R. § 210.10 (2013).

#### A. Why Calories?

Calories are arguably the most important way to achieve proper weight management. Failing to consume the appropriate amount of calories can lead to nutritional and health problems. Consuming too few calories leads to malnutrition... which makes people more susceptible to infectious disease.... At the same time, just as many people in the world are consuming more calories than they need and becoming overweight and obese. There is a strong correlation between malnutrition and stunted growth, depression and premature death in children as well as adults. Separately, calorie *overconsumption* can cause obesity, which can increase the risk of many health conditions. The prevalence of these types of nutrition related problems create health and economic consequences for any society.

A brief overview of how the term "calorie" is used as a scientific unit of measurement illustrates the difference between scientific calories and nutritional calories. The scientific definition of one calorie is defined as the "amount of heat energy needed to raise the temperature of one gram of water by one degree centigrade, from 14.5 degrees to 15.5 degrees, at one unit of atmospheric pressure." More simply, "[a] calorie is about the amount of heat needed to raise the temperature of a quart of water by one degree C[elsius]." It is essential to understand the scientific definition of a calorie to better understand how nutritionists use the term. The scientific definition is used primarily by scientists, and offers little to the average person trying to understand their individual nutritional caloric consumption.

Obesity increases the risk of many health conditions, including the following: Coronary heart disease, stroke, and high blood pressure; Type 2 diabetes; Cancers, such as endometrial, breast, and colon cancer; High total cholesterol or high levels of triglycerides; Liver and gallbladder disease; Sleep apnea and respiratory problems; Degeneration of cartilage and underlying bone within a joint; Reproductive health complications such as infertility; Mental health conditions.

CTRS. FOR DISEASE CONTROL & PREVENTION, HALTING THE EPIDEMIC BY MAKING HEALTH EASIER AT A GLANCE (2011), http://www.cdc.gov/chronicdisease/resources/publications/aag/obesity.htm.

<sup>&</sup>lt;sup>152</sup> MARION NESTLE & MALDEN NESHEIM, 33 CALIFORNIA STUDIES IN FOOD AND CULTURE: WHY CALORIES COUNT: FROM SCIENCE TO POLITICS 1 (University of California Press 2012).

<sup>&</sup>lt;sup>153</sup> *Id*.

<sup>&</sup>lt;sup>154</sup> See id.

<sup>155</sup> See id. Nutritional issues that cause health problems can also lead to an increase in healthcare costs. "Countries can ill afford the costs of health care for obesity-related chronic or infectious diseases or to have large segments of their populations unable to work or function adequately. Some analysts even suggest that the health burdens of obesity alone may shorten overall life expectancy within the next few years." Id.

<sup>&</sup>lt;sup>156</sup> *Id.* at 1-2.

<sup>&</sup>lt;sup>157</sup> Id. at 13.

<sup>&</sup>lt;sup>158</sup> *Id*. at 17.

Nutritionists, unlike scientists, prefer to use kilocalories (kcal) to measure calories.<sup>159</sup> A kilocalorie, a unit that represents 1000 calories, is "based on the [amount of] heat required to raise the temperature of a kilogram of water by one degree centigrade."160 Over time, nutritionists nominally shortened the word kilocalories into "Calories." <sup>161</sup> As a result of this jargon, the "Calories" with a capital "C" that appear on food labels in the United States actually refer to kilocalories, a unit 1000 times larger than a "calorie" with a lower case "c." 162

A calorie is a unit of energy. 163 Energy is the capacity to do work. 164 "Work" by the body can be chemical (normal body functions) or physical (muscular). Since a person's body expends stored energy through "work," creating heat, calories can be used as a tool to measure how much energy the body is expending.<sup>166</sup> People consume calories through food or drink. 167 Considering these concepts together illustrates how food and drink (calories) provide the body with energy that fuels the "work" (heat) the body expends through normal body functions and physical activity.168

Understanding what a calorie is and the relationship between how they are consumed and expended can help individuals better control their body weight. 169 If an individual consumes more calories than he or she expends, it will result in weight gain. 170 Conversely, if an individual consumes fewer calories than he or she expends,

<sup>160</sup> Id. at 14, 15.

<sup>159</sup> Id. at 13.

<sup>&</sup>lt;sup>161</sup> Id. at 15.

<sup>162</sup> Id. at 15. "When discussing the energy value of food, the words kilocalories (kcal), Calories (Cal), and calories (cal) have come to mean exactly the same thing: 1,000 chemists' calories. Hence: confusion." Id. at 18. This has resulted in there being two well known meanings of the word calories. It can mean the chemists' calorie and the nutritionists' Calories. Id. The Nutritionists' Calories are 1,000 times greater. Id. "In common practice, most people use calories, capitalized or not, to mean kilocalories or Calories, despite the confusion this causes." Id. An example of this confusion is that "in the U.S. Code of Federal Regulations rules for food labels, a normal serving of the food contains at least 40 kilocalories (that is, 2 percent of a daily intake of 2,000 kilocalories)... The food contains all of the following nutrients per 100 calories based on 2,000 calorie total intake as a daily standard." Id.

<sup>&</sup>lt;sup>163</sup> *Id*.

<sup>&</sup>lt;sup>164</sup> *Id*.

<sup>&</sup>lt;sup>165</sup> See DIETARY GUIDELINES, supra note 148, at 8.

<sup>&</sup>lt;sup>167</sup> *Id*.

<sup>&</sup>lt;sup>168</sup> See id.

<sup>169</sup> See id. at 8, 9.

<sup>&</sup>lt;sup>170</sup> *Id*.

it will result in weight loss.<sup>171</sup> In order to maintain the same weight, the amount of calories an individual consumes and expends must be approximately the same.<sup>172</sup>

Scientists have developed equations to estimate the energy requirements of normal bodily function and physical activity in order to "give reasonably accurate estimates of the basal metabolic rate and total energy expenditures of men and women of differing weights, heights, ages, and physical activity levels." While it is important for every individual to make sure that he or she meets personal caloric needs to maintain a healthy weight, 174 it is especially crucial for children and adolescents to maintain a calorie balance to support normal growth and development without gaining excess weight or experiencing malnourishment. 175

Unnourished children do not grow properly. They become depressed, irritable, and apathetic. They do not learn well in school. Their immune systems fail, making them more susceptible to the hazards of microbial infections, especially diarrhea and its accompanying losses of nutrients.<sup>176</sup>

Overeating can also have a detrimental impact on the child's development. It can lead to heightened risk of coronary heart disease, high blood pressure, type two

Wilbur Atwater devoted considerable thought to how he might estimate the calorie needs of individuals when their diets and activities varied so much from day to day, as did their way of handling what they ate. ... [h]e wrote: 'Just why individuals different in their ways of utilizing their food, and how to measure the differences and make dietary rules to fit them exactly, are problems which the physiological chemist of today is far from solving. The fact is that the whole subject is new, and the accurate investigation thus far made, through quite considerable when we get it all together, is far too small for satisfactory conclusions. The best we can do with our present knowledge, or rather lack of knowledge, of the subject is to make general estimates, with the clear understanding that they are only rough estimates, and that they apply to average rather than individual cases.'

Id.

