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## ADEQUACY OF FEDERAL SCHOOL LUNCH REIMBURSEMENT ADJUSTMENTS

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Cash reimbursements provided by the United States Department of Agriculture (USDA) for each National School Lunch Program (NSLP) meal served form the bulk of the support provided to schools to enable them to achieve the policy goal of “safeguarding the health and well-being of the nation’s children” (USDA, FNS, 2009). The reimbursement rate is adjusted each July 1 for the next school year to help cover changes in the cost of providing school lunches. The adequacy of the annual adjustment in the NSLP federal reimbursement rate became a crucial issue with the rapid rise in food prices in 2007 and the first half of 2008, and considering possible future food price volatility.

### Background

In July 2008, the USDA announced the new federal reimbursement rates for the NSLP for the 2008-09 school year: \$2.57 for free lunches, \$2.17 for reduced-price lunches, and 24 cents for paid lunches in the 48 contiguous states serving less than 60% free and reduced-price lunches. These figures compare to \$2.47, \$2.07, and 23 cents in the 2007-08 school year. These adjustments in the reimbursement rates for the 2008-09 school year reflected the annual increase of 4.26% from May 2007 to May 2008 in the Consumer Price Index for All Urban Consumers for Food Away from Home (CPI-FAFH). For the current 2009-10 school year the reimbursement rates are \$2.68, \$2.28, and 25 cents. For school districts with 60% or more of their students eligible for free or reduced-price lunches, the reimbursement rates are two cents higher. Students must come from low-income families to qualify for free or reduced-price meals. The reimbursement rates are higher for Alaska and Hawaii, because the cost of living is higher in those two states (*Federal Register, 2008*). Further federal support is provided by USDA to the schools in the form of commodities, which were worth on average 20.75 cents per meal in 2008-09, an increase of 1.25 cents over the prior year.

However, the cost of serving nutritious school lunches increased much more in 2007 and the first half of 2008 than did federal reimbursements. According to the School Nutrition Association, average lunch costs increased 10% from \$2.63 to \$2.90 between the 2007-08 and 2008-09 school years (School Nutrition Association, 2008a). About three-quarters of U.S. school districts had to raise the price of their lunches for the 2008-09 school year, because the increase in the federal reimbursement rate was inadequate given the rise in the cost of food (Kingsbury, 2008). The average price increase was about 25 cents per day for the typical lunch.

The School Nutrition Association reported that schools had to pay 14% more for milk in fall 2008 compared to a year earlier, 13% more for fruits and vegetables, 11% more for meat and meat alternatives, and 15% more for bread, all key components in providing balanced, nutritious school lunches (School Nutrition Association, 2008b). To counter the cost increases, school food services were forced to make menu substitutions, offer fewer choices, delay purchases of much-needed equipment, and increase the price of the “paid” school lunch. Reductions were required particularly in categories that are crucial to providing healthier meals, such as whole grains and a variety of fruits and vegetables, because they are relatively more expensive. For example, the Roseville School District in a suburb of St. Paul, Minn., removed salad bars in the spring of 2008 when they faced escalating prices for fresh produce.

In her testimony before a congressional committee on July 9, 2008, Kate Houston, the then deputy under-

secretary of USDA for Food, Nutrition, and Consumer Services, suggested that the annual adjustments in the NSLP reimbursement rate in relation to actual cost changes faced by school food services averaged out over time. She specifically said that “The annual adjustments in cash and commodity reimbursement rates help schools deal with rising costs over time; however, near-term cost increases can be challenging to schools” (Houston, 2008).

There is a clear sense of inadequacy about the NSLP reimbursements provided, particularly in the years of rapidly rising food prices. This merits a closer look at the CPI-FAFH as the basis of adjustments in reimbursement rates. How is this index designed? Do near-term cost increases faced by schools versus federal reimbursement rates actually average out over time when using this index? What evidence and data are available to research these questions? What options are available to better address the cost increases experienced by school food services? This article attempts to answer these questions. We do not examine the higher cost of providing healthier meals that meet the 2005 Dietary Guidelines, about which the Institute of Medicine has released a report this fall (Institute of Medicine, 2009). In addition, this study does not deal with the issue of whether the reimbursement rates should be adjusted more frequently than annually.

