Estimating Plate-Lunch Demand:
A Bottom-Line Assessment of the Competitive School Food Environment

Matthew Pham & Brian E. Roe
Department of Agricultural, Environmental & Development Economics
Ohio State University, 2120 Fyffe Road, Columbus, OH 43210
Contact Author: roe.30@osu.edu

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**Estimating Plate-Lunch Demand: A Bottom-Line Assessment of the Competitive School Food Environment**

Matthew Pham & Brian E. Roe, Dept. of Agricultural, Environmental & Development Economics

**Abstract**

Direct regulation of school lunch content seems an intuitive approach for improving the nutrition of many American children. However, little is known about substitution patterns in response to such changes. This article offers a bottom-line assessment of the competitive demand for school lunches as a function of calorie content and protein source. Our results suggest a highly inelastic response to a meal's calorie content and considerable sensitivity of demand to entrée protein source, suggesting that reductions in calorie content may be possible under proposed changes to Federal regulation may enhance food service profit margins. In addition to using past records of school lunch sales, we also initiated a running survey that explicitly explores the role of price, personal control, and personal health beliefs on children's desires for school lunches. We find that children's nutritional outcomes may be affected by school lunch regulations.

**Results**

<table>
<thead>
<tr>
<th>Component</th>
<th>Standard Error</th>
<th>Coefficient</th>
<th>t Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
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<td>0.0087</td>
<td>0.00</td>
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<tr>
<td>Protein Source</td>
<td>0.0017</td>
<td>0.0014</td>
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</tr>
</tbody>
</table>

**Conclusions**

Understanding the links and trade-offs among the various school lunch and food service policies is critical to improving the nutrition of American children. The current study offers new evidence that children's nutritional outcomes are affected by changes in school lunch regulations. Additional research is needed to identify the optimal balance between these and other school-based interventions for improving children's nutritional outcomes.

**References**

[Here the list of references would be included]

**Data & Model**

Our model predicts that children's calorie intake in school is a function of various school and household characteristics. We estimate an augmented model that includes variables for school and household characteristics, as well as measures for children's personal control and personal health beliefs. The model is estimated using a fixed effects panel data regression. We find that children's nutritional outcomes are affected by school lunch regulations.

**Discussion**

Understanding the links and trade-offs among the various school lunch and food service policies is critical to improving the nutrition of American children. The current study offers new evidence that children's nutritional outcomes are affected by changes in school lunch regulations. Additional research is needed to identify the optimal balance between these and other school-based interventions for improving children's nutritional outcomes.

**Acknowledgements**

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