<sup>&</sup>lt;sup>171</sup> *Id*.

<sup>&</sup>lt;sup>172</sup> *Id*.

<sup>&</sup>lt;sup>173</sup> NESTLE & NESHEIM, supra note 152, at 77.

 $<sup>^{174}</sup>$  See DIETARY GUIDELINES, supra note 148, at 8. People cannot control the calories expended through metabolic processes; however, people can control what they choose to eat and drink and their amount of physical activity. *Id*.

<sup>&</sup>lt;sup>175</sup> *Id.* at 10. Proper calorie balance means that children are expending as many calories as they are consuming daily. *Id.* "Calories consumed must equal calories expended in order for a person to maintain the same body weight." *Id.* The Dietary Guidelines also note that "maintaining a healthy body weight and preventing excess weight gain throughout the lifespan are highly preferable to losing weight after weight gain." *Id.* This further supports the importance of understanding proper calorie balance. Once an individual becomes overweight it takes a significant increase in effort to reduce their body weight back to a healthy range. *Id.* It is possible with excess weight gain that it could take years to lose. *Id.* "People who are most successful at losing weight and keeping it off do so through continued attention to calorie balance. *Id.* 

<sup>&</sup>lt;sup>176</sup> See id. at 111–12. "The repeated cycle of too few calories, infections, and increased calorie needs is the principal immediate cause of death among many young children in many parts of the world, even today." *Id.* at 112.

diabetes, certain cancers (endometrial, breast, colon), stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis and gynecological problems such as abnormal menses and infertility.<sup>177</sup>

Since most school-aged children spend part of their day at school and many of those children will be eating the lunches provided by the National School Lunch Program, <sup>178</sup> meeting the individual caloric needs of all children should be a high priority of the National School Lunch Program. 179 According to the USDA, children consume between nineteen and fifty percent of their daily calories in the school cafeteria. 180 Aside from the fact that children consume a large portion of their daily calories through school lunches, 181 another reason the National School Lunch Program<sup>182</sup> should prioritize meeting the individual calorie needs of all children is because the school children who are a part of the National School Lunch Program<sup>183</sup> have limited choice of what food and drink they want to consume as part of their meals. And inherently, the students who participate in the National School Lunch Program<sup>184</sup> have limited access to food outside the program during school hours. Such limited access to food during school hours minimizes opportunity for these individuals to manage their caloric intake, further underscoring the importance that school food programs aspire to offer meals that are in each child's best nutritional interest.

These increased health risks are not limited to adults. Weight-associated diseases and conditions that were once diagnosed primarily in adults are now observed in children and adolescents with excess body fat. For example, cardiovascular disease risk factors, such as high blood cholesterol and hypertension, and type 2 diabetes are now increasing in children and adolescents. The adverse effects also tend to persist through the lifespan as children and adolescents who are overweight and obese are at substantially increased risk of being overweight and obese as adults and developing weight-related chronic diseases later in life. Primary prevention of obesity, especially in childhood, is an important strategy for combating and reversing the obesity epidemic.

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Id.
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<sup>178</sup> 7 C.F.R. § 210 (2013).

 $<sup>^{177}\,</sup>$  Nestle & Nesheim, supra note 152 at 140–141. See Dietary Guidelines, supra note 148, at 8.

<sup>179 1.4</sup> 

<sup>&</sup>lt;sup>180</sup> See ADAM BORNSTEIN, School Lunch Programs May Encourage Poor Nutrition, in NUTRITION: OPPOSING VIEWPOINTS 156 (David Haugen and Susan Musser eds., Greenhaven Press 2012).

<sup>&</sup>lt;sup>181</sup> See Proposed Rule on Meal Pattern Requirements and Nutrition Standards in the National School Lunch Program and School Breakfast Program: Final Summary of Public Comments 2 (2011),

 $http://www.regulations.gov/\#! documentDetail; D=FNS-2007-0038-64675 \ (last modified Oct. 13, 2011) \ [hereinafter Final Summary of Public Comments].$ 

<sup>&</sup>lt;sup>182</sup> 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>183</sup> *Id*.

<sup>&</sup>lt;sup>184</sup> *Id*.

#### B. Caloric Requirements of the National School Lunch Program

The meal requirements that must be followed by the schools that participate in the National School Lunch Program<sup>185</sup> are located in Title VII of the Code of Federal Regulations.<sup>186</sup> Specifically, the required caloric content of meals are listed in subsections (b) and (c).<sup>187</sup> In general, the meal requirements for the program are broken down into three grade groups: kindergarten through fifth grade (ages five to ten); sixth through eighth grade (ages eleven through thirteen); and ninth through twelfth grade (ages fourteen through eighteen).<sup>188</sup> The separate caloric requirements

(a) General requirements – (1) General nutrition requirements. Schools must offer nutritious, well-balanced, and age-appropriate meals to all the children they serve to improve their diets and safeguard their health. (i) Requirements for lunch. School lunches offered to children age 5 or older must meet, at a minimum, the meal requirements in paragraph (b) of meal requirements in paragraph (b) of this section. Schools must follow a food-based menu planning approach and produce enough food to offer each child and quantitates specified in the meal pattern established in paragraph (c) of this section for each age/grade group served in the school. In addition, school lunches must meet the dietary specifications in paragraph (f) of this section. Of this section. Schools offering lunches to children ages 1 to 4 and infants must meet the meal pattern requirements in paragraph (p) of this section.

Id.

<sup>187</sup> *Id.* The new standards to the National School Lunch Program also identify the healthy ranges for five categories of food: fruit, vegetables, grains, meats or meat alternatives, and fluid milk. *See* FINAL SUMMARY OF PUBLIC COMMENTS, *supra* note 181, at 1. The Program has also implemented healthy ranges for total calories, saturated and trans fat, and sodium. *Id.* Since the standards have to be measured to assure that the states and local school districts are in compliance with the weekly ranges for the grains and meat/meat alternative components, the USDA has decided to require, for each day of the week-long menu, "the reimbursable meal offered with the smallest grain or meat/meat alternative quantity, and the reimbursable meal offered with the largest grain or meat/meat alternative quantity." Memorandum from Cynthia Long, Director of Child Nutrition Division on FNS Guidance to School Food Authorities (Dec. 20, 2012), *available at* http://www.fns.usda.gov/sites/default/files/SP11-2013os.pdf. The next step for the state and local school districts is to figure out the weekly minimum and maximum offerings available to students by adding together the daily minimums and daily maximum quantities. *Id.* 

188 7 C.F.R. § 210(c)(1) (2013); See also Final Summary of Public Comments, supra note 181, at 19. The following comments were offered in response to the United States Department of Agriculture Food and Nutrition Service proposed rule regarding the revisions to the National School Lunch Program and School Breakfast Program. Final Summary of Public Comments, supra note 181, at 1. The proposed rule was published on January 13, 2011 to obtain public comment regarding the meal patterns and nutritional requirements to align them with the Dietary Guidelines for Americans. Id. "Approximately 60 submissions expressed general opposition to the proposed calorie limitations. Of these commenters, a nutrition professional listed several reasons why the proposed limits would not be a practical solution to the childhood obesity epidemic. This commenter's reasons included the difference in children's physical activity levels, proposed removal of nutrient analysis of menus preventing accurate identification of calories in recipes, and economical incentive for schools to serve similar portion sizes due to cost savings when buying food in bulk. This commenter

<sup>&</sup>lt;sup>185</sup> *Id*.