### **Basis of Reimbursement Adjustments**

Currently the annual adjustment in the federal payment rate for the NSLP effective July 1–June 30 reflects the May-to-May (preceding 12 month) change in the CPI-FAFH determined by the Bureau of Labor Statistics (BLS). The CPI-FAFH is structured into five strata: “full-service restaurants,” “limited-service restaurants,” “food at employee sites and schools,” “food from vending machines and snack bars,” and “other food away from home.” Full and limited-service restaurants collectively account for 88% of the weight used in the index’s computation (BLS, 2008). With such a high weighting for these two strata, it is questionable how well the index reflects changes in school lunch prices.

Commercial food service and school lunch are very different types of operations. In full-service restaurants, the cost of food and beverages accounts for about 32% to 33% of their total sales. For limited-service fast food restaurants, food costs average only 30% of sales (National Restaurant Association, 2008). In comparison, food and beverage costs represent 37% of the total costs of the typical school lunch (Newman, Ralston, and Clauson, 2008). Restaurants and other food service operations spend more on labor and overhead costs, such as the space or building. Moreover, the composition of meals is typically very different. Each NSLP meal is required to include a serving of milk. School lunches are supposed to comply with certain nutritional guidelines, which is not required of commercial food service meals.

### **Analysis**

Only a few states provide publicly available average costs or prices for NSLP lunches across the school districts in their states on an annual basis. Minnesota is one of those states (MNED, 2009). The Department of Education in California posts on its website the average price paid annually for NSLP lunches in California in contrast to the average costs reported in Minnesota (CAED, 2009). The average meal prices for California are for paid lunches. Table 1 shows average costs per lunch in Minnesota, average prices for paid lunches in California, and the NSLP federal reimbursement rates for school years 2000-01 to 2007-08. Only a few urban and suburban Minnesota school districts substantially improved the quality of the meals served, so that series primarily reflects increases in food, labor, and other costs (MNED, 2009). Data for California were not available for the years 2000-01 through 2002-03.

**Table 1****School Lunch Costs, Prices Paid and NSLP Federal Reimbursement Rates, 2000–2008**

School Year	Minnesota Average Cost per Lunch <sup>a</sup>	California Average Price Charged per Lunch <sup>b</sup>	NSLP Federal Reimbursement Rate <sup>c</sup>
2000–2001	2.14	N/A	2.02
2001–2002	2.20	N/A	2.09
2002–2003	2.15	N/A	2.14
2003–2004	2.33	1.75	2.19
2004–2005	2.47	1.84	2.24
2005–2006	2.56	1.93	2.32
2006–2007	2.65	1.99	2.40
2007–2008	2.82	1.98	2.47

<sup>a</sup>Minnesota Department of Education

<sup>b</sup>California Department of Education

<sup>c</sup>Contiguous States, Free Lunch, for Participation <60%

The California paid price is so low because the state government provides an additional reimbursement of over 20 cents per lunch served. Free and reduced-price meals also accounted for 75% of the lunches served in 2007-08, whereas the comparable figure for Minnesota was only about 30%. Many California schools thus have a large, stable demand for NSLP meals, and receipts for free and reduced-price meals can be used to subsidize paid lunches. With the exception of 2002-03 in Minnesota and 2007-08 in California, all three series (columns) in Table 1 were higher every year compared with the prior year. Because of the 2001–2003 U.S. economic downturn, districts tried to hold down the cost and price of school lunches. With the economic recovery, costs that had been held back increased sharply, particularly in Minnesota in the 2003-04 school year. A few school districts also improved the nutritional quality of their meals. The reason that the California price may have decreased by 1 cent in 2007-08 is that even more students were receiving free and reduced-price lunches as the California economy began to fade.

