## If biofortified crops are goal, both genetic engineering and conventional breeding necessary

[Dr Swati Puranik, of the Institute of Biological, Environmental and Rural Sciences at Aberystwyth University in the UK] and her collaborators in Kenya and India aim to use conventional genomics-based breeding to come up with varieties of finger millet that contain higher levels of calcium and vitamins, without using genetic engineering.

• • •

Professor Paul Christou, from the Department of Crop and Forest Science and Agrotecnico Centre at the University of Lleida in Spain, has genetically engineered maize and rice to boost vitamin A, folic acid and vitamin C, along with a wide spectrum of essential micronutrients.

He sees value in conventional breeding to develop fortified crop varieties, but believes genetic engineering is the only current way to deliver a staple crop that meets the recommended daily amounts of vitamins and minerals simultaneously.

'To my mind, in order to be successful in biofortification programmes, you need to address the micronutrient deficiencies in as complete a manner as possible,' said Prof. Christou.

• • •

Genetically modified (GM) cereal varieties could have a major impact if they are accepted. But Prof. Christou recognises that not everyone is receptive to GM foods, even where they can improve nutrition for hundreds of millions of people.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: <u>New strains of staple crops serve up essential vitamins</u>