Adventures in the Lunchroom: Nutrition Education and the Nutritional Composition of School Meals in 1990s America

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Imagine an entire day at a local elementary, middle or high school focused on nutrition. For weeks or months, recruited members of the local culinary community and food service staff work side-by-side to create a carefully chosen menu—"healthy, appetizing, and with eye appeal." Administrators contact local media and ask them to attend and report on the events. Bright colored posters and table tents, possibly with cartoons, such as *The Lion King*'s Timon and Pumbaa, adorn the walls and tables of the cafeteria for days in advance. The local chefs give lectures to individual classrooms about the content of food and which foods or groups of foods should be a part of young people's healthy diets. Social studies classes examine the agricultural origin of many items on the menu, identifying where they come from geographically, while math classes look at quantities or recommended daily servings, etc. Students visit the school kitchens to watch and/or participate (depending on their age) in the preparation of lunch directly alongside the day's expanded staff. Finally, the kids get the opportunity to delight in the nutritious, nicer-than-typical meal. Perhaps in the days following they will reflect on the day's events and the meal will be positioned within the naturally repeating menu as a reminder of the day and what was learned.

Such programming was a part of the USDA's "Great Nutrition Adventure" Packet from June of 1995. The packet included sample press releases, a large booklet of local chefs willing to participate in organized programs, video of regional events organized by the USDA's Team Nutrition to kick-off the program idea, and a step-by-step plan to accomplish a miniature of those regional events at any individual school. Recent policy changes explain the effort. The Department of Agriculture had recently published a rule requiring that school lunches meet the 1990 Dietary Guidelines for Americans, and the "Great Nutrition Adventure" was just one of many attempts to improve the composition of school meals and students' eating habits.

Government officials created innovative campaigns, but the facts suggest they were fighting a losing battle. The 1992 School Nutrition Dietary Assessment found greater calories from fat and calories from saturated fat than the ideal portion for one-third of the day's eating, and nearly two-thirds of the daily recommended intake of sodium present in school lunches. Afterward, the USDA created

¹ U.S. Department of Agriculture, "USDA's Great Nutrition Adventure Action Packet [kit]," (Rockville, Md.: U.S. Department of Agriculture, Team Nutrition, 1995).

educational plans to encourage young people to eat more fruits, vegetables and grains and to decrease the sodium, fat and saturated fat content of their diets.² A "Team up at Home" packet for parents of younger children reported that fewer that one in five elementary school children ate the recommended amount of both vegetables and fruit daily, inspiring a number of efforts, such as the "Vegetable and Fruit Challenge." In this activity, a poster of 800 squares, each representing a serving of a fruit or vegetable eaten at lunch, would be placed on a classroom wall.⁴ The classroom teacher would then set a monthly goal: determined by multiplying the number of students in the class times the number of school days in a given month times 1.5, the goal serving of fruits and vegetables for one third of the day—lunch (an accompanying letter uses the example of 15 x 20 x 1.5 = 450). Each day after lunch, as the children return, they can cross out their contribution based on what they ate. Should the class reach the month's goal, then it is recommended they receive a small reward (i.e. pencils).

The "Great Nutrition Adventure" and "Vegetable and Fruit Challenge" exemplify the United States Government's attempts to encourage healthy eating among American children. During the 1990s, government officials generated reams of documents—meal buying guides, training manuals, educational films, posters, and programming and lesson plans-along with mandated legal standards for school lunches, all in a vast program designed to improve school-age children's eating habits. They did so in an environment of increasing crisis and criticism, as reformers both inside the school system and outside warned ominously that America was raising the first generation of students who could collectively expect to live shorter lives than their parents. But there is little evidence that the USDA's evangelism on behalf of nutritious eating had any lasting impact on American children and their parents. This paper will examine the political and cultural debates that shaped and surrounded the USDA's programs to argue that the programs were doomed to prolong confusion about what actually constitutes "healthy eating" and to reveal the tensions inherent in a school lunch program forced to balance economic and nutritional concerns

When it was created in 1946, the National School Lunch Program was designed to utilize excess agricultural products for underprivileged youth. But over time, the program was modified and amended by other pieces of legislation that placed greater emphasis on nutrition. In the 1950s, the program nearly doubled in size, forcing the Federal Government to support the program with cash payments,

Steven M Lutz and Jay Hirschman, "School lunch reform: Minimal market impacts from providing healthier meals," Food Review 21, no. 1 (January 1998): 28-34.