Table 2 shows the percentage change from the previous year in the three data series—Minnesota average cost per lunch, CPI-FAFH, and the reimbursement rate. As shown in Table 2, the Minnesota cost per lunch increased by 31.78% between 2000-01 and 2007-08 whereas the federal reimbursement rate increased by only 22.28% over the same period. Table 2 also shows that the average annual percentage increase in this period is 4.07% in the Minnesota cost per lunch, whereas that of the federal reimbursement rate is only 2.93%. The near-term increases in school lunch costs do not average out over time with changes in the reimbursement rate as argued by the deputy under-secretary of USDA. Schools were able to close this gap by fully utilizing the commodity program and by using a la carte foods, which are not part of the NSLP, to cross-subsidize the program. Furthermore, some districts in Minnesota with 60% or more of their students eligible for free or reduced-price lunches qualified for the higher reimbursement rate, as discussed previously. The State of Minnesota also provides a small additional subsidy to fund the NSLP, which was 8 cents per lunch in 2004-05 and is currently 12 cents (2009-10).

**Table 2****Annual Change in School Lunch Cost, CPI-Food Away From Home, and NSLP Federal Reimbursement Rates, 2001–2008**

School Year	Percent Change		
	Minnesota Average Cost per Lunch <sup>a</sup>	CPI-Food Away From Home <sup>b</sup>	NSLP Federal Reimbursement Rate <sup>c</sup>
2001–2002	2.80	2.85	3.47
2002–2003	-2.27	2.60	2.39
2003–2004	8.37	2.20	2.34
2004–2005	6.01	2.87	2.28
2005–2006	3.64	3.16	3.57
2006–2007	3.52	3.17	3.45
2007–2008	6.42	3.29	2.92
<b>Percentage Change 2001–2008</b>	31.78	21.94	22.28
<b>Average Percentage Change</b>	4.07	2.88	2.93

<sup>a</sup>Minnesota Department of Education

<sup>b</sup>Percentage change in the CPI-FAFH index for any school year, for example 2002-03, is the percentage change in the index from May 2001 to May preceding that school year, i.e. May 2002.

<sup>c</sup>Contiguous States, Free Lunch, for Participation <60%

**Possible Options**

The CPI for food in August 2009 was only 0.4% higher than in August 2008, so food price increases have receded as a pressing current issue for the NSLP. However, at some point in the perhaps not-so-distant future, rapidly rising food prices are again likely to be a crucial concern. Now is the time to consider possible alternatives to the CPI-FAFH for determining the annual adjustments in the federal reimbursement rates.

Interestingly, BLS recently started to derive a CPI for Elementary and Secondary School Food (CPI-ESSF) from 2005, based on only a very small sample. BLS warns that because of the small sample, the results are not reliable. However, BLS has clearly worked out the methodology to collect this index. Simply by way of comparison, the CPI-ESSF increased by 4.79% between May of 2006 and May of 2007; based on this index the adjustments in reimbursement rates for school year 2007-08 should have reflected an increase of 4.79%. The federal reimbursement rate increased only 2.92%, reflecting an increase of 3.29% in the CPI-FAFH, whereas the cost of Minnesota school lunches rose 6.42%, as shown in Table 2 for 2007-08. The CPI-ESSF provides a potentially better alternative for adjusting the NSLP reimbursement rate. The feasibility and cost of basing this index on a nationally representative sample of schools need to be studied.

The use of the CPI-ESSF could be subject to the basic problem of simply building increased costs of production, due to inefficiency and not just unavoidable input cost changes, into the reimbursement rate. This problem could be largely avoided by surveying only those school food service operations that would be

judged to be “top performers” and exemplify “best practices.” In conversations with school food service directors and various states’ Department of Education officials, we have found that they are well aware of which school districts have the best food service operations in their states, based on the quality of food served and their costs. In a sense, the “top-performing” school districts would serve as a “benchmark” for other school food services.

Cost-of-living adjustments (COLAs) or cost index adjustments will always raise questions. Since the adjustment for a future period is based on price changes in a prior one, it will usually trail the actual price/cost changes. For example, the change in the overall CPI for the third quarter compared to the previous year’s third quarter determines the annual COLA for Social Security benefits starting with the December payment. The use of COLAs is deeply ingrained in many government policies and programs, labor agreements, and business contracts, and the success of any dramatically different approach is likely to meet strong political resistance.

