Height and Calories in Early Childhood

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This paper estimates a height production function using data from a randomized nutrition intervention conducted in rural Guatemala from 1969 - 1977. Using the experimental intervention as an instrument, the IV estimates of the effect of calories on height are an order of magnitude larger than the OLS estimates. Information from a unique measurement error process in the calorie data, counterfactuals results from the estimated model and external evidence from migration studies suggest that the divergence between the OLS and IV estimates is driven by the LATE interpretation of IV. Attenuation bias corrected OLS estimates of the height production function imply that calories gaps in early childhood can explain at most 16% of the height gap between Guatemalan children and the US born children of Guatemalan immigrants.