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### Economic Research Service

# Do Healthy School Meals Cost More?

### **Food Assistance Research Brief**

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**Issue:** USDA school meal programs represent a significant Federal investment, at a cost of almost \$8 billion in 2001. More than 27 million children are served school meals annually, making USDA school meals programs a logical place to look for action to improve children's diets. It has been argued that improving the nutritional quality of school meals will raise costs, and therefore increasing USDA school meal reimbursement levels is necessary for that improvement to occur. However, the relationship of school meal costs to success in achieving program outcomes—that is, serving healthful appealing meals that are well-consumed by children—has never been thoroughly investigated. Previous USDA studies of the school meal programs such as the National Evaluation of School Nutrition Programs (NESNP), conducted in school year 1980-81, and School Nutrition Dietary Assessment-I (SNDA-I), conducted in 1991-92, have examined important outcome measures such as participation and dietary intakes. Costs of school meals were also examined in a separate study conducted in school year 1992-93. However, these studies predate important changes in school meal nutrition standards. Moreover, separate collection of data on costs and outcomes did not allow exploration of the relationship between outcomes and costs.

Background: With child obesity soaring and the juvenile incidence of diabetes and hypertension also on the rise in the United States, there is strong policy interest in the potential of USDA school meals to promote healthy diets and weights. Since 1995, school meals have been required to meet limits for fat and saturated-fat content. The most recent study of school meals offered to children indicates that average fat and saturated-fat content of school lunches has decreased, but still exceeds standards. Moreover, healthful foods such as fruits and green vegetables may be more likely to go uneaten by students.

In 1995, USDA's Food and Nutrition Service (FNS) launched the School Meal Initiative (SMI), amending school meal regulations to require that meals contain no more than 30 percent calories from fat and 10 percent calories from saturated fat. The potential cost of these changes raised widespread concern, with USDA receiving more than 5,500 comments on the subject when the 1995 regulations were proposed. Although a pilot study by FNS indicated schools could produce lunches that met the new standards at costs comparable to or lower than those of an old-style lunch, concerns have persisted.

**Findings:** The effects of SMI on program outcomes and costs have only been partially examined to date. The SMI Implementation Study, conducted by FNS, found that 80 percent of a nationally representative sample of school districts reported increased food costs following SMI implementation. The study did not, however, provide sufficient information to determine the proportion of food cost increases attributable to SMI implementation versus normal changes in food costs over time.

The School Nutrition Dietary Assessment Study-II (SNDA-II) examined menus from a nationally representative sample of schools. Results indicated progress in reducing fat and saturated-fat content of meals, but fewer than one-quarter of schools served lunches that met either standard. Schools were more successful at breakfast time, with the majority serving breakfasts that met the fat and saturated-fat standards.

These results tell us what schools serve children, but not how much meals cost or what children actually eat. Thus, we cannot tell whether school meals that met the standards cost more or were well-accepted by children. Ultimately, program success requires not only that meals be nutritious but that children eat them. Unfortunately, nutritious foods like fruits and green vegetables are most likely to go uneaten by children.

Innovations to promote acceptance may increase costs beyond simply modifying existing menus to meet SMI requirements. Without knowing the relationship of cost to both the quality of meals offered to children and their ultimate dietary intakes, we cannot know the extent to which menu improvements are having the desired effects of improving children's diets and health and whether cost is a barrier to improvement.

Summary: The basic questions of interest—How well are school meals achieving their intended nutrition outcomes? How much do they cost? What is the relationship of outcomes to cost?—can only be answered by an integrated study of school meal program operations, costs and outcomes. USDA has previously fielded studies of both outcomes and costs, but has never collected these data as part of a unified design and sampling plan, allowing the information to be combined to fully answer these questions of compelling policy interest. An integrated study would allow an unprecedented level of analysis of the relationship of key operating characteristics, costs, and outcomes—with outcomes including both quality of meals offered and students' participation and consumption.

As a first step to developing an integrated study, the USDA-Economic Research Service has contracted with Abt Associates Inc., and Mathematica Policy Research Inc., to design an integrated study of USDA school meal

programs and to assess the cost and feasibility of such a study. The design study is scheduled for completion in summer of 2003.

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