

7-1-2018

## Reorganizing School Lunch for a More Just And Sustainable Food System In the US

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### Citation Details

Gaddis, J., & Coplen, A. K. (2018). Reorganizing School Lunch for a More Just and Sustainable Food System in the US. *Feminist Economics*, 24(3), 89-112.

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# REORGANIZING SCHOOL LUNCH FOR A MORE JUST AND SUSTAINABLE FOOD SYSTEM IN THE US

*Jennifer Gaddis and Amy K. Coplen*

## ABSTRACT

Public school lunch programs in the United States are contested political terrains shaped by government agencies, civil society activists, and agri-food companies. The particular organization of these programs has consequences for public health, social justice, and ecological sustainability. This contribution draws on political economy, critical food studies, and feminist economics to analyze the US National School Lunch Program, one of the world's oldest and largest government-sponsored school lunch programs. It makes visible the social and environmental costs of the "heat-and-serve" economy, where widely used metrics consider only the speed and volume of service as productive work. This study demonstrates that such a narrow understanding of the labor of lunch devalues care and undercuts the potential for school food provisioning to promote ecological and feminist goals. Further, it proposes a "high road" alternative and outlines an agenda for reorganizing school food provisioning to maximize care in all its dimensions.

## KEYWORDS

Social reproduction, care labor, foodservice, school food, sustainable food systems, social provisioning

JEL Codes: B54, H4, I3

## INTRODUCTION

School lunch is a contested political arena shaped by government agencies, civil society activists, and powerful agri-food companies concerned with what and how children are fed. At its most fundamental level, school lunch is also about *care* – a "species activity that includes everything we do to maintain, continue, and repair our world so that we may live in it as well as possible" (Fischer and Tronto 1990: 40). The social organization of school lunch impacts ecological sustainability, economic development, and social justice (Robert and Weaver-Hightower 2011; Morgan and Sonnino 2013). It is not just *what* children are fed at school that matters, but also who is being fed, who performs the work of feeding, how, and for what

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45 purpose (Sandler 2011). In this contribution, we examine the intersection  
46 of sustainability, ecology, and care at the site of government-sponsored  
47 school lunch programs, responding to Julie Nelson’s call for economics  
48 to concern itself “more with concrete issues of provisioning related to the  
49 actual social and natural environment” (1996: 131).

50 The act of feeding children is vital to social reproduction, which  
51 Giovanna Di Chiro defines as “the intersecting complex of political-  
52 economic, socio-cultural, and material-environmental processes required  
53 to maintain everyday life and to sustain human cultures and communities  
54 on a daily basis and intergenerationally” (2008: 281). In many countries,  
55 including the United States, social reproduction has been largely  
56 decollectivized, becoming the responsibility of the family to be secured  
57 in the home or private sphere (Federici 2004; Bakker 2007; Nakano  
58 Glenn 2012). Food insecurity – or lack of physical, social, and economic  
59 access to sufficient, safe, and nutritious food that meets people’s dietary  
60 needs and food preferences for active and healthy lives (Food and  
61 Agriculture Organization 2015) – is a symptom of a broader crisis of social  
62 reproduction. At specific moments in global, national, and local histories,  
63 government and civil society organizations have stepped in to mediate this  
64 crisis by offering free or heavily subsidized school lunches.

65 The social organization of school lunch programs is an evolving  
66 process that varies both within and across country contexts (Robert  
67 and Weaver-Hightower 2011; Morgan and Sonnino 2013; Oostindjer  
68 et al. 2016). Program development in industrialized countries follows  
69 three distinct phases (Oostindjer et al. 2016). Between 1850 and 1950,  
70 programs were established to address hunger and malnutrition among  
71 lower socioeconomic groups and, in cases like the US, to redistribute  
72 surplus agricultural commodities. In the 1970s, some countries improved  
73 the quality and nutritional profile of school lunches to address growing  
74 concerns about the health impacts of feeding children highly processed  
75 foods. The third and contemporary phase encompasses a wider range  
76 of health and sustainability concerns (Morgan and Sonnino 2013). In  
77 less industrialized countries, the United Nations (UN) has supported  
78 school lunch programs as a means for advancing sustainable and equitable  
79 development (World Food Programme 2011). Currently operating in  
80 thirty-seven countries, the UN Home Grown School Meals initiative  
81 promotes local food and seeks to empower producers and consumers  
82 to participate in shaping their own programs (World Food Programme  
83 2016). There is tremendous potential, across country contexts, for both  
84 long-established and newly developing school lunch programs to promote  
85 sustainable diets, which the UN Food and Agriculture Organization  
86 (FAO) defines as “diets with low environmental impacts which contribute  
87 to food and nutrition security and to healthy life for present and  
88 future generations” (2010). Such diets are “protective and respectful of

89 biodiversity and ecosystems, culturally acceptable, accessible, economically  
 90 fair and affordable; nutritionally adequate, safe and healthy; while  
 91 optimizing natural and human resources” (FAO 2010). However, as our  
 92 analysis underscores, school lunch programs can become co-opted in ways  
 93 that undermine their public value.

94 Our primary case is the US National School Lunch Program (NSLP),  
 95 one of the oldest and largest school lunch programs. We bring together  
 96 literature from political economy, critical food studies, and feminist  
 97 economics to highlight how the “heat-and-serve” economy erodes the  
 98 public value of the NSLP and increases its resource intensity. Using Marilyn  
 99 Power’s (2004) social provisioning methodology, we uncover how the  
 100 distribution of power and the organization of labor within the NSLP  
 101 shape the economic, public health, and ecological impacts of school  
 102 lunch. This methodology highlights the importance of social norms in  
 103 shaping economic systems (Himmelweit 2002) and provides a platform  
 104 for feminists to critically investigate relationships between humans and  
 105 nature as mutually constitutive. Power (2004: 5) defines social provisioning  
 106 “not as a rigid template or delineation of boundaries, but as a set of  
 107 guideposts in a rapidly developing field of knowledge,” including five  
 108 intimately interconnected components: (1) the incorporation of caring  
 109 and unpaid labor as fundamental economic activities, (2) the application of  
 110 well-being as a measure of economic success, (3) the analysis of economic,  
 111 political and social processes and power relations, (4) the inclusion of  
 112 ethical values and goals as an intrinsic part of the analysis, and (5)  
 113 the interrogation of differences by class, race-ethnicity, and other factors  
 114 (Power 2004: 3). Following an integrated analysis of social provisioning  
 115 within the contemporary NSLP, we put forward an agenda for reorganizing  
 116 school lunch to serve both feminist and ecological ends.