³ U.S. Department of Agriculture, "Team up at Home: Team Nutrition Activity Book: Fun Nutrition Activities for the Family," (Alexandria, Va.: Team Nutrition, USDA, in Association with the National PTA, 1996).

⁴ U.S. Department of Agriculture, "My Pyramid for Kids: Lessons for Grades 1 and 2: Level 1," (Alexandria, Va.: U.S. Department of Agriculture, Food and Nutrition Service, 2005).

⁵ Beatrice Trum Hunter, "Revamping school meal programs," *Consumers' Research Magazine* 81, no. 11 (November 1998): 24-26.

a situation that continues into the present. In the 1960s, according to a pamphlet produced by the USDA, there was an acute focus on low-income children as part of the "War on Poverty." The Child Nutrition Act of 1966 focused the school lunch program, and added the School Breakfast Program and the summer food program, both of which were aimed at poor children. But, in step with the budget shrinking of the 1980s, Congress and the Reagan Administration cut federal funding, tightened eligibility requirements and reduced subsidies.

Also, analyses showed that nutrient deficiencies experienced by children went from being due to underconsumption of calories to overconsumption of fat. ⁷ In 1980, the federal government, which had long been making recommendations to Americans about what they should eat, began to do so in the form of the Dietary Guidelines for Americans, "providing Federal dietary recommendations for healthy Americans ages 2 years and over." The guidelines provided directional changes, and are reviewed every 5 years to adjust for changed overall eating habits in society as well as further study. This creation, which will be discussed later in this paper, is one of the key tools the government has tried to use to influence American eating in contemporary times. As a result of the passage of The Healthy Meals for Healthy Americans Act of 1994 (Public Law 103-448), the USDA hoped to put into practice the strictest guidelines in the history of the National School Lunch Program.⁸ It mandated specific nutritional targets:

> School lunches are now required to provide one-third of the RDA for protein, vitamins A and C, iron, calcium, and calories, while school breakfasts must provide one-fourth of the day's allowance for those nutrients and calories. Both lunches and breakfasts averaged over a 1week period must contain no more than 30 percent of calories from fat and less than 10 percent of calories from saturated fat.9

The targets were aggressive, but were so in a strictly quantitative and supply-side manner, leaving ample room for children to maneuver around them—choosing to eat different quantities of the foods given to them than were placed on their trays.

The USDA faced a tough challenge, but presented a strong front to face it. In a packet designed to educate and help promote a series of public service announcements by The Lion King characters Timon and Pumbaa, Ellen Haas, Under Secretary for Food, Nutrition and Consumer Services, led off the packet

⁶ U.S. Department of Agriculture, "The Lion King's Timon & Pumbaa's Smart Yet Satisfying PSA Campaign," (Alexandria, VA: U.S. Department of Agriculture, Team Nutrition, 1996).

⁷ Charlene Price and Betsey Kuhn. "Public and private efforts for the National School Lunch Program," Food Review 19, (May/August 1996): 51-57.

⁸ Joanne Guthrie, "USDA acts to improve school meals and children's nutrition," Food Review 19, (May/August 1996): 55.

⁹ Ibid.

with a firmly optimistic letter (despite the brutal statistics she included). ¹⁰ The under secretary cited that more than 25 percent of 6-11 year olds are obese, nearly all consume more fat than recommended and on any given day, and 35 percent of elementary school children do not eat fruit, while 20 percent do not eat any vegetables. Haas then stated the obvious: with 25 million students eating school lunches every day and another 25 million who could, while "the most serious health problems associated with diet—high blood pressure, stroke and certain forms of cancer—are rooted in the food choices children make," she claimed the stakes had never been higher; and the USDA was ready to meet them.

