Development of Aflatoxin Free, Peanut Based, Ready to Use Therapeutic Food

PROJECT TITLE

Rationale

Malnourished people — 925M globally; 239M in Sub-Saharan Africa
A role in 5M child deaths per year
Malnourished mothers produce affected children

Strategy

Identify appropriate target populations
Use Computer Optimization to design formulas meeting nutritional goals at least cost using local commodities
Deliver health benefits by binding mycotoxins and introducing probiotics
Develop techniques for delivering stable ingredients
Use appropriate technologies to convert formulations to actual foods

Commodities

Peanuts
Millet
Corn
Pigeon
Sugar

Compositions

Protein - 10g
Energy - 867 kcal
Carbs - 16.13 g
Protein - 3.08 g
Lysine - 0.89%
Fat - 46.2 g
Manganese - 0.33 g

Requirements

Protein
Energy
Carbohydrates
Minerals

Process

Decarboxylate and Mill Ingredients
Digest starch and protein

Costly Process

Delivering mix and probiotics to processed formulas

IN THE NEXT 5 YEARS

• Measure shelf-life of formulas
• Extend human studies in Ghana, Uganda and beyond
• Forge alliances with NGOs and Governmental Ministries
• Train producers to make formulas under oversight of Ministries or Universities
• Develop new forms of RUTFs and RUSFs

COUNTRIES AND SITES

The University of Georgia in the United States,
The University of Ghana-Legon in Ghana, and
Makerere University in Uganda
UGA research focused on women of child-bearing age in Mali

PEANUT CRSP THRUSTS

Utilization thrusts
Identification of new market opportunities and development of new products to meet market needs
Development and transfer of appropriate, low cost technologies to use peanut in traditional and new food, fuel and animal products
Global Thrusts
Increasing the value and safety of peanuts to consumers

Nutrient Content

Training and Capacity Building

Human Studies in Ghana on UEL Formulas

IMPACTS

• Any mycotoxins in formulas bound and unavailable
• Women an integral and essential part of teams and trainees
• 9 Students trained
• Formulas expected to have nutrition and health impacts