

## **Long-term metabolic effects after severe malnutrition**

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Severe acute malnutrition (SAM) is still one of the major causes of childhood mortality globally. Children who survive one or more episodes of malnutrition often suffer from long-term impaired growth. It is unclear whether a period of severe malnutrition after birth leads to serious health risks later in life. In this project we aim to answer whether SAM leads to long-term changes in selected metabolic processes. Children who had been through an episode of SAM will be studied. Results show that previously malnourished children had significantly lower height and muscle mass than control children and had reduced muscle strength. These outcomes will be related to changes in metabolism. Blood samples are being analyzed for detailed metabolic analyses focusing on fat and protein metabolism. This work could completely change our understanding of the health risks of long-term survivors of early life severe malnutrition .

“This innovative work could greatly support our mission to promote healthy lives for children worldwide,” says Dr. Robert Bandsma, one of the principal investigators.