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Food for Thought Nutrition in America's Schools

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INTRODUCTION

Good nutrition should be a goal for all of us, but children and adolescents especially have much to gain- and lose- when it comes to what they eat. Medical research has proven that children's growing and active bodies need proper nutrients to support overall growth and development, for bones to grow strong and for energy levels to remain high. Bodies need to be armed with the right fuel in order to remain healthy and for brains to continue to develop. As health officials have become aware of the intensity of the issues surrounding child nutrition in the United States, more and more have sought to find ways to improve nutrition standards in schools as a means of reducing the number of children suffering from nutrition related diseases. But despite the number of food regulations placed on school lunches, the number of children who are obese in American continues to climb: "over the past quarter century (from 1976-1980 to 2003-2004), the percentage of American children who fit the definition of 'obese' has shot up dramatically, tripling for those aged 12 to 19 (from 5 percent to 17.4 percent) and nearly tripling for those aged 6 to 11 (from 6.5 percent to 18.8 percent)." There is a clear disconnect between what medical experts know and preach and what is currently happening to our youth. Why is it that we know more about nutrition today than we ever have yet a growing number of our population continues to suffer from the obesity epidemic? What is not being addressed in schools and what problems are schools facing as they modify their menus in their cafeterias? These specific questions have led me to investigate the larger picture. Considering what is known about nutrition and childhood obesity and considering the poor eating habits of children, what are the obstacles to schools' participation in addressing the growing health concern?

This paper begins with a history of the National School Lunch Program and other foods served in schools, followed by an overview of the current literature on the subject. The paper then goes on to outline my course of study and explains my research question as well as the methods that were employed and an analysis of the data that was collected over the course of several months. As this paper will explain, this issue is complex on

social, economic, and political levels and finding a long-term solution requires addressing these complexities individually before attempting to tackle the large issue of promoting healthier lunches in schools.

I. LITERATURE REVIEW

The topic of child nutrition in America is one that has been receiving rising national attention as the general population begins to realize the substantial effects of a healthy diet on the growing human body. In particular, the role of food and nutrition in the nation's public schools has increasingly become the focal point of the current debate. Although schools have been feeding children with the help of government regulated programs for over sixty years, recent developments in the field of nutrition have forced politicians, school administrators, and parents to reconsider how we look at health and nutrition and what role schools play in meeting those needs.

Before addressing the present issues, let us review the history of the National School Lunch program. The purpose of the National School Lunch Act, which created the National School Lunch Program (NSLP), is to provide financial assistance to schools so that all students can receive a nutritious lunch (Plemmons 2004). The NSLP became one of several federal initiatives designed to promote the nutritional health of American children, a goal first articulated in the Depression of the 1930s (Nestle 2002). The program was implemented in 1943 as a response to the lack of agricultural surplus, the previous source of food for needy children. Funds were made available to schools to assist them in purchasing food at a local level to address the heightened concerns about the nutritional adequacy of citizen's diets after World War II. Despite this important enactment, the NSLP remained inadequately funded and poorly administered until the early 1960s (Plemmons, 2004).

In the 1960s, as concerns for the needy increased, it soon became apparent that schoolchildren from low-income areas could be "provided nutritious lunches by widening the school lunch program and by encouraging its adoption in as many areas as possible." (Plemmons, 2004) With this in mind, Congress enacted the Child Nutrition Act of 1966 to expand the program to fund "all schools which make application for assistance and agree to carry out a nonprofit breakfast program." (Plemmons, 2004) Today the NSLP

operates on a voluntary basis and schools that choose to participate in the program must comply fully with the terms of the National School Lunch Act.

Since the enactment of the NSLP in 1946, the United States Department of Agriculture (USDA) has enforced considerable restrictions following changing nutritional guidelines. Failure to comply with such regulations can result in termination of federal funding given to states for the NSLP (Plemmons, 2004). According to Plemmons, “dietary regulations affecting the program run the gamut from explicitly prohibiting food, to ‘recipe worksheets’ which school lunch officials must use when formulating menus, to required special child nutrition labels.” (Plemmons 2004) Purchasing and procuring the foods used for school lunches is also heavily regulated by the NSLP and the process appears to require substantial planning (USDA Food Buying Guide, 2001).