### 118 THE POLITICAL ECONOMY OF THE NSLP

119 The US Congress established the not-for-profit NSLP in 1946 as a  
 120 measure of national security to “safeguard the health and well-being of  
 121 the Nation’s children and to encourage the domestic consumption of  
 122 nutritious agricultural commodities and other foods” (US Department of  
 123 Agriculture [USDA] 2014).<sup>1</sup> The NSLP is a microcosm of the US food  
 124 system, operating within what agrarian studies scholars refer to as the  
 125 “corporate food regime” (1980s–present), characterized by international  
 126 trade liberalization, post-Fordist flexible accumulation strategies, and a  
 127 shift from public to private regulation (Busch and Bain 2004; Pechlaner  
 128 and Otero 2010). The public sector’s inability to regulate transnational  
 129 trade has allowed the private sector to wield considerable power in  
 130 reconfiguring the social relations of the global food system (Busch and Bain  
 131 2004). Despite concerns about the healthfulness and ecological impacts of

133 heavily consolidated and industrialized food systems, large multinational  
134 companies continue to gain power through public-private partnerships  
135 and regulations that favor their own business practices (Busch and Bain  
136 2004). A parallel process occurred within the NSLP, with policy shifting  
137 in favor of processed food companies as school lunch became increasingly  
138 commercialized.

139 The reduction of food's nutritional value to individual components  
140 like fat, calories, salt, sugar, and vitamins – sometimes referred to as  
141 “nutritionism” – allows food processors to reformulate and fortify products  
142 in order to make health claims about products of minimal nutritional  
143 value (Clapp and Scrinis 2017). In the late 1960s and early 1970s, the  
144 USDA promoted scientifically nutritious “efficiency foods,” like frozen and  
145 pre-plated meals, for use in the many thousands of schools that lacked  
146 kitchens and cafeterias (Levine 2008; Poppendieck 2010). Schools were  
147 allowed to outsource their lunch programs to for-profit companies. At the  
148 same time, schools were beginning to face perverse financial incentives  
149 to make money selling snack items in vending machines and à la carte  
150 lines in order to balance their budgets. The trend toward “heat-and-serve”  
151 foods accelerated throughout the 1970s, with an inflationary crisis and  
152 concerns about food waste establishing the groundwork for new legislation  
153 (Poppendieck 2010). The USDA “modernized” its commodities program  
154 by making highly processed finished products like chicken nuggets far  
155 more available to schools. Cost-cutting attempts in the 1980s and 1990s  
156 further eroded nutrition standards and brought fast food giants like  
157 Domino's and Taco Bell into school lunchrooms, where children were  
158 increasingly being treated as “customers” whose taste for salt, fat, and sugar  
159 were a source of both current and future profits for fast food franchises and  
160 powerful packaged food companies (Poppendieck 2010).

161 The most recent legislative reform to the NSLP, the Healthy Hunger  
162 Free Kids Act of 2010 (HHFKA), ushered in updated nutrition standards,  
163 which were quickly followed by intense rounds of lobbying by powerful  
164 agribusiness companies and trade associations that wanted to “relax” or  
165 revoke regulations that reduce their profitability. This included mandates  
166 to include more healthful foods like unprocessed fruits, vegetables, and  
167 whole grains, and fewer salty and starchy foods like potatoes and pizza  
168 (Confessore 2014).<sup>2</sup> By 2011, the challenge of meeting tight financial  
169 constraints and complex regulatory requirements had pushed roughly  
170 one-quarter of US schools to outsource their lunch programs (Komisar  
171 2011).<sup>3</sup> This practice evoked criticism from labor unions and media outlets  
172 in the late 1990s and early 2000s after evidence pointed to declining  
173 nutritional quality, conflicts of interest, and multiple cases of foodborne  
174 illness and fraud (Service Employees International Union 2005; Bogardus  
175 2010; Komisar 2011). For-profit management companies, especially those  
176 with multi-state and multi-sector contracts, are notorious for controlling

177 their costs by cutting food quality and reducing workers' wages and benefits  
 178 (Jacobs and Graham-Squire 2010). Most school districts continue to run Q4  
 179 self-operated lunch programs, but they too face pressures to keep food and  
 180 labor costs low, which further reinforces the logic of the "heat-and-serve"  
 181 economy.

### 182 183 THE LABOR OF SCHOOL LUNCH

184  
 185 Women perform most of the food provisioning practices in schools and  
 186 at home, yet they control few resources and hold little decision-making  
 187 power over agri-food policy or industry practices (Allen and Sachs 2007).  
 188 As a commodified form of reproductive labor, the wages and value  
 189 assigned to school foodservice work is tethered to a legacy of feminization,  
 190 racialization, and devaluation (England, Budig, and Folbre 2002). Over 90  
 191 percent of the estimated 420,000 foodservice workers in US K-12 schools  
 192 are women (Jacobs and Graham-Squire 2010). They worked a median  
 193 twenty-five hours per week and in 2008 earned a median annual income  
 194 of US\$9,300, compared with forty hours per week and US\$30,000 for  
 195 the workforce as a whole. Due to chronically low wages, they are about  
 196 twice as likely to participate in one or more public assistance programs  
 197 compared with the US workforce as a whole (36.3 percent versus 19.7  
 198 percent, respectively; Jacobs and Graham-Squire 2010).

