

Are beneficiaries willing to pay for folate biofortified rice? Findings from a high-risk region in China.

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Despite the large number of developed biofortified crops, knowledge on consumers' preferences for such micronutrient enriched foods is still scarce, particularly in target regions. Especially when it comes to GM biofortified crops, where transgenic breeding techniques are applied to enhance vitamin or mineral concentrations, like Golden Rice, little is known about the purchase intentions of their key beneficiaries. Because GM biofortification is not yet approved for commercialization, it is important to examine how the awareness of the use of GM technology affects preferences for such GM foods with health benefits.

This study reports consumers' willingness to pay for GM rice with a higher folate content, known as folate biofortified rice, as obtained through experimental auctions in a high-risk region of folate deficiency, namely Shanxi Province, China. The study is conducted with female rice consumers, which are - due to the high prevalence of neural-tube defects caused by folate deficiency- considered the key beneficiaries of increased folate consumption.

The results show that this target group is prepared to pay substantially more for folate enriched rice than for regular rice, namely an average premium of 33.7 %. Although this is 13.1 % lower than their willingness-to-pay for conventional bred folate biofortified rice, a majority of the beneficiaries still prefers this product when information about the applied technology is given. Furthermore, the awareness of the folate content and benefits, as well as region-specific information has a positive effect on the valuations. Finally, Shanxi women are most susceptible to one-sided positive or negative GM information, while negative information is dominant when providing conflicting information.

Scientific abstract (1774 characters)

Question:

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Methodology:

This study reports consumers' willingness to pay for GM rice with a higher folate content, known as folate biofortified rice, as obtained through experimental auctions in a high-risk region of folate deficiency, namely Shanxi Province, China. The study is conducted with female rice consumers, which are - due to the high prevalence of neural-tube defects caused by folate deficiency- considered the key beneficiaries of increased folate consumption.

Results and conclusions:

The results show that this target group is prepared to pay substantially more for folate enriched rice than for regular rice, namely an average premium of 33.7 %. Although this is 13.1 % lower than their willingness-to-pay for conventional bred folate biofortified rice, a majority of the beneficiaries still prefers this product when information about the applied technology is given. Furthermore, the awareness of the folate content and benefits, as well as region-specific information has a positive effect on the valuations. Finally, Shanxi women are most susceptible to one-sided positive or negative GM information, while negative information is dominant when providing conflicting information.