Today over 27 million children are served low-priced or free meals in over 97,000 schools as part of the USDA’s National School Lunch Program. However, fifty years after the School Lunch Program began, the largest problem children are facing is no longer malnutrition but *obesity*. Overweight and obesity are serious health concerns for children and adolescents and the number of overweight American children has risen drastically in recent years. Data from two NHANES surveys (1976–1980 and 2003–2004) show that the prevalence of overweight is increasing: for children aged 2–5 years, prevalence increased from 5.0% to 13.9%; for those aged 6–11 years, prevalence increased from 6.5% to 18.8%; and for those aged 12–19 years, prevalence increased from 5.0% to 17.4% (Center for Disease Control, 2005). Societal changes have made it necessary to reassess what types of food children should be served in schools (Harris 2002 and Shwartz & Puhl 2003). However, simply understanding this need is independent of actually reforming school lunches, both of which require an investigation of government policy.

Attempts to reform and update the USDA’s national nutrition standards and School Lunch Program are being met with anger and resentment by food corporations and lobbyists who fear that cutting certain foods and beverages from schools will greatly affect their profits (Sims 1998, Nestle 2002, Plemmons 2004). The struggle to make

school lunches healthy and nutritious lies in the mandates set forth by the Child Nutrition Act of 1946, which states that the school lunch program must not only satisfy children's nutritional needs but also serve as an effective farm-support program (Nestle, 2002). This means that schools must, in large part, rely on government-donated agricultural commodities. Many commodity foods – such as ground beef, butter, and cheese – contain high levels of artery-clogging saturated fat. Unfortunately, food-service directors often do not have the flexibility to order exactly what they want. Instead, they must find a way to use what is offered to them.

Another issue confronting reform of the NSLP is that most schools provide access to foods for purchase through vending machines, a la carte, and school stores (Nestle, 2002). Many school districts contract with private entities, allowing companies to sell items on school grounds in exchange for a fee. According to Plemmons “such contracts result in an elevation in the sales of a la carte food items, which are separate, individual items not sold on the lunch trays that students receive, and are not stringently regulated like the items on school lunch trays.” (Plemmons, 2004) These foods are not regulated by the USDA and thus do not need to conform to the same nutritional guidelines. Schools are only prohibited from selling “foods of minimal nutritional value” in the cafeteria during meal times. The standard also does not apply to other parts of the campus and other times during the school day (Plemmons, 2004).

Competition with private entities for consumer business has generated problems when trying to provide healthy meals in schools. Studies have suggested that school-age children in general maintain unhealthy eating habits overall. The highly regarded Mathematica Policy Research study on children's diets found that “children consumed too much fat and sodium and too few nutrients, while a large portion of their ‘food energy’ (calories) was derived from sugar.” (Plemmons, 2004)

The combination of poor eating habits and the temptation to purchase items that call to children's cravings has had a negative effect on the NSLP. The USDA has shown concern for the competitive foods and indicated that they are substantially less healthy than USDA-approved foods served through the NSLP:

With no regulated nutrition standards, competitive foods are relatively low in nutrient density and are relatively high in fat, added sugars and calories...[When consumed in] large quantities, there is the likelihood of

over consumption and the risk of unhealthy weight gain. (Foods Sold in Competition, USDA)

Such disapproval of competitive foods has led to lobbying by the USDA for complete control over meals served in schools. However, such control does not seem likely in the near future, given court's previous reluctance to purge the NSLP of all private competition. One particular case, *Pulaski County Special School District v Bergland* upheld Coca-Cola as a drink choice to students at school meals by reasoning that since milk was offered first, and beverages such as Hi-C, Welchaid, and Coca-Cola were offered second, the menu "complied with the requisite USDA regulations by not placing the private products in competition with the NSLP offerings" (*Pulaski Country Special School Dist. V Bergland*, 495 F. Supp. 820 E.D. Ark., 1980). Such rulings only further impede efforts to provide healthy and nutritiously sound food to schoolchildren.

