BETTER CHILDHOOD NUTRITION LEADS TO GREATER EDUCATIONAL ATTAINMENT IN ADULTHOOD

Feeding very young children a high-energy, high-protein supplement leads to increased educational attainment in adulthood, especially for women, according to a study published in the April 2009 issue of the *Economic Journal*.

Girls who received the supplement, known as atole (the Guatemalan name for porridge), in the first three years of life completed one additional year of schooling than those who received an alternative low-energy supplement. Both men and women who received atole as children achieved higher scores on reading comprehension tests and on non-verbal cognitive tests.

By following the same individuals from childhood to adulthood, this study provides some of the strongest evidence to date of the effects of early childhood nutrition on educational attainment in adulthood.

The research was conducted in Guatemala by the Institute for Nutrition in Central America and Panama, Emory University, the International Food Policy Research Institute (IFPRI), the University of Pennsylvania and Middlebury College.

John Maluccio, lead author of the article and assistant professor of economics at Middlebury College, says:

> ‘Before this study, only limited evidence spanning childhood to adulthood existed to support claims about the long-term effects of early childhood nutrition.
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> ‘This study confirms that the first three years of life represent a window of opportunity when nutrition programs can have lifelong benefits on a child's development, particularly in education.’

From 1969-1977, four rural communities in Guatemala participated in a food supplementation study in which children received one of two supplements fortified equally with micronutrients. The first, atole, was high in protein and energy; the second contained no protein and was low in energy.

In 2002-2004, researchers returned to Guatemala to interview individuals who had participated in the nutrition supplement program as children. They collected information about schooling attainment, reading comprehension and non-verbal cognitive ability.

Estimates indicate that the cost per child of providing atole for three years in the 1970s was US$15. In Guatemala today, providing the same amount of a similar atole, commercially marketed as Incaparina, would cost about US$60.

John Hoddinott, an article co-author and IFPRI senior research fellow, says:

> ‘We have long known that nutrition interventions can provide significant benefits in terms of a child's health and development. This study in Guatemala is important because it shows that improving nutrition in early childhood can have significant educational payoffs into adulthood.’

ENDS

Notes for editors: 'The Impact of Improving Nutrition during Early Childhood on Education among Guatemalan Adults' by John Maluccio, John Hoddinott and colleagues is published in the April 2009 issue of the *Economic Journal*.

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