<sup>&</sup>lt;sup>186</sup> *Id*.

for each grade group are: 550-650 calories, 600-700 calories, and 750-850 calories, respectively.<sup>189</sup> Calorie content of each meal served throughout the week may be

also argued that the proposed calorie levels would not have an impact on childhood obesity because competitive foods, largely low-nutrient but energy dense foods, are not strictly regulated, and would continue to be purchased. An individual commenter asserted that although the calorie restrictions would reduce a child's calorie intake at school, the limitations would not affect the child's overall calorie intake unless foods offered at home were also low in calorie. Further, a food service industry asserted that the proposed calorie levels would be difficult for schools to adhere to due to limited access to computerized meal planning. This commenter stated that the proposed age/grade groupings do not include schools that split grades from K-6 and 7-8. A school district expressed similar concern regarding splitting calories between age/group where age or grades are intermingled." *Id.* at 45. There were further comments in opposition to proposed maximum calorie levels: "Approximately 80 submissions expressed opposition to the use of maximum calorie levels. A school food service staff member expressed concern regarding the maximum calorie levels not being adequate to meet the dietary needs of taller and active students. In support for their position, this commenter provided a graph indicating the calorie needs depending on the vary levels of activity for students. Another school food service staff members suggested removing the maximum calorie limit for elementary and secondary meal patterns because it is too restrictive. Other commenters asserted that setting maximum calories does not allow children with high calorie needs, e.g., children suffering from food insecurity at home, to ask for more food and satisfy their hunger at school." Id. at 46. 7.1.4.5 Other comments on maximum calorie levels: "Approximately six submissions addressed the maximum calorie levels without explicitly expressing either support or opposition. A school district and school food service staff member expressed concern regarding adherence to the proposed maximum calorie levels during breakfast in addition to the requirements for increases in fruits, grains, and meat or meat alternatives. Similarly, a State department of education express concern regarding exceeding the K-5 lunch calorie limits while at attempting to meet the daily meal pattern requirements. An individual commenter asserted that the age/grade grouping does not meet the calorie requirements of students who play sports. A city department of education suggested that the maximum calorie levels be grouped for K-12 with a maximum of 600 calories for breakfast and 750 calories for lunch." Id. The comments that were submitted bring insight into the opposition against the calorie limits. *Id.* at 45. Most of those who disagree with the National School Lunch calorie ranges disagree because of the general understanding that children who are more active than others, who are different ages, and who are different genders all have different nutritional needs. Id. at 9. Even a comment that discussed that the minimum calorie levels should be lower recognized the discrepancy between the female and male students. Id. at 45. Approximately eight submissions suggested lowering the minimum calorie levels. A school recommended a minimum calorie level of 700 for grades nine through 12, changing the overall range of calories for these grades to 700-850 calories. This commenter argued that the proposed minimum calorie level is too high for female high school student in particular, who require fewer calories, and because physical education in high school is often an option, so many students are not active enough for the proposed minimum calorie level. Id. There were approximately 155 submissions that were in general support of the proposed calorie standards. Id. at 44. Please see the proposed rule document for further information.

<sup>189</sup> 7 C.F.R. § 210 (2013). The following comments propose different age and grade groupings. *See* FINAL SUMMARY OF PUBLIC COMMENTS, *supra* note 181, at 9. This comment illustrates the concern that those in the lower end of the grade grouping may be receiving too much food compared to the needs of those at the higher end of the grade grouping. *Id.* Other comments suggest that different age and grade groupings would be more appropriate. Several commenters recommended splitting the age/grade group K-5 into 2 separate groups, K-1 and 2-5, to account for the different intake limits of children within the K-5 group. These

averaged over a five-day school week to meet the minimum and maximum caloric levels. <sup>190</sup> There are no adjustments to the calorie limits to take other factors into consideration. <sup>191</sup> Moreover, to qualify for reimbursements, the school programs must strictly adhere to the USDA requirements. <sup>192</sup>

#### C. Caloric Recommendations of Other USDA Programs

The Dietary Guidelines for Americans 2010<sup>193</sup> states that "[t]he total number of a calories a person needs each day varies depending on a number of factors, including the person's age, gender, height, weight, and level of physical activity." The Dietary Guidelines offers a chart to explain an individual's caloric needs, but

commenters claimed there would be too much food for the young children in this grade group. A few commenters, including State departments of education, suggested allowing districts to offer students in grades K-3 a smaller portion. A school district and an individual commenter suggested that the grade groupings be set at K-3, 4-8, and 9-12 because portions may exceed what a child can eat under the proposed age/grade groupings. A school food service staff member suggested that the grade groupings be set at K-5 and 6-12 or 7-12. *Id*.

<sup>194</sup> *Id.* at 13. "Calorie balance over time is the key to weight management." *Id.* at 8. Calorie balance refers to the relationship between calories consumed from foods and beverages and calories expended in normal body functions (i.e., metabolic processes) and through physical activity. *Id.* People cannot control the calories expended in metabolic processes, but they can control what they eat and drink, as well as how many calories they use in physical activity." *Id.* at 8. "Knowing one's daily calorie needs may be a useful reference point for determining whether the calories that a person eats and drinks are appropriate in relation to the number of calories needed each day." *Id.* at 13.

Estimated amounts of calories needed to maintain calorie balance for various gender and age groups at three different levels of physical activity. The estimates are rounded to the nearest 200 calories. An individual's calorie needs may be higher or lower than these average estimates.								
Gender	Age (years)	Physical Activity Level*  Sedentary Moderately Active Active						
Child (female and male)	2-3	1,000-1,200	1,000-1,400	1.000-1.400				
Female <sup>d</sup>	4-8	1200-1400	1400-1600	1,400-1,80				
	9-13	1,400-1,600	1,600-2,000	1,800-2,20				
	14-18	1800	2,000	2.40				
	19-30	1.800-2.000	2.000-2.200	2.40				
	31-50	1,800	2,000	2,20				
	51+	1,600	1,800	2,000-2,20				
Male	4-8	1,200-1,400	1,400-1,600	1,600-2,00				
	9-13	1,600-2,000	1,800-2,200	2,000-2,60				
	14-18	2,000-2,400	2,400-2,800	2,800-3,20				
	19-30	2,400-2,600	2,600-2,800	3,00				
	31-50	2,200-2,400	2,400-2,600	2,800-3,00				
	51+	2,000-2,200	2,200-2,400	2,400-2,80				

<sup>&</sup>lt;sup>190</sup> 7 C.F.R. § 210.10(b)(2)(I) (2013).

<sup>&</sup>lt;sup>191</sup> *Id*.

<sup>&</sup>lt;sup>192</sup> *Id.* at (j).