Advertisements in school are equally counterproductive to ensuring healthy consumption consistent with the *Dietary Guidelines*. According to Nestle "parent groups in several states are attempting to fight the in-school television station Channel One, in part because of the commercials it airs for candy, soda, and other high-calorie foods" (Nestle, 2002). With few ways to combat the offering and advertisement of competitive foods, schools are only left with the option of encouraging students to forego unhealthy options or slightly limiting the times or places in which they are offered. Overall, the existence of foods competing with the NSLP shows the increased need for nutrition education yet educational initiatives remain meek because of lack of sufficient federal funding.

Though the USDA might not ever have the sole distribution rights for food in schools, nutritionists and health experts suggest updating current standards for competitive foods. Current national nutrition standards for foods sold outside of meals are outdated. Nutrition science has evolved since the USDA implemented its nutrition standards in the 1970s and nutrition activists contend that the current standards do not reflect current science and concerns about childhood obesity (Healthy School Food Brigade, 2009). For example, according to current USDA regulations, items such as 'fruitades', ice cream bars, candy bars, chips, and doughnuts are still permitted in

schools, while items such as seltzer water, popsicles made from juice, and breath mints are not allowed (USDA, Foods Sold in Competition).

Selling unhealthy foods in schools contributes to the obesity epidemic and undermines taxpayer investments in federal meal programs. Over the last two decades, rates of obesity have tripled in children and adolescents. Diseases that used to be seen only in adults are now occurring in children (Center for Disease Control). It is estimated that a fifth of the average increase in body mass index (BMI) in teens between 1994 and 2000 was attributable to increased availability of junk food in schools. Aside from these staggering statistics, taxpayers invested \$12 billion in school lunches and breakfasts in 2008. Selling junk food clearly undermines that investment (Healthy School Food Brigade).

Health professionals and advocates are calling for an updated national school nutrition standard in order to protect children's health and support parents and to reduce health care costs related to obesity. Two-thirds of states have weak or no nutrition standards for foods sold outside of meals (Sims, 1998). All students should have access to healthy foods. Junk food in schools also undercuts parents' efforts to teach their children good nutrition and to help them make smart choices. Poor diet and obesity are key causes of diabetes, high blood pressure, heart disease, stroke, and other chronic diseases. By developing a pattern for eating low-nutrition foods, children increase their risk of developing those diseases in the long term (Center for Disease Control).

II. RESEARCH METHODS

I began my research by considering public legal documents so I could understand the progression in federal government regulation in addressing the issue of food served in schools. Congressional and senatorial meeting minutes along with full text laws and regulations provided clear insight and allowed me to ground my research historically and politically.

In an effort to learn more about food served in schools, I spoke with several representatives from a diverse group of organizations including directors of food services and lunch ladies across the state of Connecticut, advocates and lobbyists on Capitol Hill, and parents of school-aged children in over ten states across the country. In addition to

the interviews I conducted, I had the opportunity to observe in several cafeterias and during conferences and rallies. Having used such forms of qualitative and interpersonal research, I am bound by a code of ethics to ensure confidentiality and anonymity to all participants. For this reason, all names of participants, organizations, and schools have been excluded from my findings.

Placing my research in this dual framework allowed me to combine policy and practice to better understand the overall scope of the discussion around food politics in schools. Through my research I was able to capture the voices of people on Capitol Hill the concerns of parents in the home, and the perspectives of those on the frontlines, working in public school cafeterias around the country.

III. DATA AND ANALYSIS

The opportunity to experience this debate on the frontlines has shed light on why it is such a challenge to make changes in schools. Conversely, this important debate has brought the issue into the public sphere and has opened the space that allows for change to occur. It would be false to say that all food served in schools is unhealthy. At this point, the nutrition standards have improved as new information has become available, the commodity program has grown and provides a wider array of food products, and efforts have been made to provide more options to students. While these improvements are important much remains to be accomplished if we intend to make institutional changes to the system.