199 There are some "good" jobs in school foodservice. The minority of  
 200 workers covered by strong union contracts, and those with decades of  
 201 seniority or highly specialized skills, earn upwards of US\$15 per hour  
 202 and may qualify for employer-provided healthcare and retirement benefits.  
 203 However, the vast majority of jobs in the "heat-and-serve" economy are  
 204 short-hour low-wage positions without benefits. New employees are hired  
 205 as temporary or substitute workers who fill shifts as needed. After gaining  
 206 a permanent position it can take a decade or more to be promoted into  
 207 a full-time position with benefits. This precarious employment structure  
 208 disproportionately affects single mothers and primary providers who make  
 209 up a substantial portion of the K-12 cafeteria labor force (UNITE HERE!  
 210 2013). The degraded nature of their jobs harms not only the economic  
 211 security and well-being of their families, but also the millions of children  
 212 and families who depend on the NSLP as a care service.

213 Managers typically assess their operations using a metric of staffing  
 214 efficiency and productivity called "meals-per-labor-hour" (MPLH; Rushing,  
 215 Anderson, and Boettger 2016), which pushes schools to rely more heavily  
 216 on pre-packaged food and disposable trays that have negative consequences  
 217 for the health of children's bodies and the environment. Frontline cafeteria  
 218 workers are judged primarily by criteria that prioritize speed in both  
 219 production and service. In some schools, the lack of culinary infrastructure  
 220 makes it difficult for them to prepare healthy meals (PEW Trusts 2013),



221 and the pace of service is so fast that cafeteria workers barely have time to  
222 engage children, though public health research demonstrates that verbal  
223 prompts help children make healthier choices (Schwartz 2007).

224 Evaluating the labor of lunch predominantly through a lens of time  
225 efficiency undermines the social interactions that are vital to providing  
226 high-quality meals to children and devalues the expansive range of paid and  
227 unpaid caring activities that a social provisioning approach makes explicit.  
228 Following Nakano Glenn's (2012) typology of care work, we outline three  
229 intertwined categories of labor that cafeteria workers perform. First is direct  
230 caring – the physical care of nourishing children's bodies; the emotional  
231 care of offering reassurance and knowing children's names, life situations,  
232 and preferences; and the services required to help children and families  
233 meet their needs, like assisting with paperwork for free lunch applications  
234 and keeping track of students with allergies and special dietary needs.  
235 Second is maintaining the physical spaces where children eat: washing  
236 lunch trays, restocking napkins and utensils, and keeping serving areas  
237 clean. Third is the work of fostering relationships and social connections,  
238 also referred to as "community mothering," which includes encouraging  
239 respectful and caring behavior toward other children and adults, and  
240 connecting students to the people who grow and produce their food. For  
241 cafeteria workers who live in the communities they serve, and those who  
242 have had a long tenure at a particular school, "community mothering"  
243 also involves making connections intra- and intergenerationally between  
244 the children they feed and their extended family and neighbors.

245 High-quality care depends on the cultivation of sustained personal  
246 relationships (Himmelweit 2007), but degraded job conditions disrupt  
247 relationships between cafeteria workers and the children they feed. Schools  
248 across the US are struggling to recruit and retain cafeteria workers (Jacobs  
249 and Graham-Squire 2010). In some cases, cafeterias are short-staffed for  
250 months or even years at a time, which pressures workers to skip their  
251 scheduled breaks, work overtime without pay, or take on additional tasks  
252 to ensure that students are fed on time (UNITE HERE! 2013). Such  
253 self-exploitation has parallels across caring industries, where "owners and  
254 managers often seem to depend on their workers' willingness to sacrifice  
255 for their clients" (England, Folbre, and Leana 2012: 33).<sup>4</sup> In sum, we argue  
256 that failing to recognize, value, and support cafeteria staff's ability to care  
257 for children undermines the NSLP's stated goal of "safeguard[ing] the  
258 health and well-being of the Nation's children" (USDA 2014).

## 259 260 REPRODUCING HEALTH AND ENVIRONMENTAL RISK

261  
262 At a cost of roughly US\$12.5 billion in 2016, the NSLP is one of the  
263 largest and most widespread child welfare programs in the US (USDA  
264 2017a). Approximately 95 percent of public and non-profit private schools

265 participate, feeding roughly 30.4 million children (USDA 2017b). Children  
 266 qualify for free, reduced-price, or full-priced meals based on their family  
 267 income, – a policy that has reinforced class and race divides throughout  
 268 the NSLP’s history (Levine 2008; Poppendieck 2010). Non-white families  
 269 participate in the NSLP at higher rates (Ralston et al. 2008), as do children  
 270 of women employed outside the home (Datar and Nicosia 2012). Over  
 271 twenty million eligible children – mostly from higher-income families – do  
 272 not participate in the NSLP. The poor quality of school meals, perceived or  
 273 actual, coupled with the potential stigma of eating school lunch are just a  
 274 few of the reasons why eligible children may opt out (Mirtcheva and Powell  
 275 2009; Poppendieck 2010).

276 All school lunches, including “full price” meals, are subsidized to some  
 277 extent by the federal government through a formula that dispenses cash  
 278 subsidies and an allotment of agricultural commodities per child served.  
 279 The maximum 2016 federal reimbursement for a “free” school lunch in the  
 280 contiguous states was US\$3.39 and US\$0.44 for a “full price” lunch (USDA  
 281 2016). These reimbursement dollars, along with revenue from full-price, Q6  
 282 lunches and à-la-carte sales, help offset the cost of free and reduced-price  
 283 lunches, which make up about 73 percent of the total number of lunches  
 284 served (USDA 2017b).

285 Schools participating in the NSLP must offer a nutritionally balanced  
 286 meal and cover their labor, equipment, and administrative costs. To  
 287 avoid dipping into general education funds, foodservice directors strive to  
 288 minimize costs and maximize average daily participation (ADP). The need  
 289 to operate as a “business” creates an economic incentive to attract paying  
 290 “customers” by selling brand-name and other commercial foods that mirror  
 291 the snacks and fast foods sold in retail settings (Poppendieck 2010). Poor  
 292 nutrition negatively impacts children’s ability to excel in the classroom  
 293 (Taras 2005). The composition of school lunches, is therefore, especially  
 294 important for low-income children who are disproportionately dependent  
 295 on the NSLP for their energy and nutritional intake (Briefel, Wilson, and  
 296 Gleason 2009).