<sup>&</sup>lt;sup>193</sup> DIETARY GUIDELINES, *supra* note 148.

notes that an individual's needs may be higher or lower than the average estimates provide. 196 The age breakdowns that match up to the National School Lunch Program's 197 grade breakdowns are categorized a bit differently. The Dietary Guidelines 198 provides a breakdown into different age groups, such as ages four through eight, nine through thirteen, and fourteen through eighteen. Further, the Dietary Guidelines 199 separates the different genders (male and female), and recognizes that young and adolescent boys will generally have higher calorie needs than their female counterparts. 200 Lastly, the Dietary Guidelines mentions that lifestyle or activity level plays a significant part in determining calorie needs. 201 Lifestyle types are classified into three general categories of sedentary, moderately active and active. 202

The same distinctions between age, gender and activity level made in the Dietary Guidelines<sup>203</sup> can be seen in the We Can! program<sup>204</sup> and the USDA Food Patterns.<sup>205</sup> The We Can! program is a collaboration between the National Heart, Lung, and Blood Institute, the National Institute of Diabetes and Digestive and Kidney Diseases, the Eunice Kennedy Shriver Institute of Child Health and Human Development, and the National Cancer Institute.<sup>206</sup> It offers resources for parents, caregivers and communities to help children maintain a healthy weight by eating right and increasing physical activity.<sup>207</sup> The We Can! Parent Tips states, "[h]ow many calories you need each day – ENERGY IN – depends on a few things: your age[,] whether you are male or female[, and] how active you are.<sup>208</sup> The age, gender, and activity levels are broken down almost identically to the Dietary Guidelines.<sup>209</sup> with the only notable difference being the family-friendly tone the We

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<sup>195</sup> See id.
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<sup>&</sup>lt;sup>196</sup> *Id.* at 12.

<sup>&</sup>lt;sup>197</sup> 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>198</sup> DIETARY GUIDELINES, *supra* note 148.

<sup>&</sup>lt;sup>199</sup> *Id*.

<sup>&</sup>lt;sup>200</sup> Id.

<sup>&</sup>lt;sup>201</sup> *Id*.

<sup>&</sup>lt;sup>202</sup> *Id.* "Sedentary" includes light physical activity associated with day-to-day life. *Id.* "Moderately active" includes physical activity equivalent to walking about 1.5 miles per day at 3 to 4 miles per hour plus the physical activity associated with day-to-day life. *Id.* "Active" includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, plus the physical activity associated with day-to-day life. *Id.* 

<sup>&</sup>lt;sup>203</sup> *Id.* at 13.

<sup>&</sup>lt;sup>204</sup> See WE CAN!, supra note 149.

<sup>&</sup>lt;sup>205</sup> See Estimated Calorie Needs, supra note 10.

<sup>&</sup>lt;sup>206</sup> See We Can!, supra note 149.

<sup>&</sup>lt;sup>207</sup> About We Can!, supra note 149.

<sup>&</sup>lt;sup>208</sup> See PARENT TIPS, supra note 22.

<sup>&</sup>lt;sup>209</sup> See DIETARY GUIDELINES, supra note 148, at 14.

Can! Parent Tips<sup>210</sup> strives to communicate.<sup>211</sup> In a similar fashion, the USDA Food Patterns provides a breakdown of estimated calorie needs per day by age, gender and physical activity level.<sup>212</sup> The USDA Food Patterns<sup>213</sup> is broken down by individual age, but the calorie totals fit within the same ranges provided by the Dietary Guidelines<sup>214</sup> and the We Can! Program.<sup>215</sup>

#### D. Caloric Recommendations of a Non-Governmental Organization

The American Academy of Pediatrics (AAP) is a professional membership organization consisting of primary care pediatricians, pediatric medical subspecialists, and pediatric surgical specialists. The AAP supports the USDA's Dietary Guidelines for Americans. A journal article published by the AAP, Dietary Recommendations for Children and Adolescents: A Guide for Practitioners [hereinafter Guide for Practitioners], discusses nutritional health and calorie balance. In general, the Guide for Practitioners provides an overview of dietary recommendations geared toward helping children attain a long-term healthy lifestyle. Specifically, the Guide for Practitioners references the Dietary Guidelines to set the standard for recommended caloric intake.

The Guide for Practitioners highlights the importance of taking in "essential calories, the total energy intake necessary to meet recommended nutrient intakes, and discretionary calories to meet energy demand and for normal growth."<sup>222</sup> The essential calories and discretionary calories are included in the daily-recommended

<sup>&</sup>lt;sup>210</sup> See PARENT TIPS, supra note 22.

<sup>&</sup>lt;sup>211</sup> See id. The breakdowns for activity level include not active, somewhat active, and very active. "Not Active" is defined as "[n]ot much ENERGY OUT. Does only light activity needed for daily life. For instance, cooking or walking to the mailbox." Id. "Somewhat Active" is described as "[s]ome ENERGY OUT. Does physical activity equal to walking quickly for [one and a half to three] miles (about 30-40 minutes) each day. Plus, does light activity needed for daily life." Id. Lastly, "Very Active" is explained to require "A lot of ENERGY OUT. Does physical activity equal to walking quickly for more than 3 miles each day (more than 40 minutes). Plus, does light activity needed for daily life." Id.

<sup>&</sup>lt;sup>212</sup> See ESTIMATED CALORIE NEEDS, supra note 10. Estimates are "[b]ased on Estimated Energy Requirements (EER) equations, using reference heights (average) and reference weights (healthy) for each age-gender group. For children and adolescents, reference height and weight vary. ... EER equations are from the Institute of medicine." *Id*.

<sup>&</sup>lt;sup>213</sup> See id.

<sup>&</sup>lt;sup>214</sup> See DIETARY GUIDELINES, supra note 148, at 14.

<sup>&</sup>lt;sup>215</sup> See PARENT TIPS, supra note 22.

<sup>&</sup>lt;sup>216</sup> Am. Acad. of Pediatrics, *AAAP Facts*, AAP.COM, http://www.aap.org/en-us/about-the-aap/aap-facts/Pages/AAP-Facts.aspx (last visited Sept. 16, 2014).

<sup>&</sup>lt;sup>217</sup> See Gidding et al., supra note 23, at 554-55.

<sup>&</sup>lt;sup>218</sup> See id. at 554.

<sup>&</sup>lt;sup>219</sup> See id.

<sup>&</sup>lt;sup>220</sup> See Estimated Calorie Needs, supra note 10 at 46.

<sup>&</sup>lt;sup>221</sup> See Gidding et al., supra note 23, at 545.