As school administrators and food service personnel attempt to reform the foods they offer, they often face hurdles that slow down the process. Issues as important as funding and as small as the design of cafeterias make it difficult to generate change. Four issues arose over and over as I met with food service directors and health advocates to discuss the obstacles they face in dealing with the growing concern of the quality of food served in schools. Economic feasibility, parental support, student preferences, and the conditions in which school children eat all emerged as playing a vital role in determining why bigger strides have not been taken to reform food in schools. When all of these factors are interwoven it is no wonder schools are facing setbacks and are having difficulty addressing issues of nutrition in their cafeterias.

Economic Feasibility

Perhaps the issue of funding is the most obvious of my findings yet this topic yielded noteworthy and important information. It is evident that lack of funding is almost always a setback but when it comes to food services, money is a twofold issue. First, the majority of food service directors with whom I spoke emphasized the self-sustained and self-funded nature of their programs. As one participant put it:

The average cost per student, per meal, is approximately \$2.60 and the federal government pays for only about \$1.25 of that. [My program] has to cover the remaining amount. We have to make that money in order to run our program. I have to pay for my building, my staff of over 400 at all the schools in the district, the extra food, everything!

As this participant described, money is tight and food service organizations have to find ways to fund their programs. Federal and state subsidies are not nearly sufficient to run these programs without some sources of additional income. One way in which they are able to keep providing food in schools is by selling items outside of the meals. “A la carte” food and beverages help fill the gap in funding and help pay the bills. These items are not regulated by the USDA and do not have to meet any nutritional guidelines. Despite this, food service programs find that it is the only way to raise money:

Unfortunately, junk food is what brings in the most money so that’s what we have to sell. Kids don’t want to pay for fruit; they want a bag of chips or they want a chocolate chip cookie.

As discussed earlier in this paper, it is clear that *a la carte* sales help many schools keep their cafeterias running. Until more money is allocated to feeding in schools there is no way to eliminate junk food entirely from menus. Programs have to meet the demands of their clients and to this day, junk foods are high in demand.

The limited amount of funding also restricts the types and kinds of foods that can be purchased for students. Some items are just not a possibility because of their price. One participant I spoke with expressed the frustration she experienced when purchasing vegetables for her district:

I tried to order sweet potatoes for this month’s menu but they were so much more expensive than regular potatoes, I didn’t feel like I could

legitimize my choice. I ended up just ordering the potatoes. I just wish I could have more diversity in my menu options.

Thus, though schools might want to serve higher quality foods, many are not able to pay for them. Organic and locally grown vegetables are more expensive than buying from large corporations and food service programs cannot afford the luxuries. Funding is at the root of the problem and unless more money is made available to the personnel responsible for organizing the distribution of food in schools, it seems unlikely that any significant changes will be feasible.

Parental Support

Parents have an impact on the choices children are making and they also influence the decisions school districts make about the kinds of foods that are available for purchase within a school. Currently, parents stand on either side of the debate revolving around food in school: either they do not want schools to decide what their children can and cannot eat or they want stricter regulations put in place that guarantee healthy food options. At this point, there is no unified parent movement for reform. One side's view makes it difficult for schools to make changes while the latter group might be pushing for too much too soon. This ongoing debate between parents is also having a negative effect because parents are not working together to solve the problem; instead they are focused on proving the other side wrong.

I spoke with parents who had become activists for the cause but most of these women emphasized the gigantic efforts it took to rally support and make change happen. One mother from Georgia, president of her district's PTA, discussed her successes but also noted the tremendous amount of work she still had ahead of her:

We, parents, were able to get our *a la carte* choices improved in our school district, but there are still really poor choices available for purchase. I was able to get our school district to embrace the concept of school gardens to teach nutrition curriculum and environmental education curriculum. We are still trying to get farm to school programming implemented. We do not have the most progressive folks in our Food and Nutrition Services Department, so it is a very tough sell.

In order for this small yet notable change to occur in her district, this mother had to rally support and convince several people that certain changes would be beneficial for the community:

Each improvement is a victory but in order for there to be bigger changes, I need to have more support. I spend more time rallying parents and getting them excited about all of this then I do actually improving nutrition in our schools! It's tiring but I know it's worth it. I just wish I could get everyone behind me but it's more complicated than that.