A contemporary USDA study¹¹ showed that "on average, [school] lunches are high in fat, saturated fat, and sodium, and some fall short of the Recommended Dietary Allowance (RDA) for key nutrients for some age groups."¹² To meet the challenge created by the combination of goals set (by the Dietary Guidelines, Food Pyramid and Healthy People 2000) and unflattering realities discovered, ¹³ the Department of Agriculture formed Team Nutrition, an organization designed: "To improve the health and education of children by creating innovative public and private partnerships that promote food choices for a healthful diet through the media, schools, families, and the community."¹⁴

Team Nutrition created a whole new wave of food recommendations and purchasing and cooking methods for school personnel. Thick binders of purchasing recommendations for school food service professionals were created based on: size, grade, popular varieties, how packed, in season, purchasing tips. ¹⁵ (Some, as there was limited availability,) Cooks could attend culinary school training sessions "on how to reduce fat and sodium and increase fiber, vitamins and minerals in school meals." ¹⁶ Standards were created requiring not just the appearance, but the clear implementation of a nutrition-first style of lunch planning. One such method, titled Nutrient Standard Menu Planning (NuMenus), allowed schools to conduct nutrient analysis on a week-by-week basis using

U.S. Department of Agriculture, "The Lion King's Timon & Pumbaa's Smart Yet Satisfying PSA Campaign."

¹¹ Price and Kuhn do not attribute a date to the "recent study sponsored by the USDA," though their article was published in the middle of 1996, suggesting it would have occurred in the year or two before

¹² Charlene Price and Betsey Kuhn. "Public and private efforts for the National School Lunch Program."

¹³ United States Department of Agriculture Food and Nutrition Service, 21 January 2001, "Foods Sold in Competition with USDA School Meal Programs," http://www.fns.usda.gov/cnd/lunch/ private/competitivefoods/report_congress.htm>.

¹⁴ U.S. Department of Agriculture, "The Lion King's Timon & Pumbaa's Smart Yet Satisfying PSA Campaign."

¹⁵ U.S. Department of Agriculture, "Choice Plus: a Reference Guide for Foods and Ingredients," (Washington, D.C.: U.S. Department of Agriculture, Food and Consumer Service, with The National Food Service Management Institute, University of Mississippi. 1996).

¹⁶ Paul King, "USDA's "Team Nutrition" raises the bar for school lunch plans," Nation's Restaurant News (February 1996).

computer software. 17 The NuMenus program would tell food service professionals what adjustments might need to be made over the course of a week to reach the standard: averaging the required values of calories from fat and saturated fat as well as important vitamins and minerals for a third of daily value for the number of school days each week (most often, five). For some cooks, this removed the process too much from actual food. Thus, another option, called Assisted Nu-Menus, offered more autonomy or the ability to contract out menu development and nutrition analysis to "State agencies, consortiums of school food authorities, private consultants" and the like.

An Assisted NuMenu guide consists of five basic sections: listing of fiveweek cycle menus, encouraging the use of food production records—to save the use of unnecessary ingredients in the next cycle by analyzing the amount of waste created by that which went uneaten this time, explaining recipes which have details about where calories come from by percent but not the daily value of nutrients, and last, expressing the weekly value of the five-week lunch cycles. 18 A computer, like with the full NuMenus program, still does this part of the operation, detailing the percent of the nutritional expectation based on the Dietary Guidelines: percent of calories from protein, carbohydrates, total and saturated fat, calories, protein (g), total and saturated fat calories, iron (mg), calcium (mg), Vitamin A (RE) and Vitamin C (mg) are listed for breakfast (K-12) and lunch (K-6 and 7-12) based on the weekly totals.

This procedure, recommended by the USDA, is emblematic of the transition of the perception of food that took place from the 1980s into the '90s, what Michael Pollan in his book, In Defense of Food, calls "nutritionism." During this time, Pollan explains, foods were replaced by nutrients ostensibly, a more scientific measure of what people needed to put in their bodies to be healthy. ¹⁹ So, while supermarkets became stocked more and more with the latest combination of chemicals and minerals that were popularly determined by science and the media as "healthy," the School Lunch Program followed suit. The normative change was so successful that Pollan notes psychologist Paul Rozin of the University of Pennsylvania found that a third of Americans believe "a diet absolutely free of fat-a nutrient...essential to our survival-would be better for us than a diet containing even just 'a pinch' of it."²⁰ Eating became an exercise in managing risk, and the guidelines for school lunches reflected the trend.

