



USDA School Meal Programs: How and Why the Cost of Food Purchases Varies Across Locales

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What Is the Issue?

Food costs make up almost half of overall meal costs in the National School Lunch Program (NSLP) and School Breakfast Programs (SBP). These programs serve millions of children healthy meals every school day, with most meals provided to low-income children free or at a reduced price. A better understanding of factors that affect food costs and how they vary at the local level could inform strategies to improve the economic efficiency of these programs. Local school food authorities (SFAs), usually a unit of the school district, are responsible for food purchasing, preparation, and service and are reimbursed by the USDA at rates set for the 48 contiguous States and the District of Columbia. However, local costs may vary, making it more difficult for SFAs with higher costs to serve appealing meals that meet USDA nutrition standards within their budget constraints. This study examines how food costs (defined as cost per ounce for foods in eight major categories) vary by volume of purchases and SFA characteristics such as location and purchasing practices. We consider how SFA purchasing practices and other decisions can mitigate effects of factors outside SFA control, such as cost differences associated with the volume of purchases and location.

What Did the Study Find?

Analyses of a nationally representative sample of public SFAs participating in the NSLP in 2009-10 provided the following insights of SFA-level variation in costs of foods purchased for the program:

- Per unit cost of a food product dropped with volume purchased. The cost of a low-volume purchase of fruits and vegetables (one-fourth the sample mean) was about 17 percent higher than the cost of a high-volume purchase (four times the sample mean). The smallest change (about 8 percent) was for milk and dairy.
- Food costs varied by region. SFAs in the Northern Plains and Mountain regions had higher average food costs for most major food categories (fruits and vegetables, staples, milk and dairy, meat and poultry, and fully processed foods). SFAs in the Southeast region had lower costs in all categories.

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- Some purchasing practices, such as fixed-price contracts, were consistently associated with lower food costs. Use of cooperative buying had mixed results, sometimes associated with lower costs but not always. Cooperative buying may serve other purposes, such as accessing foods that would otherwise be unavailable to the SFA.

An important caveat is that this study is limited to an investigation of food costs only and does not consider other expenses of meal production, most notably labor costs, which on a national basis are roughly equal to food costs. However, like food costs, labor costs may vary across locations; for some SFAs, comparatively high food costs may be offset by lower labor costs, enabling those SFAs to produce meals that are still within the constraints of Federal lunch and breakfast reimbursement rates. Future research with datasets that include labor and other nonfood costs of meal production is needed to better understand cost differences across SFAs.

How Was the Study Conducted?

Data were obtained from the USDA School Food Purchases Study III, conducted in school year (SY) 2009-10. The study is the most recent available source of national estimates of the quantity, value, and unit prices of food acquisitions by public unified school districts participating in the NSLP and SBP, obtained from a nationally representative sample of 420 SFAs spread across 48 contiguous States and the District of Columbia. Information also was collected on SFA characteristics, procurement practices, and food service operations. Foods are sorted into eight groups representing major SFA purchasing categories (fruits and vegetables; staples such as cereal, bread products, flour, and rice; milk and dairy; meat and poultry; desserts; snacks; prepared foods; and nondairy drinks). For each group, food cost per ounce was estimated as a function of the quantity purchased, SFA location and other SFA characteristics and SFA purchasing practices, and product characteristics. We account for survey design by using survey strata and survey weights and report nationally representative results.