# Genetically modified cotton improves diet quality for small-scale farmers in India

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Insect-resistant genetically modified (GM) cotton has significantly improved calorie consumption and dietary quality among small-scale farmers in India over a 7-year-period, according to research published June 5 in the open access journal *PLOS ONE* by Matin Qaim and Shahzad Kouser from the University of Goettingen, Germany.

The researchers used data from a survey of over 500 randomly selected small farm households conducted from 2002-2008, and found that growing GM cotton crops increased farm yields and incomes, enabling these farming households to afford more and better food. Calorie consumption and dietary quality improved significantly in households that grew GM cotton compared to those that did not. In 2002, the proportion of GM-cotton growing farms was small, but by 2008 99% of the farmers surveyed had adopted this technology. Food insecurity was reduced by 15-20% as a result.

Small-scale farming households in Asia and Africa make up a large proportion of undernourished people worldwide. The researchers conclude that although GM crops alone may not solve the hunger problem, they may be an important component in a broader food security strategy.

**More information:** Qaim M, Kouser S (2013) Genetically Modified Crops and Food Security. *PLOS ONE* 8(6): e64879. doi:10.1371/journal.pone.0064879