The USDA programs did not have the positive impact on school lunches officials hoped. First, the training never reached the thousands of food service workers around the country who needed to be individually shown the techniques for keeping fat and sodium content lower through the cooking process. Also,

¹⁷ Charlene Price and Betsey Kuhn. "Public and private efforts for the National School Lunch

¹⁸ U.S. Department of Agriculture, Assisted NuMenus: School Breakfast & School Lunch, (Alexandria, Va.: U.S. Department of Agriculture, Food and Consumer Service, 1996).

¹⁹ Michael Pollan, In Defense of Food: an Eater's Manifesto, (New York: Penguin, 2008), 19-20. ²⁰ Pollan, 79.

the Dietary Guidelines themselves had deep flaws. They continued to emphasize meat and milk—despite their location near the top of the pyramid. For instance, in a poster featuring Timon and Pumbaa from *The Lion King*, the tray has multiple servings of meat and an exaggerated milk carton—matching the size of the servings of pasta and fruit, supposedly more important in the pyramid and Team Nutrition's literature. The continuing centrality of meat and milk showed the continuing power of the USDA's industry "partners." Pollan tells a story from 1977, when the Senate Select Committee on Nutrition and Human Needs, chaired by Senator George McGovern, attempted to alter the dietary guidelines according to the accepted scientific belief that Americans consumed too much meat. ²¹ After the initial action, a strong reaction from the "the red meat and dairy industries" led the wording to be changed from "reduce consumption of meat" to "choose meats, poultry, and fish that will reduce saturated fat intake," a much more benign statement that would keep consumers, rather than scare them away from meat and dairy products.

Marion Nestle argues that the original release of the Food Guide Pyramid in 1991 revealed the USDA's "consistent history of responding to the interests of agricultural producers at the expense of public health" to the public at large.²² After 11 years of testing and preparation, the meat and dairy industries still strongly questioned the pyramid for the placement of their products next to sweets—near the top of the table. With the aid of some public relations mistakes (Secretary of Agriculture Edward Madigan stated that more research needed to be conducted, when it already had been.), the USDA pulled guidelines back into a research stage for 366 days at the cost of \$855,000.23 When finally released, the pyramid had 33 changes from the year before—two of which Nestle says are significant. First, the department changed the phrase across the top from "Eating" Right" to "Food Guide" in response to complaints from Kraft Foods that the line infringed on copyright, and from ConAgra that the words "might give Kraft a marketing advantage."24 Second, it moved the recommended servings outside the pyramid and put them in boldface type, suggesting that one should "include at least 2-3 servings of meat and dairy foods each day"—implying an increase of servings from the previous guide, the Basic Four. Once again, the government gave private interests priority.

Finally, the USDA's effort was not financially feasible. According to Florida high schoolers who were part of focus group surveys in the mid-1990s, the food was still awful.

"You don't know what is in there!!! I have seen them serve beef stew one day and then the next day they serve

²¹ Pollan, 23.

Marion Nestle, Food Politics: How the Food Industry Influences Nutrition and Health, (Berkeley: University of California, 2002) 58.

²³ Nestle, 56-63.

²⁴ Nestle, 63-64.

chopped up beef and you know they served it yesterday...it is disgusting."

"I don't trust what they do to it to save money. I don't trust what the schools will put in their food you know."

"Sometimes the cookies aren't like totally baked."

"People just don't eat at school because it looks disgusting; you just look at it and it's like I won't put that in mv mouth."

"If they actually made it look appetizing then I would be tempted to buy my lunch."25

A reputation for low quality food, made with cheap, subsidized ingredients is one difficult to overcome—let alone improve and make healthy—when compared with the cheap, attractive looking and tasting alternatives available. Nationally, 56 percent of students participate in the school lunch program, with High school students less likely to participate than their younger peers. Predicted participation on open campuses, where students are allowed to leave for lunch is 49 percent, while 58 percent of students on closed campuses eat the cafeteria offering. Even when eliminating the ability to leave school and purchase cheap, fast food, competing influences within campus, such as vending machines and a-la carte fast food meals, though they do not statistically lower school lunch participation, certainly undermine the message without leaving the school. This last fact is ironic because of the fact that school lunch menus are decorated with homages to fast food. Children want to eat chicken nuggets, pizza, hamburgers, etc. and in a slightly healthier way, schools indulge the behavior; particularly because it is cheap and inexpensive to do so. Though supported by government funds, the average student charge for a school lunch in 1995 was \$1.25, supporting "Food, personnel, equipment purchasing and maintenance, supplies, and utility expenses." ²⁶ Food service directors, attempting to provide healthy food, still must look to the bottom line first, which is a serious limiting factor. All that can be purchased—and eaten, to avoid waste—is not fresh, but is instead processed.

