

Modelling Protection Behavior towards Child Malnutrition: The Case of Iodine Biofortified Vegetable Legumes in East-African Children

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Short description

The behavioral theory of protection motivation theory is integrated with an economic valuation technique to analyze the uptake of iodine biofortification as a health strategy for East-African children.

Long description

Despite successes recorded in combating iodine deficiency, more than 2 billion people are still at risk of iodine deficiency disorders, especially in rural landlocked, developing regions. This study applies the behavioral change theory of protection motivation and integrates an economic valuation technique to evaluate the potential of iodine biofortified vegetable legumes to protect children against the negative effect of iodine deficiency on mental health.

By using a multi-stage cluster sampling, a survey was administered to 1200 participants were recruited in three land locked areas in Kenya, Uganda and Tanzania: schools (n=40*3) and neighborhood households (n=360*3). Path analysis modelling and two-limit tobit regression is used to assess, respectively, the determinants of protection motivations and preferences for iodine biofortified food.

This study lend support for prevention of iodine deficiency in an unprotected population through biofortification. Thereby, 'Threat' appraisal elements and socio-economic indicators are decisive in stimulating the uptake of this novel strategy and could be targeted when designing or improving iodine interventions.

Keyword:

Biofortification;
Consumer Survey;
East Africa;
Iodine;
Preference;
Protection motivation theory;

Profile of the presenter

Hans De Steur (°1983) graduated as a Sociologist and obtained his Diploma of Complementary Studies in Economics and Business Administration at Ghent University, Belgium. In 2011, he successfully finished his PhD in Applied Biological Sciences, which focused on the market potential of biofortification. He currently works as a postdoctoral assistant at the Division of Agri-Food Marketing and Chain Management, Department of Agricultural Economics in Ghent University. Hans was and is involved in various national, international (EU) research projects dealing with healthy and/or genetically modified foods. He is also (co-)author of various scientific publications in peer-reviewed journals, among which 2 articles in Nature Biotechnology, and presented his results at several international conferences.

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