The lack of a strong parent base for these types of reforms make it hard for schools to address the problem. It is also hard to discuss changes to food services when parents are concerned with so many other aspects of their children's schooling. Some parents see it as vital to their children's education while other parents might find it more important to focus on academics or sports. If school administrators and health officials want to see changes in the kinds of foods offered to students, parents must unite and support their districts and individual schools' efforts.

Student Food Preferences

Another significant finding in my research is the impact of student food preferences in determining food offered in schools. Student preferences is understood by breaking down what the majority of students consider good, popular, tasty, or filling. Food services have to meet the desires of the students in order for them to consume the food that is served. If students do not enjoy the options that are offered in cafeterias, then they will not eat them. Food service personnel often struggle with this aspect of food preparation because they are torn between what is best for students and what will fund their programs. As one director of a school district in Connecticut put it:

If I had my way, and money wasn't an issue, kids would be eating brown rice, green beans, and tofu everyday. But the truth of the matter is that we can't offer those foods to kids because they won't eat them. They aren't used to those kinds of foods and if they showed up on their lunch tray I can guarantee they would make their way straight to the trashcan. We can't have that; kids need food so they can have the energy they need to make it through the school day.

When designing menus, one has to consider what is going to make students come back for more every day. In order to keep the programs going, food service must factor in

the responses of the students they feed. Another program director walked me through the steps she takes in order to create menus for the schools she catered to:

I taste everything on my menus. The food has to meet nutritional guidelines in order for them to be reimbursable. I want my food to be appealing to kids so I have to make sacrifices but everything I serve for a meal is within the guidelines. It has to be; the size and portions are analyzed by a computer program. They have to be under 30% fat. But my main concern is that I have to get students to eat it. If a student takes one bite and is disgusted and just dumps their meal in the garbage, then I haven't done my job.

The acceptability of the foods available to students is a major concern and stunts the introduction of healthier options into school cafeterias. It is believed that food service programs would not be successful if they served healthy options exclusively. Programs cannot afford to take the risks to challenge students to consume only healthy foods because they would suffer financially and it would be detrimental to the overall mission of providing food for students.

This catch-22 highlights one of the main issues affecting schools as they attempt to tackle the subject of food in their cafeterias. Food programs are both businesses competing for student dollars and public programs with a responsibility for the greater good. In order to continue to operate, school food programs must maintain both opposing goals. The tension that arises between these two factors limits any fundamental changes.

Cafeteria Conditions

Beyond the actual food, the way and the conditions in which children consume their lunches is also cause for concern. Several factors revolving around this issue affect schools' impact on students' dining experiences. The institutional design of cafeterias, the lack of supervision, and the time allotted for meals all have a harmful effect on the efforts food services are making to improve the quality of food.

Several participants brought up the issue of the design of cafeterias. In their view, the space where children are eating is stressful and unpleasant. As one director of food services mentioned, students did not focus on eating:

Cafeterias are too big and too much is going on within them for kids to only pay attention to the food in front of them. The long tables and high ceilings amplify the sounds and create a stressful environment.

In defense of such comments, when I observed lunch at many schools, it was so loud, that I often could hardly hear myself think. An excerpt from my field notes from a visit to an elementary school in Hartford, CT best capture the experience:

...Pure cacophony. Bursts of laughter, fits of rage, spontaneous screams and the overwhelming sound of children talking over each other in a large room. Children run from table to table. One child slips right in front of me. This is anarchy; there is absolutely no discipline going on...

Without the presence or the discipline of teachers, children are left to their own devices and forget that they are supposed to be eating. More needs to be done to create a positive and structured environment during meal times.

Discipline is a big concern. In the majority of situations, teachers do not have lunch with their students, so not only are children not being supervised; they do not have an adult role model to interact with during meals. Teachers generally take their trays to their lounge and eat amongst themselves while the children wreak havoc in the cafeterias:

Kids come out of class and have all of this energy that they don't know what to do with. They come into the cafeteria screaming and running around because they need to burn off the energy. The problem is, there's so much going on that kids get distracted and instead of eating their food, they start striking up conversation with their friends. The one or two supervisors walking around the room are only responsible for making sure nothing gets out of hand, like fights or something. No one is there telling these kids to eat their food.