One method some schools use to reduce costs and assure income is to allow brand name, fast food products to be sold on a regular basis. Sometimes school officials demand nutritional improvement of the products, but often they do not. In 1994 in Delaware, Capital Hill Schools began offering Pizza Hut in high schools when seniors were allowed opportunities to leave campus for lunch.²⁷ Participation in school lunches rose 18 percent on days the major pizza chain's

²⁵ Delores C S James, Barbara A Rienzo and Carol Frazee, "Using focus group interviews to understand school meal choices," The Journal of School Health 66, no. 4 (1996): 128-131.

²⁶ Pat Snyder and others, "Commentary on School Meals from School Food Service Personnel and Researchers," The American Journal of Clinical Nutrition S61, no. 1 (1995): 247S.

²⁷ Charlene Price and Betsey Kuhn. "Public and private efforts for the National School Lunch Program."

product was an option. The rationale of devising meals around these items, rather than fruits, vegetables and grains—the foods Team Nutrition claims to so strongly advocate for—is the evidence of particular foods being wasted more than others. One article said that the average amount of serving waste "for cooked vegetables was 42 percent, compared with 11 percent for milk." ²⁸ When this is combined with the use of weekly analysis, one might conclude that even if menus balance, kids eating off of them still avoid healthful habits anyway (or turn to tampered sources for guidance).

In a survey of school food service staff in 1997, when the requirement of meeting the Dietary Guidelines had been in place for over a year, more food service directors and managers still preferred planning their meals based on food used, rather than its nutritional composition. This makes sense, as the five most commonly cited barriers to the acceptance of the new standards by school children according to those same food service personnel: were poor reception of the food (39.8 percent surveyed), its higher cost (31.3 percent), the extra time required for preparation (18.4 percent), "the inability to include commodity food items in lower fat and lower sodium menus" (16.0 percent), and a lack of training (9.6 percent).²⁹

Food service workers' ambivalence about USDA guidelines demonstrates that barriers stood in the way of the reforms government officials hoped to put in place. By the end of the decade, the mixed messages coming to children in the school cafeteria inspired a line of questioning in a 1998 article in *Consumer's Research Magazine*: "By mimicking the foods available at fast food outlets, are schools failing to educate children to make good food choices from basic nutrient-dense foods?" Without a unified belief in meeting the guidelines and great execution of said philosophy, the USDA could not institute the healthy behaviors it set out to instill in the country's youth.

The evidence read by this writer suggests that systemic change—a clear break from the foods that cause obesity rates among children (and adults, alike) is the only practical method. Yes, the USDA understands well that this is a task which it cannot ask food service workers, P.E. instructors and teachers to undertake alone—children are being ushered into societal norms by their parents and, more acutely now than ever, television programs and commercials. However, a much larger investment in natural foods, great-tasting recipes, healthier methods of cooking and nutrition education is necessary when looking forward (having examined the more recent past).

Morgan Spurlock's independent documentary "Supersize Me" along with many other efforts have tried, since the 1990s, to drive consumer consciousness to understand the incredibly adverse affects of what they eat, without much ap-

²⁸ Jamie S. Stang and others, "Meeting the U.S. Dietary Guidelines in School Meals: Current Practices, Perceived Barriers, and Future Training Needs," *Journal of Nutrition Education* 29, no. 3 (1997): 152-58.

²⁹ Ibid.

³⁰ Hunter, "Revamping school meal programs."

parent success. But a current program on ABC, "Jaime Oliver's Food Revolution," though placed in the little watched Friday night television slot, chronicles a British chef's attempt to conduct a massive change in school food offerings, beginning with the least healthy place in the United States, Huntington, West Virginia. Whether Oliver will succeed remains to be seen. The series finale continued to grapple with the constant school meal challenges of culture, knowledge and the bottom line, as the Huntington school district faced a surplus of cheap, processed food from the USDA—such as sugared milk—and the challenge of kids bringing meals filled with processed, sugary products instead of trying the fresh and healthy food that guidelines said they should eat.