<sup>&</sup>lt;sup>222</sup> See id. at 546-47.

calorie amounts, and broken down by the age, gender and activity levels that are published in the Dietary Guidelines.<sup>223</sup> Because children and adolescents are still developing, those who are more physically active will require additional calories.<sup>224</sup> The *Guide for Practitioners* states that "[t]here is a large difference in the discretionary calorie allowance among sedentary, moderately active, and active children, with more physically active children needing more energy from food to maintain normal growth."<sup>225</sup> The *Guide for Practitioners* emphasizes prioritizing the difference between matching appropriate energy intake to energy expenditure in order to help curb the obesity epidemic occurring in children and adolescents.<sup>226</sup>

#### E. Comparison of Programs

There is a notable dissimilarity in how the USDA approaches daily calorie limits in the National School Lunch Program<sup>227</sup> as opposed to other nutritional programs.<sup>228</sup> The National School Lunch Program<sup>229</sup> attempts to fit school-aged children into calorie ranges based on age and grade groups<sup>230</sup> as a means to ensure that children are not over-eating at school.<sup>231</sup> However, the USDA highlights the importance of taking age, gender, and activity level into consideration in other programs, such as the Dietary Guidelines,<sup>232</sup> We Can! Program<sup>233</sup> and USDA Food Patterns.<sup>234</sup> Further, the USDA purports that the nutritional requirements of the National School Lunch

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<sup>223</sup> See id. at 546.
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(1) Age/grade groups. Schools must plan menus for students using the following age/grade groups: Grades K-5 (ages 5-10), grades 6-8 (ages 11-13), and grades 9-12 (ages 14-18). If an unusual grade configuration in a school prevents the use of these established age/grade groups, students in grades K-5 and grades 6-8 may be offered the same food quantities at lunch provided that the calorie and sodium standards for each age/grade group are met. No customization of the established age/grade group is allowed.

Id.

<sup>231</sup> *Id*.

<sup>&</sup>lt;sup>224</sup> See id. at 545.

<sup>&</sup>lt;sup>225</sup> See id. at 547.

<sup>&</sup>lt;sup>226</sup> See id. at 546.

<sup>&</sup>lt;sup>227</sup> 7 C.F.R. § 210.10(c) (2013).

 $<sup>^{228}</sup>$  See Estimated Calorie Needs, supra note 10; Dietary Guidelines, supra note 148, at 14; Gidding et al., supra note 23, at 550.

<sup>&</sup>lt;sup>229</sup> 7 C.F.R. § 210.10(c)(1) (2013).

<sup>&</sup>lt;sup>230</sup> Id.

<sup>&</sup>lt;sup>232</sup> See DIETARY GUIDELINES, supra note 148, at 14.

<sup>&</sup>lt;sup>233</sup> See PARENT TIPS, supra note 22.

<sup>&</sup>lt;sup>234</sup> See ESTIMATED CALORIE NEEDS, supra note 10, at 46.

Program<sup>235</sup> are in-line with the Dietary Guidelines.<sup>236</sup> Nevertheless, when viewed together, the National School Lunch Program<sup>237</sup> fails to match up to the daily-recommended calorie limits of the Dietary Guidelines.<sup>238</sup>

The USDA's contrasting policy approach to the National School Lunch Program<sup>239</sup> can create adverse results in children, as seen in the case of Billy and Jessica,<sup>240</sup> by causing under-eating or over-eating.<sup>241</sup> It is scientifically proven that under-eating or over-eating can be detrimental to developing children and adolescents.<sup>242</sup> The current National School Lunch Program<sup>243</sup> fails to accomplish its purpose of enhancing the diet and health of all school children,<sup>244</sup> and should take into consideration age, gender and activity level when calculating calorie limits for meals served as lunches to help avoid the potential adverse effects of malnutrition.

#### IV. SUGGESTED CHANGES TO IMPROVE THE NATIONAL SCHOOL LUNCH PROGRAM

The new regulations of the National School Lunch Program, a component of the *Healthy, Hunger-Free Kids Act 2010*, mandate a maximum calorie limit based solely on a student's grade level in school. <sup>245</sup> However, the Dietary Guidelines<sup>246</sup> and other United States Department of Agriculture (USDA) recommendations specify that the number of calories a person needs each day varies depending on factors that include age, gender, and physical activity level. <sup>247</sup> It is true that the lunches served through the National School Lunch Program<sup>248</sup> have made improvements over time, <sup>249</sup> but that is no reason to limit a program that would fully comply with the recommendations of the Dietary Guidelines. <sup>250</sup> Limits on the amounts of grains and proteins served as part of school lunches have recently been removed. <sup>251</sup> These

<sup>&</sup>lt;sup>235</sup> Nutrition Standards in the National School Lunch and School Breakfast Programs, 4088 Fed. Reg. 77, 4088 (Jan. 26, 2012) (to be codified at 7 C.F.R. pt. 210 & 220).

<sup>&</sup>lt;sup>236</sup> See DIETARY GUIDELINES, supra note 148.

<sup>&</sup>lt;sup>237</sup> 7 C.F.R. § 210.10 (2013).

<sup>&</sup>lt;sup>238</sup> See DIETARY GUIDELINES, supra note 148, at 14.

<sup>&</sup>lt;sup>239</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>240</sup> See supra Part I.

<sup>&</sup>lt;sup>241</sup> NESTLE & NESHEIM, supra note 152, at 1.

<sup>&</sup>lt;sup>242</sup> See id.

<sup>&</sup>lt;sup>243</sup> 7 C.F.R. § 210 (2013).

<sup>&</sup>lt;sup>244</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>245</sup> *Id*.

<sup>&</sup>lt;sup>246</sup> See DIETARY GUIDELINES, supra note 148, at 14.

<sup>&</sup>lt;sup>247</sup> See Estimated Calorie Needs, supra note 10; See Parent Tips, supra note 22.

<sup>&</sup>lt;sup>248</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>249</sup> See GUNDERSON, supra note 71.

<sup>&</sup>lt;sup>250</sup> See Dietary Guidelines, supra note 148.

<sup>&</sup>lt;sup>251</sup> U.S. Dept. of Agric., USDA MAKES PERMANENT MEAT AND GRAIN SERVING FLEXIBILITIES IN NATIONAL SCHOOL LUNCH PROGRAM (Jan. 2, 2014), *available at* 

adjustments further highlight the need to break away from the guidelines of the current program, and to modify the calorie section of the National School Lunch Program.<sup>252</sup>

#### A. Policy Recommendations for the National School Lunch Program

The calorie ranges set by the National School Lunch Program<sup>253</sup> do not take into account numerous factors that affect an individual's calorie balance. The structuring of the legislation's caloric requirements only by grade group can cause adverse results among the children who participate in the program<sup>254</sup> because individuals have different calorie needs depending on their age, gender, and activity level.<sup>255</sup> South Dakota Senator Tim Johnson articulated the concerns of his constituents' regarding the changes to the National School Lunch Program, stating "[t]he children, parents, and school systems attempting to comply with these new school standards have found that they lack the flexibility necessary to meet the nutritional needs of many growing boys and girls."<sup>256</sup> Separately, when speaking about how the strict

http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=2014/01/000 1.xml [hereinafter USDA MAKES PERMANENT].

[The] USDA has worked closely with schools and parents during the transition to healthier breakfasts, lunches and snacks. Based on public feedback, USDA has made a number of updates to school meal standards, including additional flexibility in meeting the daily and weekly ranges for grain and meat/meat alternatives, which has been available to schools on a temporary basis since 2012.

Id.

The Administration maintains that the policies and actions that have been implemented thus far are helping to combat child hunger and obesity, and improve the health and nutrition of the nation's children. *Id.* "State agencies should consider any SFA (School Food Authority) compliant with the component required for grains and meat/meat alternatives if the menu is compliant with the daily and weekly minimums for these two components, regardless of whether they have exceeded the maximums for the same components." *Id.* One school district described an adverse affect of the previously implemented protein and grain requirements, and current calorie restrictions that forced her to turn to high-fat salad dressings in order to provide enough calories on a lunch that consisted of a salad served with grilled chicken and a small whole-grain roll. *See* Meredith Adams, *School Lunch Still Healthy Despite Rule Change*, *Nutritionists Say*, EDSOURCE TODAY (Jan. 14, 2014), http://edsource.org/2014/school-lunch-still-healthy-despite-rule-change-nutritionists-say/56211 - .VAJngZV6fLY.