Children do not benefit from lack of supervision. Lunchtime is no exception to the rule and the responses of participants and my personal notes emphasize this fact greatly.

Perhaps the most important finding of my research lies in the amount of time designated for meals in school. Children do not have very much time to enjoy their food especially given the circumstances of their environment. Short lunch periods force children to consume their food very quickly and the limited time does not allow for proper digestion. Also, for districts with vending machines installed in schools, the time crunch encourages students to purchase foods sold outside of meals. Instead of waiting in line for full meals, students consume snack foods and sugary drinks to quell their hunger.

As one food service director from a large urban district explained:

Kids in this district have twenty-five minutes for their lunch period. That is to say, they have twenty-five minutes from the end of class until lunch is over. In that time, teachers have to get them from the classroom to the cafeteria, they then have to wait in line to get their food, find a spot, sit down, and eat. By the time a kid

has gotten his food he or she only has about 12mins to eat. Everything needs to be easy and quick to eat. They just don't have time.

Something as simple as lengthening the time of lunch periods might have a positive impact on school dining. School food is still deeply rooted in a fast food mentality because children are not given enough time to eat. By giving students more time for lunch, food services can provide a multitude of dishes that they would not otherwise be able to serve in a restricted timetable. Increasing time would mean an increase in variety and could most likely help schools improve their menus.

However, another critical issue arises when considering the design of cafeterias and the time allocated for meal preparation and consumption: many schools are not equipped with full kitchens. For example, in a district with ten schools, it is possible that only six will have the proper space needed to prepare meals. In this case, these six schools are responsible for preparing and packaging food for the four other schools and delivering the meals by lunchtime. This causes a back up in food preparation and limits the kinds of foods available to the district because the meals must be re-heatable and properly sealed according to state sanitation guidelines. So even if school administrators increased the time period for lunch, certain schools would not be able to provide a wider variety of food. Kitchens are a vital part of the process and students are being short-changed because their schools do not have the necessary tools to prepare full meals.

The design of cafeterias and the time students have to eat are two issues that could be easily addressed but more needs to happen to address the root of the problem of the conditions in which students eat. Schools and food preparation staff need to have access to fully equipped kitchens. Of course, we come full circle when we realize that this issue cannot be dealt with until food service programs have more money and access to funding. If food service programs are having difficulty purchasing food items, they certainly do not have the necessary means to start installing kitchens and employing qualified individuals with culinary backgrounds.

IV. CLOSING REFLECTIONS

Schools across the country are facing a plethora of issues as they continue to make attempts to transform their cafeterias. The topic of school food in America seems

so simple on the surface but is, in fact, marred with complexity. All of these factors: the lack of a unified parent base, issues with funding, student preferences, and the conditions in which students dine all play a role in the greater picture and help us understand what hurdles schools must face before they can truly be seen as an environment that encourages healthy choices and eating habits. Each of these factors work as independent variables but they also all are interrelated and collectively make changes to the food system extremely difficult.

Sources

Brown, Larry J. *Hunger in America the growing epidemic*. Middletown, Conn: Wesleyan UP, Distributed by Harper & Row, 1985.

In this book, Dr. Larry Brown and other members of the Physician Task Force on Hunger in America investigate the reasons behind hunger in the United States. They consider factors leading to hunger and address government policy. Of particular interest to my study, the authors dedicate a chapter of the book to school feeding programs.

Bushweller, K. “*Health on The Menu.*” *The American School Board Journal* v. 181 (February 1994) p. 38-40

This article, dating from 1994, discusses the growing concern among parents, teachers, doctors, school food service workers, and policy makers about the quality of food being served in school cafeterias in the early 1990s. The article outlines the beginning of a movement to require that school meals meet basic federal dietary guidelines. It includes several facts about the nutritional quality of school lunches and discusses some of the obstacles to improving the nutritional content of school meals.

