Food & Business Applied Research Fund

Project: Macro Nutrient Fortification of first-line food cereals with milk protein to produce affordable value added cereal products in Uganda/East Africa

Consortium Members

1. Dr. Gaston AmpekTumuhimbise, Principal Investigator, Value Addition Institute
2. Dr. Anita Linnemann, Co-Investigator, Wageningen University
3. Dr. Abel Atukwase, Co-Investigator, Food & Nutrition Solutions Ltd.
4. Francis Tucungwirwe, Coordinator, Value Addition Institute

Main Innovation

Enhancing cereal based flours with animal protein from cow milk and using local food materials as sources fortificants. This intervention will significantly contribute to reduction of high rates of malnutrition in the region.

Objectives

1. To support VAI's current protein-fortification efforts in order to produce most affordable protein-fortified flours (maize, millet and rice) for Uganda and neighbouring countries
2. To undertake national and regional promotion, commercialization and utilization of protein fortified cereal products

Expected impacts

- Increased number of the population having access to nutrient-dense cereal flour
- Improved nutritional status of mothers and young children
- Increased incomes of cereal farmers especially smallholder farmers

Impact activities and results

- *Process Improvement;* under this focus is on improvement of product processing approaches. Experiments on substituting powdered milk with liquid milk and obtaining flour are on-going with good prospects.
- *Product improvement;* the focus is on Increasing the micronutrient profile of the milk protein enhanced flours using locally developed fortifiers. Experiments are on going with promising prospects.

Opportunities

- The products have been widely accepted by target consumers
- There are other partners interested in providing complementary resources

Challenges

- There is still limited capacity to produce the products to meet the growing demand
- Some aspects of process improvement research are likely to require facilities that are not locally available