297 Over the past decade, public health professionals and policymakers  
 298 have focused on reforming the NSLP as a means for reducing child  
 299 obesity, which has tripled since 1980 (Ogden et al. 2012). Child obesity,  
 300 like other diet-related health risks, is distributed unevenly across class  
 301 and race lines (Otero et al. 2015). Between the years 2011 and 2014,  
 302 only 14.7 percent of non-Hispanic white children were obese, while 21.9  
 303 percent of Hispanic children and 19.5 percent of non-Hispanic black  
 304 children were classified as obese by the Centers for Disease Control and  
 305 Prevention (CDC; 2017). The energy balance model largely guides efforts  
 306 to reverse these trends, by theorizing that people gain weight when the  
 307 amount of calories they consume exceeds the amount of calories they  
 308 expend. This overly simplistic model leads policymakers and activists to



309 treat poor nutrition as an individual problem of personal choice (Gibson  
310 and Dempsey 2015). It ignores structural, genetic, and environmental  
311 factors that mediate metabolic processes (Guthman 2011). It also deflects  
312 attention away from the human and environmental impacts of the energy  
313 and chemicals used in growing, transporting, and preserving school  
314 meals.

315 The industrialization of the food system contributes to the hundreds  
316 of chemicals, including pesticides, bisphenol A (BPA), and phthalates  
317 that are now part of the human “body burden,” or the sum of synthetic  
318 and naturally occurring chemicals present in an individual’s body (CDC  
319 2009).<sup>5</sup> Chronic exposure to environmental toxins, particularly endocrine-  
320 disrupting chemicals, can affect fat tissue development (Newbold et al.  
321 2008), disrupt appetite and metabolism (Tabb and Blumberg 2006), and  
322 heighten the risk of certain reproductive and behavioral disorders and  
323 cancers (Krimsky 2002). Mediating children’s chemical body burdens  
324 through individual acts of “precautionary consumption” (MacKendrick  
325 2014) requires inputs of additional time and money that many low-  
326 income caregivers cannot afford. What’s more, attempting to navigate this  
327 landscape of chemical risk creates yet another burden for women who are  
328 deciding what to feed their children or whether to let them participate in  
329 the NSLP (Cairns, Johnston, and MacKendrick 2013).

330 During Congressional reauthorization of the NSLP in 2010, nutrition  
331 standards were updated to more closely match the *Dietary Guidelines for*  
332 *Americans* (DGA). Every five years, beginning in 1980, the US Department  
333 of Health and Human Services and the USDA have jointly published the  
334 DGA – a document ~~that is~~ meant to reflect the most current, science-  
335 based nutrition advice (Office of Disease Prevention and Health Promotion  
336 2017). Recommendations from an advisory committee comprised of  
337 independent experts in the fields of nutrition, medicine, and public health  
338 inform the final DGA. **Though** based on scientific evidence, the DGA  
339 are far from apolitical (Nestle 2013). Large agri-food companies and  
340 trade associations shape nutrition science and policy through selective  
341 funding of scientific research, professional lobbying, and donations to  
342 lawmakers and professional organizations (Brownell and Warner 2009).  
343 Notably, the advisory committee for the 2015–20 DGA included evidence-  
344 based recommendations on environmental sustainability and its relation  
345 to the American diet (Wood-Wright 2016). However, these considerations  
346 were dropped from the final DGA, despite nearly three-quarters of adults  
347 in the US supporting the inclusion of environmental provisions and  
348 the promotion of sustainable agriculture practices in the DGA (Wood-  
349 Wright 2016). At present, the DGA and the social provisioning of the  
350 NSLP reinforce the agri-food industry’s influence over nutrition standards,  
351 reproduce health disparities along lines of race and class, and limit federal  
352 support for sustainable diets.

## FOOD, ECOLOGY, AND SOCIAL PROVISIONING

353  
354 The social provisioning methodology requires that we extend our analysis  
355 of well-being beyond children's bodies to the health and sustainability of  
356 the environments they inhabit. A growing number of metrics point to the  
357 *un*-sustainability of the dominant global industrial food system (Heller and  
358 Keoleian 2003). From an environmental standpoint, these include: loss of  
359 genetic diversity, escalating rates of agricultural land conversion, high rates  
360 of soil loss and groundwater withdrawal, intensive reliance on fossil fuels  
361 and synthetic chemicals, and the generation of large amounts of food waste.  
362 From a socioeconomic perspective, indicators include: the limited income  
363 and profitability of farming, the aging demographics of farm operators, the  
364 precarious legal status and labor conditions of many food chain workers,  
365 and the high degree of capital consolidation occurring in the food industry  
366 (Heller and Keoleian 2003). From a public health standpoint, pesticide  
367 exposures (via farm-based application and food intake) raise the risk for  
368 some cancers and reproductive disorders; concentrated animal feeding  
369 operations contribute to widespread outbreaks of foodborne pathogens;  
370 and excessive use of antibiotics in farm animals can lead to resistant strains  
371 of microbes in humans (Horrihan, Lawrence, and Walker 2002).

372 Alternative food networks and movements have grown in response to  
373 the environmental, socioeconomic, and public health concerns related  
374 to the industrial food system. In the 1960s and 1970s, "back to the  
375 land" movements sought to create alternatives through local and organic  
376 agriculture, natural food cooperatives, and vegetarian diets (Belasco 2014).  
377 At the same time, communities of color drew on the momentum of  
378 ~~civil rights movements~~ to organize against the exploitation of migrant  
379 farmworkers, framing labor as a critical social justice issue. Beginning in the  
380 1980s, new alternative food movements and initiatives emerged and shifted  
381 their focus toward environmental sustainability (Allen et al. 2003; Alkon  
382 and Agyeman 2011). The contemporary alternative food movement hinges  
383 mainly, though not exclusively, on initiatives both by and for the white  
384 middle class who decry a perceived disconnect with "where our food comes  
385 from" and champion a return to a romanticized agrarianism to combat the  
386 alienation of modern urban life (Alkon and Agyeman 2011; Minkoff-Zern  
387 2014). The dominant discourse of alternative food politics has thus shifted  
388 from the public to the private sphere, away from collective organizing and  
389 toward "voting with one's fork" and affecting change primarily through  
390 market-based mechanisms (Brown and Getz 2008; Guthman 2008; Jaffee  
391 2012).


