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## Participation in the USDA National School Lunch and School Breakfast Programs: Evidence from a Nationally Representative Elementary School Survey

Lisa M. Powell, PhD<br>Institute for Health Research and Policy<br>University of Illinois at Chicago<br>powell! @uic.edu<br>Lindsey Turner, PhD<br>Institute for Health Research and Policy<br>University of Illinois at Chicago<br>lindseyt@uic.edu<br>Katherine Ralston, PhD<br>Economic Research Service<br>United States Department of Agriculture<br>kralston@ers.usda.gov

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## Food and Fitness

## Elementary School Survey

- 2007-8
- Sampled from all schools with a $3^{\text {rd }}$ grade
- Response rates: 70.6\% (748 schools) for public schools and 84.4\% (336 schools) for private schools.
- Funded by Robert Wood Johnson Foundation


## Objectives

- Measure school participation rates for public and private schools
- Elicit reasons for school non-participation
- Measure student participation rates for public and private schools
- Identify determinants of student participation rates


## USDA School Meals at a Glance

- Lunches and Breakfasts meet nutritional and standards
- Free meals for students in households below $130 \%$ of poverty, reduced price meals for those at 130-185\% poverty
- USDA reimbursements school districts \$2.72 per free lunch served, $\$ 2.32$ per reduced-price lunch, $\$ 0.26$ per full-price lunch.
- Breakfast reimbursement: \$1.48, \$1.18, \$0.26


# School Participation in USDA School Meals 



## Schools' Reasons for Not Participating in USDA Lunch



Public Schools ■ Private Schools

## Schools' Reasons for Not Participating in USDA Breakfast



## Students' Participation in the National School Lunch Program



# Students' Participation in the School Breakfast Program 



## Determinants of USDA School Meal Free/Reduced price Take-up Rates

|  | Breakfast | Lunch |
| :--- | :--- | :--- |
| Reduced breakfast/lunch price at |  |  |
| no cost | $0.1510^{* * *}$ | 0.0284 |
| Public school | $0.1848^{*}$ | $0.0767^{*}$ |
| Percentage of black students | $0.1403^{*}$ | $0.1405^{* * *}$ |
| Percentage of Hispanic students | $-0.1806^{* *}$ | 0.0571 |
| Commercial food available | -0.0384 | 0.0127 |
| Food information provided | 0.0163 | -0.0067 |
| Nutritionist available at school | $0.0865^{* * *}$ | 0.0052 |
| Other breakfast/lunch option | -0.0171 | -0.0218 |
| Eligibility rate | 0.1866 | -0.0329 |
| Household income | -0.0121 | -0.0050 |
| Observations | 299 | 436 |
| R-squared | 0.1931 | 0.0487 |

## Determinants of USDA School Meal Full-price Take-up Rates

|  | Breakfast | Lunch |
| :--- | :--- | :--- |
| Full breakfast/lunch price | $-0.1138^{*}$ | -0.0499 |
| Public school | -0.1315 | -0.0640 |
| Percentage of black students | -0.0357 | -0.0365 |
| Percentage of Hispanic students | $-0.2640^{* * *}$ | $-0.1324^{*}$ |
| Commercial food available | $-0.0644^{* *}$ | $-0.0969^{* * *}$ |
| Food information provided | 0.0060 | -0.0183 |
| Nutritionist available at school | 0.0329 | 0.0177 |
| Other breakfast/lunch option | -0.0352 | -0.0013 |
| Eligibility rate | $0.4341^{* * *}$ | $0.2038^{* *}$ |
| Household income | 0.0066 | -0.0117 |
| Observations | 269 | 465 |
| R-squared | 0.1855 | 0.1102 |

## Student Participation Findings

- Higher eligibility rate associated with higher participation of full-price students, not free/reduced
- Presence of commercial food associated with lower participation of full-price students, not free/reduced
- Higher price associated with lower breakfast participation for full-price students ( $p<0.05$ )
- Weak price effect on lunch $(p=0.17)$