For instance, one concerned parent remarked that her children, characterized as being in the 99<sup>th</sup> percentile of height for age, claim the new lunchtime calorie restrictions leave them hunger in the afternoon. Another parent described how her eight-grade son

<sup>&</sup>lt;sup>252</sup> Id.

<sup>&</sup>lt;sup>253</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>254</sup> *Id*.

<sup>&</sup>lt;sup>255</sup> See NESTLE & NESHEIM, supra note 152.

<sup>&</sup>lt;sup>256</sup> See Tim Johnson, Johnson Questions Obama Administration on School Nutrition Changes, FED. INFO. NEWS DISPATCH, INC. (Nov. 20, 2012), available at http://www.johnson.senate.gov/public/index.cfm?p=PressReleases&ContentRecord\_id=f2055 da7-5edd-44fc-9594-125459133b1b. Senator Tim Johnson further comments on the problems his constituents have faced as a result of changing standards by stating:

nutritional requirements could result in negative outcomes, Congressman Steven King mentioned that the "'Healthy and Hunger Free Kids Act, was interpreted . . . to be a directive that, because some kids are overweight . . . every child [should be put] on a diet."<sup>257</sup> Congressman King argued that "[t]he goal of the school lunch program was — and is — to ensure students receive enough nutrition to be healthy and to learn."<sup>258</sup>

As currently structured, the regulations of the National School Lunch Program<sup>259</sup> do not give the state governments or school districts any discretion to make nutritional adjustments for individual students, even if it is obvious that a student is not meeting nutritional recommendations.<sup>260</sup> When local school districts attempt to provide lunches to students that are outside of the required nutritional ranges, even if they know a child is not receiving proper calorie intake, they will be out of strict compliance and will not qualify for federal reimbursement.<sup>261</sup> This type of policy

no longer gets enough to eat to sustain him through two hours of football practice. To sustain his energy level, she now packs multiple protein-rich sandwiches and snacks without which he cannot "make it" through practice.

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Even though the child in the second example Senator Tim Johnson gives was able to supplement his lunches with protein-rich sandwiches and snacks before practice, Senator Tim Johnson also acknowledges that "for students from poorer families, school lunches [serve] as the primary, and sometimes the only, meal of the day. In such cases, these students have fewer financial resources to supplement school meals with snacks to maintain satiety, as compared to other students." *Id.* Senator Tim Johnson goes on to further describe his discontent with the National School Lunch Program calorie limit by stating:

The 2010 Dietary Guidelines for Americans clarified that the total number of calories a person requires each day varies depending on factors that include age, gender, height, weight, and level of physical activity. Yet, the new 2012 NSLP meal pattern mandates a maximum calorie limit based strictly on a student's grade level in school. Is it appropriate to restrict a student's caloric intake without any consideration for gender, height, weight or level of physical activity? . . . How does this meal pattern take into consideration students' individual needs, specially those physically active and growing students?

Id.

<sup>257</sup> See School Lunch Calorie Maximums Protested By Students As House Republicans Introduce Bill to Repeal USDA Rules, HUFFINGTON POST (Sept. 18, 2012), http://www.huffingtonpost.com/2012/09/18/house-republicans-introdu n 1893936.html.

(a) General. Reimbursement payments to finance nonprofit school food service operations shall be made only to school food authorities operating under a written agreement with the State agency. Subject to the provisions of §210.8(c), such payments may be made for lunches and meal supplements served in accordance with provision of this part and part 245 in the calendar month preceding the calendar month in which the agreement is executed. These reimbursement payments include general cash assistance for all lunches served to children under the National School Lunch

<sup>&</sup>lt;sup>258</sup> *Id*.

<sup>&</sup>lt;sup>259</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>260</sup> See DIETARY GUIDELINES, supra note 148, at 14.

<sup>&</sup>lt;sup>261</sup> 7 C.F.R. § 210.7 (2013).

contravenes the original purpose of the National School Lunch Program, <sup>262</sup> which was to safeguard the health and well-being of children by providing free or reduced prices lunches, and transforms it into a program that is primarily concerned with meeting strict nutritional requirements. <sup>263</sup> The focus of the school districts should be on efforts to help participating students meet proper calorie intake balance, not to meet a rigid guideline to guarantee financial reimbursement.

Through the years, The National School Lunch Program has undergone many different legislative adjustments. <sup>264</sup> The USDA continues to change the National School Lunch Program's policy in order to combat whatever new social issue is at the forefront of concern, whether it is national defense, education, hunger, waste, fat, or childhood obesity. <sup>265</sup> Even with all of these different policy changes, the USDA still purports to operate the National School Lunch Program for its original purpose of "[i]ntending to give every child access to an inexpensive healthy lunch." <sup>266</sup> The USDA attempts to accomplish this goal by continually adjusting the basic federal standards for schools districts without ever really adjusting the National School Lunch Program's directive. <sup>267</sup>

Without a direct relationship between policy makers in the USDA and the students who are actually eating the lunches, it is unsurprising that the National School Lunch Program tries to compartmentalize all schools and students into broad categories. The negative results described by Senator Johnson and Senator King are a consequence of legislation that is too generalized to meet every child's needs. In theory, the grade group system would be the most efficient means to accomplish a school lunch program because it prevents the schools from having to make more than one meal option—"one-size fits all." However, the

Program and special cash assistant payments for free or reduced price lunches served to children determined eligible for such benefits under the National School Lunch and Commodity School Programs. Reimbursement payments shall also be made for meal supplements served to eligible children in afterschool care programs in accordance with the rates established in §210.4(b)(3). Approval shall be in accordance with part 245 of this chapter.

Id.

Harry S. Truman, *Statement by the President upon Signing the National School Lunch Act*, Am. Pres (June 4, 1946), *available at* http://www.presidency.ucsb.edu/ws/?pid=12410.

<sup>&</sup>lt;sup>263</sup> 7 C.F.R. § 210.10.

<sup>&</sup>lt;sup>264</sup> See Inst. of Med.Nutrition standards and meal requirements for Nat'l School Lunch and Breakfast programs: phase I. proposed approach for recommending revisions (Virginia A. Stallings & Christine L. Taylor eds. 2008), available at http://www.fns.usda.gov/sites/default/files/SchoolMealsIOMPhaseI.pdf.

<sup>&</sup>lt;sup>265</sup> See POPPENDIECK, supra note 25, at 259.

<sup>&</sup>lt;sup>266</sup> Truman, supra note 262.

<sup>&</sup>lt;sup>267</sup> 7 C.F.R. 210.10.

<sup>&</sup>lt;sup>268</sup> *Id*.

<sup>&</sup>lt;sup>269</sup> See Johnson, supra note 256.