392 Alternative food movement activism within the context of the NSLP  
393 has focused largely on support for school gardens and farm-to-school  
394 (FTS) programs. A grassroots group of farmers, parents, and nonprofit  
395 organizations launched the FTS movement in the early 1990s (National  
396

397 Farm to School Network 2016a). FTS – which includes some combination  
398 of local purchasing, school gardens, and educational initiatives – has  
399 gained significant traction among policymakers and practitioners in the  
400 past decade. The USDA established a formal FTS program in 2012, through  
401 which it administers grant funding and technical assistance.

402 FTS programs improve student health (Moss et al. 2013), increase  
403 participation in the NSLP, and provide a range of important community,  
404 environmental, and economic benefits that are not directly captured  
405 using the NSLP’s current metrics (Kloppenborg and Hassanein 2006;  
406 National Farm to School Network 2016b). Proponents argue that FTS  
407 shifts children’s relationship to food, nature, and community in ways that  
408 are healthier and more ecologically sustainable, while at the same time  
409 directing public funds to local farmers. Examining the FTS movement  
410 through the lens of social provisioning, particularly with regard to political-  
411 economic processes and power relations, reveals a more complicated  
412 picture. Some critical food studies scholars argue that FTS reproduces  
413 much of the rhetoric and practices of neoliberal governance through  
414 contingent labor relations, reliance on private funding sources, and the  
415 devolution of responsibility to the local level (Allen and Guthman 2006).

416 While over 42 percent of US school districts participated in at least  
417 one FTS activity in 2015 (USDA 2016a), reliance on state and local  
418 governments and civil society organizations to fill the funding gap has  
419 led to highly unequal development, with poorer states participating less  
420 in FTS programming (Lyson 2016). Furthermore, cumbersome USDA  
421 procurement regulations and the ubiquity of “heat-and-serve” cookery  
422 make it difficult for schools to develop robust FTS programs.<sup>6</sup> Connecting  
423 with local farmers, applying a “geographic preference” specification when  
424 writing bid documents, and purchasing the necessary equipment to safely  
425 store, cook, and serve fresh food all require additional staff time and  
426 financial resources that poorer school districts may not have. Despite  
427 overwhelming public support for FTS,<sup>7</sup> less than half of 1 percent of  
428 the annual federal budget for the NSLP is allocated to support these  
429 programs.<sup>8</sup> Instead of investing in FTS, most of the NSLP budget supports  
430 industrially produced food and reinforces the power asymmetries of the  
431 corporate food regime.

432 ~~Moreover, the~~ social provisioning methodology pushes us to explicitly  
433 consider the value of paid and unpaid care work and to incorporate ethical  
434 goals and values as part of our analysis of FTS programs. As with other  
435 alternative food initiatives, an uncritical approach could reproduce the  
436 gender, class, and racial hierarchies of the industrial food system, which  
437 are not partial to the length of supply chains and often manifest at the  
438 local scale (DuPuis and Goodman 2005; McMahon 2005; Born and Purcell  
439 2006). For example, critical food scholars have shown that the production  
440 of local food relies on the self-exploitation of farmers (Galt 2013) and/or

441 the cheap labor of farm workers who are vulnerable to the same types  
 442 of exploitation as those who toil in the global industrial food system  
 443 (Gray 2014). K-12 cafeteria jobs do not necessarily improve just because  
 444 local food is ~~being~~ prepared and served. The educational wing of FTS   
 445 depends heavily on unpaid volunteers and low-paid service members of  
 446 organizations like AmeriCorps whose work supports school gardens, field  
 447 trips, and local food tastings (Allen and Guthman 2006). Thus, in order  
 448 to avoid the “local trap,” which posits that local eating as *inherently* more  
 449 ecologically sustainable and socially just (Born and Purcell 2006), FTS  
 450 advocates must focus on dismantling the structural inequalities embedded  
 451 within the NSLP and adopt what Charles Levkoe (2011) refers to as a  
 452 “transformative orientation.”

### 453 454 REORGANIZING THE PUBLIC WORK OF FEEDING

456 The preceding critique of the NSLP points to numerous ways that the  
 457 current social provisioning of school lunch harms children, cafeteria  
 458 workers, and the environment. Reorganizing school lunch in order  
 459 to maximize the public benefits of care as an interspecies and  
 460 intergenerational activity is a multifaceted endeavor. Informed by critical  
 461 food studies (Gottlieb and Joshi 2010; Alkon and Agyeman 2011; Levkoe  
 462 2011) and the social provisioning methodology (Power 2004), we outline  
 463 five properties of such a food system:

- 465 (1) Food chain workers who grow, process, distribute, prepare, and serve  
 466 food earn a decent living and are respected for the role they play in  
 467 feeding others.
- 468 (2) The health of human and nonhuman species is actively protected  
 469 and restored when necessary.
- 470 (3) Food production, transport, storage, processing, and packaging are  
 471 designed to minimize the use of fossil fuels, chemicals, water, and  
 472 other resources.
- 473 (4) Regional food cultures that promote vibrant communities and  
 474 meaningful connections to the environment are actively supported.
- 475 (5) Producing and consuming food is safe and healthy for people of all  
 476 socioeconomic class, gender, race/ethnicity, and legal statuses.

