

Childhood Development and Nutrition: What is the Role of Refrigerators? A Research Proposal

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Childhood Development and Nutrition: What is the Role of Refrigerators? A Research Proposal

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Despite the existence of a vast body of literature in the field of health economics on overweight, obesity and undernutrition, little is known about the importance of owning a refrigerator on the consumption of healthy foods and a balanced nutrition. Refrigerator ownership is limited in the developing world, in countries with average PPP adjusted incomes below US\$10,000 per year only 20% of households own one. This study uses data originally collected for the evaluation of a community nutrition program in El Alto, Bolivia, that has a rich set of socioeconomic, demographic, and nutrition variables. A balanced panel of 1571 households and a balanced panel of 1310 children among this households were created for child-level nutrition analysis. We estimate the effects of household refrigerator ownership on diet and nutrition outcomes using fixed effects models. Results provide evidence supporting the idea that owning a refrigerator increases healthier food consumption and has long-term effects on children's health. In particular we find compelling evidence on the following: (i) households with a refrigerator are more likely to buy and consume food that requires refrigeration, (ii) children's food quality consumption is improved; and (iii) children in households with refrigerators are taller and less overweight (height-for-age 0.18 standard deviations higher and BMI lower by 0.27 standard deviations). While further research is needed to confirm these results with different ethnicities and in a more rigorously controlled environment like a random experiment, this study provides compelling evidence to continue exploring the idea that refrigerators may have a key role in childhood development and nutrition, especially in low- and middle-income countries, and in rural areas, where adoption is still low.