Harris, K. “*The USDA School Lunch Program: New Approaches to Meeting the Demands of Child Health and Nutrition in the 21st Century.*” *The Clearing House* v. 75 no. 6 (July/August, 2002) p. 38-40

After examining the historical purposes for the foundation of USDA school lunch program (a response to abject poverty and malnutrition among school children), the author notes that societal changes make it necessary to reconsider how we look at health and nutrition and what roles schools play in meeting those needs. Harris proposes several solutions for meeting child health and nutrition needs through school-based initiatives.

Mudry, Jessica J. *Measured meals nutrition in America*. Albany: State University of New York, 2009.

Jessica Murdy writes a compelling story about how language affects what we eat and how we eat it. The author also discusses America’s relationship with food. A portion of the book is dedicated to food in schools and programs such as the Edible Schoolyard project.

Nestle, Marion. *Food Politics How the Food Industry Influences Nutrition and Health (California Studies in Food and Culture)*. New York: University of California, 2002.

Marion Nestle discusses the contradiction between nutrition theory and practice. Her book provides an overview of how eating habits have evolved since the 1900s as well as an eye opening view of how the food industry and policy interact. She dedicates a large portion of her work to eating habits of children and youth and focuses on school feeding programs.

Plemmons, K. “*The National School Lunch Program and the USDA Dietary Guidelines: Is There Room For Reconciliation?*” *Journal of Law and Education* v.33 no. 2 (April, 2004) p181-212.

Plemmons discusses the National School Lunch Program (NSLP) and Department of Agriculture dietary guidelines. After discussing existing laws and regulations relating to the NSLP, Plemmons discusses the scope and likely effectiveness of proposed legislative and regulatory measures. Plemmons concludes by proposing ways of improving the NSLP, focusing on dietary improvements, educational initiatives, and new legislation.

**Sims, Laura S. *Politics of fat food and nutrition policy in America.*
Armonk, N.Y: M.E. Sharpe, 1998.**

Laura Sims studies the role of the government in American food culture. The author, through several case studies, shows how public policy and bureaucracy in the food system influences consumers' food choices. The author concludes that government policy mechanisms are key to changing eating habits but that policies must not contradict each other.

**Swartz MB and Puhl R. "*Childhood Obesity in Youth: A Societal problem to Solve.*"
Obesity Review, 2003; 4(1): 57-71**

Swartz and Puhl study the contributing factors of childhood obesity. They conclude that childhood obesity is a societal problem and that factors such as marketing methods, school lunch menus, and parental supervision all play into the growing number of children suffering from obesity.

**United States. "*Encouraging Healthy Choices for Healthy Children.*" Hearing Before
the Subcommittee on Education Reform of the Committee on Education and
the Workforce, U.S. House of Representatives, One Hundred Eighth
Congress, Second Session, February 12, 2004. Washington: U.S. G.P.O.,
2004.**

This hearing discussed methods to encouraging schools to offer healthy choices for children as well as methods to promote healthy eating habits in children. The committee emphasizes the importance of nutrition education and parental supervision of children's eating habits.

**United States. "*Food for Thought: How to Improve Child Nutrition Programs.*"
Hearing Before the Subcommittee on Education Reform of the Committee
on Education and the Workforce, U.S. House of Representatives, One
Hundred Eighth Congress, First Session, July 16, 2003. Washington: U.S.
G.P.O., 2004.**

This hearing discussed methods to improving child nutrition programs as well as school feeding programs. Of the many methods up for discussion, the committee discussed increasing funding for nutrition programs, increasing nutrition education, and cutting back on high-fat foods in school cafeterias.

**United States. "*Challenges and Opportunities for Improving School Nutrition.*"
Hearing Before the Committee on Education and Labor, U.S. House of
Representatives, One Hundred Tenth Congress, Second Session, March 4,
2008. Washington: U.S. G.P.O., 2008.**

This hearing discussed the challenges and opportunities for improving nutrition standards in schools and explains why nutrition policy is difficult to implement.