

## New GMO rice could fight iron, zinc deficiencies in developing world

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.**

A transdisciplinary group of scientists has succeeded in increasing iron (Fe) and zinc (Zn) levels in rice through biofortification—a breakthrough in the global fight against micronutrient deficiency or “hidden hunger.” Their research was recently published in *Nature’s Scientific Reports*.

According to the World Health Organization, Fe deficiency is the most pervasive form of malnutrition and a leading cause of anemia in women and children. Zn deficiency causes stunting and has serious consequences for health, particularly during childhood.

....

Howarth Bouis, HarvestPlus director, described the significance of the research by way of its implication on global hunger and mitigating undernutrition: “The research results, which have exceeded target levels of both Fe and Zn, speak of the immense potential of using transgenic techniques in pursuing biofortification to improve the nutritional value of food crops. This demonstrates how scientific innovations can expand the range of solutions to curbing micronutrient deficiencies.”

Polished rice grains generally contain only about 2 micrograms of Fe and 16 micrograms of Zn per gram. [With limited variation in grain Fe content across the rice gene pool](#), conventional breeding efforts have fallen short of reaching 13 micrograms of Fe and 28 micrograms of Zn per gram of polished rice to fulfill 30% of the estimated average requirement (EAR) in humans.

....

The full article, [Biofortified indica rice attains iron and zinc nutrition dietary targets in the field](#) is available on the *Nature* website.

**Read full, original post:** [Genetically engineered rice with high levels of iron and zinc is developed](#)