Another possibility would be to use inflation forecasts by some authoritative government body. However, basing the adjustments in payments for government programs, such as School Lunch and Social Security, on some prediction of future cost increases could easily degenerate into a political morass, with various factions presenting their own forecasts that support their self-interest. One can only imagine the political pressures from using inflation predictions for the next year by the Federal Reserve Bank or White House Council of Economic Advisers to set government program payments, or a forecast by USDA’s Economic Research Service for cost increases over the next 12 months to set the NSLP federal reimbursement rate on July 1 for the next school year. The fundamental problem is that the future is unknowable with a high degree of certainty, as the last 12 months have clearly demonstrated.

However, for the NSLP reimbursement rate adjustment, an appropriate CPI for Elementary and Secondary School Food may well be a better alternative for its determination than the current use of the CPI for Food Away from Home. As part of the reauthorization of the Child Nutrition Act, Congress could request that USDA conduct a study of the feasibility and cost of using this alternative for determining the adjustments in the NSLP federal reimbursement rates.

### **For More Information**

Bureau of Labor Statistics (BLS). (2008). Relative importance of items in the Consumer Price Index. Washington, DC. Retrieved August 14, 2009 from <http://www.bls.gov/cpi/cpiri2008.pdf>.

California Department of Education (CAED). 2009. School nutrition programs. Sacramento, CA. Retrieved August 14, 2009 from <http://www.cde.ca.gov/ds/sh/sn/>.

Houston, K. (2008, July 9). Testimony of the Deputy Under-Secretary of Agriculture for Food, Nutrition, and Consumer Services before the House Education and Labor Committee.” Retrieved August 14, 2009 from <http://www.fns.usda.gov/cga/speeches/CT070908.html>.

Institute of Medicine. (2009). *School Meals: Building Blocks for Healthy Children*. Washington, DC: The National Academies Press. Retrieved October 20, 2009 from [http://books.nap.edu/openbook.php?record\\_id=12751](http://books.nap.edu/openbook.php?record_id=12751).

Kingsbury, K. (2008, July 11). Food prices eat up school lunch. *Time*. Retrieved July 15, 2009 from <http://www.time.com>.

Minnesota Department of Education (MNED). (2009). Financial management- School Nutrition Programs. District Food Service Financial Reports. Roseville, MN. Retrieved August 14, 2009 from [http://education.state.mn.us/MDE/Learning\\_Support/FNS/SNP/FinancialManagement-SNP/index.html](http://education.state.mn.us/MDE/Learning_Support/FNS/SNP/FinancialManagement-SNP/index.html).

National Restaurant Association. (2008). Highlights from the restaurant industry dollar. Washington, DC. Retrieved July 15, 2009 from <http://www.restaurant.org/>.

Newman, C., Ralston, K., and Clauson, A. (2008, September). Balancing nutrition, participation, and cost in the National School Lunch Program. *Amber Waves*, 6(4). Washington, DC: U.S. Department of Agriculture,

Economic Research Service.

School Nutrition Association. (2008a). Heats on: School meals under financial pressure. National Harbor, MD. Retrieved August 14, 2009 from <http://www.schoolnutrition.org>.

School Nutrition Association. (2008b). Impact of rising food prices on school nutrition. National Harbor, MD. Retrieved August 14, 2009 from <http://www.schoolnutrition.org/content.aspx?id=2398>.

United States Department of Agriculture Food and Nutrition Service. (2008). National School Lunch, Special Milk, and School Breakfast Programs, National average payments/maximum reimbursement rates. *Federal Register*, 73(130). Retrieved August 14, 2009 from <http://www.fns.usda.gov/cnd/Governance/notices/naps/NAPs08-09.pdf>.

United States Department of Agriculture, Food and Nutrition Service (USDA, FNS). (2009). National School Lunch Program: Fact Sheet. Washington, DC. Retrieved August 14, 2009 from <http://www.fns.usda.gov/cnd/Lunch/AboutLunch/NSLPFactSheet.pdf>.

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