477  
 478 Our agenda for reorganizing school lunch in ways that better conform to  
 479 these properties is informed by scholarship on “high road” labor market  
 480 strategies for the care sector (Folbre 2006), and by the work of planning  
 481 scholars Kevin Morgan and Roberta Sonnino (2013) who articulate a new  
 482 “moral economy” of school food based on three factors: a broad conception  
 483 of care, public procurement as a tool for enhancing social justice and  
 484 ecological sustainability, and active citizen participation in the design and

485 delivery of school food programs. In putting forward this agenda, we  
 486 identify several “way stations,” or intermediate institutional innovations,  
 487 that may only partially embody the values of the ideal alternative, but move  
 488 the system in the right direction (Wright 2007).

### 490 Expanding culinary capacity

491 Scratch cooking is a cost-effective way to expand the variety of healthy  
 492 lunches that children are offered (Woodward-Lopez et al. 2014). Countries  
 493 as diverse as Japan, Italy, and Brazil all emphasize fresh cooking in  
 494 their national school lunch programs (Hager 2015; Liquori 2006; Otsuki  
 495 2011). Before the mass industrialization of the NSLP, many US schools  
 496 had production kitchens that were outfitted with versatile equipment  
 497 that allowed cooks to prepare recipes from scratch (Poppendieck 2010).  
 498 Staff followed nutritional requirements and learned a wide range of  
 499 culinary skills while on the job: baking bread, scaling recipes, substituting  
 500 ingredients, and even basic butchery (Briggs 2004). Their ~~high-level~~  
 501 ~~of culinary capacity~~ made the NSLP an economically efficient and less  
 502 resource-intensive program (for example, through bargains on seasonal  
 503 produce, thrifty ingredient substitutions, and zero-waste practices like using  
 504 vegetable peelings and turkey carcasses for making stock). The flexibility  
 505 of cooking from scratch also allowed schools to serve culturally relevant  
 506 meals that reflected and reproduced the tastes and traditions of particular  
 507 communities (Hollingsworth 2012).

509 While the physical infrastructure and skill base for on-site production  
 510 in US schools has largely eroded (PEW Trusts 2013), a growing number  
 511 of communities are taking the first steps toward transitioning to scratch  
 512 production (Collins 2012). Interventions designed to increase “culinary  
 513 capacity,” or the skills, time, and equipment needed to turn raw ingredients  
 514 into freshly prepared meals, improve not only children’s health and  
 515 wellness (Cohen et al. 2012; Djang et al. 2016), but also their educational  
 516 outcomes and school attendance (Belot and James 2011). Scratch cooking  
 517 also directs more money to labor and ingredients rather than prepared  
 518 foods (Tsui et al. 2013), and allows schools to serve more plant-based  
 519 entrées that are less resource intensive than the beef, chicken, cheese, and  
 520 fluid milk that are currently relied upon as the primary protein sources in  
 521 the NSLP. The energy demands of the US food system could be reduced  
 522 by up to 74 percent if the population were to shift to an energy efficient  
 523 pescatarian diet (Canning et al. 2017).

524 Breaking from the “heat-and-serve” economy and building community-  
 525 based culinary capacity acts as a way station for “productive justice,”  
 526 or the ability of individuals and groups to actively shape the social  
 527 and economic systems in which they live (~~Wright 2007~~). Minneapolis,  
 528 Minnesota, Public Schools (MPS) offers one example of how schools can

529 simultaneously transition to scratch cooking, promote experiential food  
 530 and nutrition education, and support a sustainable agricultural supply  
 531 chain (Minneapolis Public Schools 2017). MPS had very low culinary  
 532 capacity until it began investing in a kitchen renovation project and  
 533 FTS programming in 2012. The city built a central production kitchen  
 534 in the 1970s, where workers produced tens of thousands of pre-packed  
 535 lunches on a mechanized assembly line. These meals were trucked to  
 536 “warming kitchens” in locations across the city where they were reheated  
 537 in their plastic or aluminum containers and then distributed to kids in  
 538 the cafeterias. Under the leadership of a new foodservice director, MPS  
 539 embarked on an ambitious project to renovate the kitchens of all sixty-four  
 540 of its buildings to accommodate scratch cooking (Boss 2016).

541 While the MPS project is still underway, early results suggest that  
 542 transforming the social provisioning of school food has helped generate  
 543 skilled “high-quality care jobs” that are more likely to be full-time and  
 544 to allow for ~~more~~ autonomy, creativity, and collaboration (Folbre 2006;  
 545 Schneider 2016). Investing in production kitchens has also helped MPS  
 546 build capacity from within, thereby increasing the “transformability” of  
 547 school lunch as a social-ecological system (Walker et al. 2004). ~~As it~~  
 548 ~~built culinary capacity,~~ MPS pioneered the elimination of “ingredients of  
 549 concern” from its supply chain and developed “clean label” recipes without  
 550 the additives found in products of lower nutritional quality (Minneapolis  
 551 Public Schools 2015).<sup>9</sup> In addition, MPS uses its purchasing power to  
 552 support local producers and gives preference to minority growers and small  
 553 farms with sustainable agricultural practices and fair labor standards.

554 Investing in structural changes to how school food is grown, prepared,  
 555 and served, as Minneapolis has done, would help the NSLP advance  
 556 feminist and ecological goals in tandem. The vast network of school  
 557 kitchens and cafeterias in the US could be reimagined, and ultimately  
 558 reconfigured, to develop a culinary skill base of adults trained to prepare  
 559 healthy, sustainable, culturally relevant foods and a “taste base” of children  
 560 who have learned to accept or even desire foods that differ from the  
 561 flattened-out tastes and expectations of the industrial food system (Carolan  
 562 2015).

### 564 Procurement and participation for the public good

566 Market-based mechanisms may also be able to effectively reorganize  
 567 school lunch to promote care and sustainability if the procurement  
 568 criteria encompass a holistic range of quality metrics (Morgan and  
 569 Sonnino 2013). Rome, Italy, launched a “quality revolution” in 2001 that  
 570 dramatically restructured school lunch procurement to prioritize seasonal,  
 571 local, organic food, and “bio-dedicated” food chains that promote regional  
 572 agricultural identity and global solidarity through fair trade (Liquori 2006).