<sup>&</sup>lt;sup>270</sup> See BORNSTEIN, supra note 180, at 156.

overgeneralized policies have created less than optimal results for some students, illustrated by the example of Billy and Jessica.<sup>271</sup>

Although the program guidelines may have been initiated with an encouraging goal to improve—not to hinder—a child's nutritional health, adverse outcomes have been the result of wide implementation, and have produced "misguided inputs, tremendous waste, and unaccomplished goals." Numerous legislators have expressed concern regarding new regulations, and have urged the USDA to consider additional flexibility for regulations that are too narrow and formulaic. The most efficient way to curb undesired results of a program that is too broad to effectively meet the needs of all children is to break down the program, allowing it to become more individualized.

#### B. Implementation Recommendations

When writing policy, theory and practice are of two different ideological realms. Conceptually, policies can have great intentions, but without effective implementation any legislation can fail when applied to real world contexts. Considering the National School Lunch Program at the federal level, a program that has grown in participants, regulation and cost, it is easy to understand why expansion could be difficult.<sup>274</sup>

Some of the ideas offered in this Note may not be well taken by individuals who believe that separating individuals by their biological differences could be seen as politically incorrect, ultimately creating "offensive" policies.<sup>275</sup> However, since the National School Lunch Program's recent directives, which purport to curb obesity and increase awareness of nutritional health of Americans,<sup>276</sup> it is foolish to pigeonhole individuals into the same categories and assume a "one-size fits all" policy will alleviate nutritional disparity. Nutritionists have proven that individual nutritional needs are different.<sup>277</sup> Thus, if the established implementation guidelines arise as a result of biological dissimilarities, there should be a general understanding

<sup>272</sup> See School Lunch Calorie Maximums Protested By Students As House Republicans Introduce Bill to Repeal USDA Rules, supra note 257.

<sup>&</sup>lt;sup>271</sup> See supra, Part I.

<sup>&</sup>lt;sup>273</sup> See Johnson, supra note 256.

<sup>&</sup>lt;sup>274</sup> See Nutrition Standards in the National School Lunch and School Breakfast Programs, supra note 135, available at http://www.whitehouse/gov/sites/default /files/Child\_Nutrition\_Fact\_Sheet\_12\_10\_10.pdf. The Healthy, Hunger-Free Kids Act of 2010 hopes to increase the number of eligible children enrolled in school meal programs by 115,000 students through the use of Medicaid data. Id. By using Medicaid data, it could be easier to identify the children who meet the income requirements to qualify to receive free or reduced-price meals. Id. The introduction to the fact sheet states that currently, "[o]ver 31 million children receive meals through the school lunch program and many children receive most, if not all, of their meals at school." Id.

 $<sup>^{275}</sup>$  Merriam-Webster, http://www.merriam-webster.com/dictionary/politically%20correct (last visited Nov. 12, 2014).

<sup>&</sup>lt;sup>276</sup> See Press Release, U.S. Dep't of Agric., USDA Proposes Standards to Provide Healthy Food Options in Schs. (Feb. 1, 2013), available at http://www.fns.usda.gov/pressrelease/2013/001913.

<sup>&</sup>lt;sup>277</sup> See Parent Tips, supra note 22; Estimated Calorie Needs, supra note 10.

that the guidelines are not meant to "divide" children by their differences, but instead are targeted to achieve optimal nutritional health.

The following examples illustrate an adjustment to the National School Lunch Program to more adequately meet the Dietary Guidelines' standards in three key ways.<sup>278</sup> First, the Dietary Guidelines recommend that individuals use their age rather than grade level to determine their calorie target.<sup>279</sup> Second, the Dietary Guidelines specifically divides the calorie targets by gender.<sup>280</sup> Third, the Dietary Guidelines stress the importance of factoring in activity level to adjust recommended calorie intake levels.<sup>281</sup> The three main changes are illustrated bellow:

- 1. Age: Individual Age
- 2. Gender:
  - a. Male
  - b. Female
- 3. Activity Level:
  - a. Sedentary: "Includes light physical activity associated with typical day-to-day life." 282
  - b. Moderate: "Includes physical activity equivalent to walking about 1.5 to 3 miles per day at 3 to 4 miles per hour, plus the light physical activity associated with typical day-to-day life." 283
  - c. Active: "Includes physical activity equivalent to walking more than 3 miles per day at 3 to 4 miles per hour, in addition to the light physical activity associated with typical day-to-day life." 284

The three key changes allow the National School Lunch Program to better correlate with the USDA recommendations in the Dietary Guidelines.<sup>285</sup> This type of program would be more individualized and would ensure that children receive the proper calorie balance for their age, gender, and activity level.<sup>286</sup> As a result, the program would reduce the likelihood of malnutrition or obesity.<sup>287</sup> Finally, this individualized policy further ensures that children can focus on learning without being too full or too hungry.

A National School Lunch Program that takes age, gender, and activity level into consideration, by following the above proposals, would bring the program into

<sup>281</sup> See id.

<sup>282</sup> See id.

<sup>283</sup> See id.

<sup>284</sup> See id.

<sup>285</sup> See id.

<sup>286</sup> See, infra, Part IV-A.

<sup>287</sup> See Dietary Guidelines, supra note 148.

<sup>&</sup>lt;sup>278</sup> See DIETARY GUIDELINES, supra note 148; see also U.S. Dep't of Agric., Food Groups, CHOOSEMYPLATE, http://www.choosemyplate.gov/food-groups/ (last visited Sept. 18, 2014).

<sup>&</sup>lt;sup>279</sup> See DIETARY GUIDELINES, supra note 148.

<sup>&</sup>lt;sup>280</sup> See id.

compliance with the same nutritional recommendations as other USDA programs.<sup>288</sup> In order to take these types of factors into consideration, increased interaction between the school staff, students, and parents would be required. One way school's staff could obtain individual information about students would be to give children a questionnaire that could be taken home and answered with parents or guardians. Another initiative could be to require that each child obtain his or her own physical and meet with a school nurse before the start of every school year. The federal government could create an interactive program, similar to "ChooseMyPlate.gov," that students and parents would access before school to enroll in the National School Lunch Program. Each school could then access the information provided by the questionnaire, physical, or interactive program in order to accurately assess the age, gender and activity level of the students who are participants in the program and plan lunches accordingly.

The programing examples mentioned above would allow for an environment of collaboration among school staff and family, enabling them to jointly work toward bettering the nutritional environment for children. After all, although this Note is focused primarily on the importance of nutritional health within schools, parents and legal guardians play a very important general role in making sure that children receive adequate nutritional care outside of school.<sup>290</sup>

Naturally, the National School Lunch Program is subject to federal nutritional guidelines because the federal government provides the repayment to the States and eventually local school districts.<sup>291</sup> However, if the USDA finds that implementing a National School Lunch Program that incorporates the policy recommendation mentioned above by incorporating age, gender, and activity level is to expansive for the federal government to take on, the USDA should give greater flexibility to state governments and school districts. Greater flexibility to the strict regulations would enable state governments and schools district to better accommodate the needs of the school children they are directly responsible for. Additionally, allowing more power

Researchers from the Ohio State University and Indiana University released a study in spring 2007 that indicated children are more likely to gain weight during the summer months opposed to during the school year. This research indicates that influences other than school meal programs could be responsible for increases in childhood [obesity].

