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Biofortification: Combating Micronutrient Deficiencies in India

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Keywords

Biofortification; Golden Rice; Orange-fleshed Sweet Potato; Dhanshakti. **ABSTRACT:** The diets of over two-thirds of the world's population lack one or more essential mineral elements. Staple diet of people in developing countries like India is based on cereals and is not sufficient to provide essential minerals and vitamins like iodine, iron, zinc and vitamin A. Micronutrient deficiency in such countries is one of the major cause of death and disability and a serious health challenge. Biofortification, a promising approach to address micronutrient malnutrition worldwide refers to the development of micronutrient enhanced staple crop varieties by traditional breeding practices or by modern biotechnology. The main focus of this review is to discuss the groundbreaking work on (i) Golden rice, (ii) 2016 malnutrition award winning orange-fleshed sweet potato and (iii) Dhanshakti – the first high iron biofortified pearl millet crop commercialized in India. The review concludes with an assessment of controversies and challenges for biofortification, especially in India.© 2016 iGlobal Research and Publishing Foundation. All rights reserved.

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