573 Rome's school lunch service is almost entirely privatized, but the contracts  
574 are awarded in a way that limits the overall market share of any single  
575 company; and caterers must be able to satisfy a broad set of criteria  
576 related to ecological sustainability, cultural identity, social justice, and labor  
577 standards (Liquori 2006).

578 Critical food studies scholars warn that the devolution of school lunch  
579 policy to the local level can lead to inequitable outcomes (Allen and  
580 Guthman 2006; Levine 2008; Morgan and Sonnino 2013). Local flexibility  
581 and participatory democracy coupled with strong national procurement  
582 standards can help mitigate this concern. To these ends, Brazil's Home  
583 Grown School Food program offers a compelling case: federal legislation  
584 mandates that 70 percent of the food served in schools is fresh or  
585 minimally processed and that 30 percent is sourced from local family  
586 farmers (Otsuki 2011). This nationwide stimulus for ethical consumption  
587 (Kleine and das Graças Brightwell 2015) protects against the further  
588 displacement of regional foodways by the corporate food regime (Monteiro  
589 and Cannon 2012).<sup>10</sup> However, these laws came about only after civil society  
590 organizations exerted sustained pressure on legislators, demonstrating that  
591 transforming food systems requires citizen participation (Hassanein 2003).

592 In the vein of increasing participation in school food systems and  
593 establishing the conditions for productive justice, we suggest inviting  
594 children to grow, prepare, and serve their own school lunches.<sup>11</sup> Such  
595 activities increase children's food awareness, skills, and confidence, which  
596 may have spillover effects into the home environment (Ensaff et al.  
597 2015). These experiential opportunities should be sensitive to and educate  
598 students about the ways in which particular populations (such as African  
599 Americans during slavery and more recently Latino/a immigrants within  
600 the US context) have been exploited in the production of food, and  
601 encourage them to explore the ways in which these lasting legacies shape  
602 their attitudes and relationships to food labor.

603 School children themselves have at times been exploited in the  
604 production of food, for example on farms in Tanzania (Phillips and Roberts  
605 2011), and in cafeterias in the US (Levine 2008). It is therefore critical  
606 to ensure that students are the beneficiaries of their own labor and that  
607 such programs are designed to dismantle rather than reproduce systems of  
608 oppression. Furthermore, through the intentional design and delivery of  
609 inclusive and holistic programs that allow children to care for themselves,  
610 each other, and the environment, the social provisioning of school lunch  
611 can advance the feminist goal of breaking down the gendered, classed, and  
612 racialized distribution of caring responsibilities.

613 The NSLP's current system of only offering free lunches to children from  
614 poor families has the unintended consequence of reinforcing class divides  
615 and shaming those parents and children who participate (Poppendieck  
616 2010). Advocates of a universal program convincingly demonstrate that

617 providing free lunches to *all* children reduces the stigma of participation  
 618 and eliminates the time burden and administrative costs associated with  
 619 verifying income-based eligibility (Poppendieck 2010). From a pragmatic  
 620 standpoint, universal care policies help taxpayers better understand the  
 621 value of increased public provisioning (Folbre, Howes, and Leana 2012)  
 622 and the need for improving the quality of school lunches. The potential  
 623 for universal gains can help generate political pressure. Take South  
 624 Korea, for example: in 2010, a coalition of over 2,100 civic groups and  
 625 social organizations successfully demanded that the government provide  
 626 universally free school lunches made with local and organic ingredients  
 627 through programs managed by school districts, not private companies  
 628 (Kang 2011). The South Korean coalition intentionally leveraged the  
 629 demand for high-quality social services, in this case school lunch, to initiate  
 630 a more democratic arrangement of care and a more ecologically sustainable  
 631 food system.

632 A coalition politics that seeks to advance more democratic arrangement  
 633 of care within the US might look to the possibility for schools to play  
 634 a greater role in the social provisioning of food for other vulnerable  
 635 populations. For instance, cafeteria workers who currently hold part-  
 636 time positions could be hired full time to prepare affordable, nutritious,  
 637 ethically sourced meal “kits” and heat-and-serve meals for caregivers,  
 638 ~~elderly, chronically ill, and disabled people~~ who may not have the ability to  
 639 cook from scratch. This would help ease the gendered and classed burdens  
 640 of ethical consumption (Cairns, Johnston, and MacKendrick 2013), and  
 641 help families, especially women, manage competing care responsibilities  
 642 for populations whose needs are often pitted against each other in  
 643 policy discussions (Folbre, Howes, and Leana 2012). This would make  
 644 efficient use of school-based infrastructure that is frequently unused in  
 645 the afternoons, evenings, and weekends. Schools could also open their  
 646 cafeteria doors to allow the elderly and other vulnerable populations to eat  
 647 lunch alongside children and youth, which would reduce social isolation  
 648 and teach children of all genders to be both givers and receivers of care – a  
 649 step in the right direction for producing caring democratic citizens (Tronto  
 650 2013).<sup>12</sup>

651 Achieving these “high road” reforms rests on strengthening and  
 652 sustaining community support. This is a whole family issue, but children  
 653 and youth have perhaps the most at stake. School lunch impacts their  
 654 bodies and the economic and ecological systems they will inherit as  
 655 adults. They have agency to organize at the local level and to use social  
 656 media to stage mass actions that force policy change at state and national  
 657 levels. Organizing cafeteria workers to take a collective stand, as unionized  
 658 workers in three US cities have already done, is another way to begin  
 659 building the political power necessary to reorganize the social provisioning  
 660 of the NSLP (Gaddis 2014). However, this is a daunting task in the US,

661 where decades of attacks on organized labor have created a hostile climate  
 662 for the labor movement. They will need allies. “Whole worker organizing,”  
 663 whereby labor and community organizing go hand in hand to build  
 664 sustained power for change (McAlevy 2016), helps us conceptualize how  
 665 the efforts of both the receivers and givers of care could be harnessed for  
 666 maximum impact. Finally, by making strategic connections to civil society  
 667 organizations with intersecting concerns (such as Black Lives Matter,  
 668 [fightfor15.org](https://fightfor15.org), Slow Food International, 350.org, and La Via Campesina),  
 669 this budding coalition of grassroots school lunch activists can amplify their  
 670 voices and reach new allies until it has forged a coalition politics capable  
 671 of forcing governments to play a more aggressive and proactive role in  
 672 mediating crises of social reproduction and environmental destruction (Di  
 673 Chiro 2008).