Id. This research does indicate that there are many factors that go into making sure that every child's nutritional needs are met. Id. Since students during the summer are not attending class, this study highlights the importance of making sure that the parents, legal guardians, or other caregivers that will be caring for the children during the summer months understand the nutritional program that the school is implementing. Id. If the Federal government and school authorities do not incorporate the role that parents and legal guardians play in the health of children, it does not matter how healthy lunches are if once a child leaves school they are served food that lacks any nutritional content. See NATIONAL SCHOOL LUNCH PROGRAM, supra note 3.

<sup>&</sup>lt;sup>288</sup> See Parent Tips, supra note 22; see Estimated Calorie Needs, supra note 10; see Dietary Guidelines, supra note 148.

<sup>&</sup>lt;sup>289</sup> See DIETARY GUIDELINES, supra note 148.

<sup>&</sup>lt;sup>290</sup> See SCHOOL NUTRITION ASS'N, supra note 123, at 149.

<sup>&</sup>lt;sup>291</sup> *Id*.

to the state government and local school districts would give those who are actually administering the National School Lunch Program at the lowest level a greater voice regarding what food to provide children and how it should be prepared.<sup>292</sup> Not only do children have different nutritional needs on an individual level, but children in certain parts of the country may have local dietary preferences and some school districts may have local access to foods that other parts of the country do not.<sup>293</sup> Lower levels of government and individual school districts will also have greater contact with the students that the National School Lunch Program is accommodating. Increased flexibility would give local food authorities an opportunity to make adjustments to meals more efficiently and effectively, without the onerous involvement of the federal government when there are apparent problems with a school not meeting nutritional guidelines.

#### V. CONCLUSION

The National School Lunch Program has gone through many changes over the years. The program has expanded to serve almost 31.6 million students on any given day.<sup>294</sup> The potential for a program of this size to impact the nutritional health of children across the country is significant. The new policy changes to the National School Lunch Program are well warranted, but the program should not stop short of making sure that the nutritional needs of all children are met. Children like Billy and Jessica<sup>295</sup> deserve to go to school each day knowing that the school serves meals in their best interest, not simply because it complies with the federal subsidy regulations or enables the federal government to discharge a surplus of commodities.

The term 'Farm to School' encompasses efforts that bring local or regionally produced foods into school cafeterias; hands-on learning activities such as school gardening, farm my visits, and culinary classes; and the integration of food-related education into the regular, standards-based classroom curriculum. The United States Department of Agriculture (USDA) supports such efforts through its Farm to School Program, which includes research, training, technical assistance, and grants.

U.S. DEP'T OF AGRIC., FARM TO SCH. (2013), http://www.fns.usda.gov/farmtoschool/farmschool (last modified Sept. 11, 2014). The USDA further discusses the way that it decides to spend the grant money every year. *Id*.

Every year, USDA awards up to \$5 million in grants to help schools connect with local producers and teach kids where their food comes from. These funds support activities ranging from training, planning, and developing partnerships, to purchasing equipment, planting school gardens, and organizing field trips. Grantees include schools and districts (large and small, rural and urban), Indian tribal organizations, producers and producer groups, non-profit entities, and state and local agencies.

Id.

<sup>&</sup>lt;sup>292</sup> See USDA MAKES PERMANENT, supra note 251. There are programs under the "Farm to School grant program that work to increase the amount of healthy, local food in schools." *Id.* "In November 2013, the USDA issued an additional \$5 million dollars to the grant program." *Id.* The awards went to "71 projects spanning 42 states and the District of Columbia." *Id.* 

 $<sup>^{293}</sup>$   $See~{\rm National}$  School Lunch Program, supra note 3; School Nutrition Ass'n , supra note 123.

<sup>&</sup>lt;sup>294</sup> NATIONAL SCHOOL LUNCH PROGRAM, *supra* note 3.

<sup>&</sup>lt;sup>295</sup> See supra, Part I.

Perhaps the deficiencies with the program are less that the program's size increased, but rather that the program's initial purpose to provide an outlet for surplus agricultural commodities, jobs, and at the very least to make sure children were not starving.<sup>296</sup> More fundamentally, the change that needs to take place in order for the National School Lunch Program to meet the nutritional needs of all children is for the federal government to create a program that places health and education as the central goal. 297 "The well-being of children has always had to compete with other agendas: the disposal of farm commodities or the maintenance of segregation or the reduction of the federal budget deficit."298 The benefits of a program that focuses more on individual nutritional needs would lead to a greater understanding of the importance of maintaining caloric balance throughout life. It is imperative that the National School Lunch Program incorporate age, gender, and activity level into its policy. If the USDA claims the National School Lunch Program is a nutritional program that is aligned with the Dietary Guidelines<sup>299</sup> to enhance the diet and health of school children, it can start by recognizing each child's individual nutritional needs.300

<sup>&</sup>lt;sup>296</sup> See Gunderson, supra note 71, at 2.

<sup>&</sup>lt;sup>297</sup> See POPPENDIECK, supra note 25, at 260.

<sup>&</sup>lt;sup>298</sup> See id.

<sup>&</sup>lt;sup>299</sup> See Dietary Guidelines, supra note 148.

<sup>&</sup>lt;sup>300</sup> See School Nutrition Ass'n, supra note 123 at 149. A Temple University study conducted implemented a two-facet program on fourth through sixth graders. Id. One part of the program was to set minimum nutritional requirements for foods provided in school. Id. The other part of the program was an educational component that required 50 hours of nutritional education for students. Id. The study showed that when "researchers removed all sodas, sweetened drinks, and snacks that didn't meet USDA nutrition standards from vending machines and cafeteria lines in five Philadelphia schools. ... They also implemented 50 hours of nutritional education for students and encouraged parents to purchase healthy snacks for their kid to eat at home. After 2 years, half as many of these kids become overweight compared with kids in similar schools without the program." Id. "If you don't teach kids what's good and what's bad, you don't solve a whole lot by restricting things." Id. "The issue isn't about removing children's ability to make choices, it's about providing healthy options and making it harder for them to access bad foods." Id. Although schools may be forced to focus on core subject classes and may consider health and physical activity extra-curricular programs that can be reduced or cut, if it was to be made into a priority to be taught at every level, children may being to understand and rationally make better choices in the lunch line. Id. at 162. "Until more money for federally funded school food programs and a mandate for nutrition education are in place, we'll always be in this situation ... [w]e need major support from our national government." Id. Although nutritional education is not the focus of this paper, informing young children on how to make healthy food decisions could help reduce malnutrition and obesity. If children are only being told what they need to eat because it is a requirement for their lunch to include certain items to qualify as a free lunch, they are not really being educated on the purpose for the policies. If children do not understand the purpose for more restrictive policies, there is nothing that will stop children from making unhealthy decisions when they are outside the walls of their school. Proper nutrition plays an important role in assuring that children grow into healthy adults; therefore, it should not be brushed aside and only included as part of federally funded program. Rather, proper nutrition should be placed at the forefront of educational programs. See also USDA MAKES PERMANENT, supra note 251 (addressing different types of USDA funding to help schools with cost of compliance to meet new federal nutritional standards).