### 674 CONCLUSION

675 The US NSLP, and its reliance on “heat-and-serve” meals, serves as a  
 676 cautionary tale to government agencies and civil society organizations  
 677 that are funding school lunch programs as a way to advance sustainable  
 678 development. Our analysis demonstrates why an alternative system of  
 679 provisioning is necessary in order to maximize the public value of the  
 680 NSLP, particularly in relation to care, ecology, and sustainability. The  
 681 agenda we put forward builds on Morgan and Sonnino’s (2013) framework  
 682 for a moral economy of school food, but following Power’s (2004) social  
 683 provisioning methodology generates three caveats. First, we posit that a  
 684 moral economy of school food cannot be realized without recognizing  
 685 the value of the paid and unpaid care work that goes into feeding  
 686 children and actively supporting this work as necessary to children’s well-  
 687 being. Second, we contend that a moral economy of school food treats  
 688 social reproduction and ecological sustainability as mutually constitutive  
 689 collective responsibilities. Third, we argue that a moral economy cannot  
 690 be achieved without disrupting the entrenched power structures of the  
 691 corporate food regime through intentional and confrontational forms of  
 692 collective action and coalition politics (Di Chiro 2008).

693 Finally, we believe that existing public institutions and programs, like  
 694 school lunch, deserve greater exploration as part of a broader agenda  
 695 of action-oriented scholarship at the intersection of sustainability, care,  
 696 and ecology. We agree with Power when she says, “Starting points matter  
 697 because of where they take you and, as such, must be chosen with  
 698 great care” (2004: 15). Endpoints matter too. The social provisioning  
 699 methodology helps to guide a holistic analysis of complex social, political,  
 700 and ecological systems; as an analytical approach, it stops short of  
 701 radically reimagining possible alternatives and articulating strategies  
 702 for transformation, which are made explicit within the tradition of  
 703

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705 emancipatory social science (Wright 2007). In making this claim, our  
706 intention is to underscore the analytical utility of the social provisioning  
707 methodology and to stimulate further research on how social provisioning  
708 might be *actively reorganized* in ways that simultaneously serve both feminist  
709 and ecological goals.

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742

## ACKNOWLEDGMENTS

743

We would like to thank all the foodservice professionals engaged in the  
744 work of feeding children at school, as well as the many activists who are  
745 fighting for a just and sustainable food system. In addition, we would  
746 like to thank the two anonymous reviewers and the participants of the  
747 workshop on Sustainability, Ecology, and Care hosted by Friedrich Ebert  
748 Stiftung and the International Association for Feminist Economics for their

749 helpful comments. Any remaining errors or oversights are our own. This  
 750 research was funded by the National Science Foundation, grant number  
 751 1256925.

## NOTES

- 755 <sup>1</sup> Despite a federal mandate to feed all needy children free of charge, few African  
 756 American children in racially segregated southern states and northern cities received  
 757 any benefit from the federal allocations until the victories of the civil rights movement  
 758 in the late 1960s and early 1970s (Levine 2008).
- 759 <sup>2</sup> ~~At the time of our writing, conservative lawmakers in the House Freedom Caucus have  
 760 targeted the HRFKA as their first agenda item in a list of regulations and rules that  
 761 they are advising President Trump to examine or revoke in his first 100 days in office  
 (Meadows 2016).~~
- 762 <sup>3</sup> This includes both small regional firms and multinational corporations like  
 763 Sodexo, Compass, and Aramark. These companies often hold contracts with other  
 764 institutional purchasers (such as universities, hospitals, airports, and prisons).
- 765 <sup>4</sup> Like other care providers, unionized school foodservice workers are not likely to  
 766 exercise their bargaining power because withdrawing their services (that is, going  
 767 on strike) puts the very people they care for at risk (Folbre 2001).
- 768 <sup>5</sup> Notably, body burdens are higher for populations in the US compared to those in  
 769 Europe and Asia (Hites 2004).
- 770 <sup>6</sup> In addition, a mismatch in agricultural seasonality (most schools are not in session  
 771 during the peak growing months of June–August) and issues of scale are also barriers  
 772 that make it difficult for schools to shift their procurement to local farms.
- 773 <sup>7</sup> According to a nationally representative survey, 88 percent of US adults support  
 774 government-funded FTS programs (Reincke 2015).
- 775 <sup>8</sup> The USDA awards up to US\$5 million annually in competitive grants to support FTS  
 776 programs (USDA 2016b), but the total NSLP budget exceeds US\$12 billion.
- 777 <sup>9</sup> Likewise, Saint Paul, Minnesota, Public Schools and Chicago, Illinois, Public Schools  
 778 have also begun to prepare some recipes from scratch, which has resulted in greater  
 779 autonomy to purchase local products and to use collective purchasing power to drive  
 780 reforms further up the food chain (Stanley, Colasanti, and Conner 2012).
- 781 <sup>10</sup> Notably, scholars have argued that the UN's embrace of public–private food  
 782 partnerships allowed the corporate food regime to undermine public health in the  
 783 global south (Monteiro and Cannon 2012).
- 784 <sup>11</sup> Empowering both the givers and *receivers* of paid care is a strategy for increasing the  
 785 quality of jobs and services (Folbre 2006; Glenn 2012).
- 786 <sup>12</sup> There is precedent for such arrangements within the history of the NSLP (see for  
 787 instance the September 1971 issue of the *School Foodservice Journal* for a profile of  
 788 elderly feeding programs administered by school foodservice departments).

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