



VALID develops highly effective and innovative ready-to-use food products to address malnutrition.



*“Our philosophy is not to import solutions into the developing world, but to add value to society, industry and farming locally.”*

Dr. Steve Collins, Founder & Director

**ANNUAL REVIEW OF 2018**

# Introduction and Governance Structure

Welcome to VALID Nutrition's Annual Review 2018. The purpose of this document is to provide our supporters and the general public with a candid review of VALID Nutrition's activities and developments during 2018, including an overview of our plans for the year ahead.

VALID Nutrition is a "not for profit" company, limited by guarantee and incorporated in Ireland. As such, it has no shareholders and cannot disperse profits outside of the business. It is a registered Irish, UK and US public charity, but operates a distinctive social impact business model that incorporates a special dispensation from the Irish Revenue Authorities allowing it to trade. Eight Members (Trustees), four of whom form the Board of Directors, govern the company. The Board is chaired by company founder, Dr. Steve Collins and includes Howard Dalzell (former Director of Policy at Concern Worldwide), Roger Yates, (Humanitarian Director of PLAN International), Dr. Hans-Jürgen Koch, (former CEO of Deutsche Bank (Suisse) SA) and Caroline Keeling (Chief Executive of Keelings). The Company Secretary is Derek Staveley, formerly Finance Director of Unilever Ireland. VALID Nutrition's small management team report to the Board through their Chief Executive, Paul Murphy (former Chief Executive of Unilever Ireland). Our lean structure is designed to harness modern technology and progressive work practices, thereby reducing costs and enabling smarter, more efficient work methods.

- **Auditors:** KPMG, 1 Stokes Place, St. Stephen's Green, Dublin 2.
  - **Banking Services:** Allied Irish Bank (Irl), Barclays (UK) and Northern Trust (USA).
  - **Head Office:** Derry Duff, Bantry, Co. Cork, Ireland – "virtual office".
  - **No. of Employees:** 7.
  - **Turnover:** €576,509 (for year ending 31st March 2018, our financial year).
- Note:** The above figure excludes turnover from our foods manufacturing partnership in Malawi.

## Ending Malnutrition

The opportunity to end malnutrition has never been greater and yet, **ACUTE Malnutrition** effects over 50 million children globally and is responsible for between 1-2 million childhood deaths each year. Acute Malnutrition is divided into **Severe** and **Moderate** forms treated by Ready-to-Use Therapeutic Foods (RUTF), and Ready-to-Use Supplementary Foods (RUSF), respectively. Both forms of acute malnutrition are treatable. **The challenge** is to extend treatment to all those who need it by reducing product cost and improving access to treatment.

**CHRONIC Malnutrition**, which leads to "stunting" is caused by a prolonged diet deficient in key essential nutrients and effects 151 million children in developing countries – equating to approximately one third of all children in these locations. Since 2000, stunting among children in Africa has decreased in percentage terms from 38.3% to 30.3%, yet due to population growth, the actual numbers of children stunted has risen. These children are denied the opportunity to ever reach their full human potential - both mentally and physically. **The challenge** is to extend nutritional awareness to mothers and local communities, coupled with the provision of access to appealing, affordable and effective nutritional products for low-income consumers.

A solution is possible and the prize is absolutely enormous, not just for the children concerned, but also their societies and the global economy. By changing mind-sets and regarding malnourished children as autonomous individuals (by providing them with affordable nutritional choices) rather than beneficiaries, and by empowering mothers using an innovative evidence-based approach, VALID aims to unleash a significant change in how this problem is addressed – and in so doing, be a catalyst for an enterprise driven and sustainable solution to malnutrition.

**Our VISION is that market based solutions, which create and nurture consumer demand for good nutrition are the key to ending global malnutrition – and driving economic growth in the countries concerned.**

Childhood malnutrition is the most important cause of global poverty, underdevelopment and child mortality in the world today (ref: The World Bank/WHO). **The global consensus is that preventing malnutrition has the highest return on investment of all development interventions.** At the individual level, preventing malnutrition leads to massive increases in adult earning and educational potential. At the macro level, it increases GDP in affected countries by an average of 2-3% and by up to 10% in high burden countries. In November 2014, The Copenhagen Consensus confirmed that childhood malnutrition is the most critical and economically sound intervention.

**VALID Nutrition's MISSION is to make the choice of effective, affordable and appealing nutrition available to consumers in developing countries – at scale.**

# VALID Nutrition—Country Operations

## Malawi

In 2018, **VALID Nutrition Malawi**, which is a collaboration with our local business partner **Exagris Africa Limited**, produced 4.6 million sachets of **Ready-to-Use Therapeutic Food (RUTF)** – enough to treat almost 35,000<sup>1</sup> children suffering from **Severe Acute Malnutrition (SAM)**. Since establishment, VALID Nutrition Malawi has produced over 48 million sachets of ready-to-use therapeutic food. This figure represents sufficient product to treat over 355,000 children with severe acute malnutrition. Crucially, and with support from customers such as **UNICEF** and **WFP**, these figures represent local production which has now nearly eliminated the need for any ready-to-use therapeutic food to be imported into Malawi from Europe or the USA. This is a significant fact given that approximately 50% of the market is currently supplied from offshore. Furthermore, we are assisting local farmers and suppliers as well as providing employment and skills transfer. All this has a hugely **beneficial multiplier effect** on the local economy.

In addition to our manufacturing activities above, VALID Nutrition Malawi continues to act as a progressive and innovative research and development hub supporting VALID's broader objectives, which in 2018 have included activities in collaboration with **World Vision Malawi** and designed to generate further operational evidence of cost effectiveness (through a **Community-based Management of Acute Malnutrition (CMAM)** pilot programme), and thus to support the anticipated endorsement by the **World Health Organisation (WHO)** of VALID's recent breakthrough **Soya-Maize-Sorghum (SMS) RUTF** recipe. Once endorsed, SMS-RUTF will facilitate the treatment of an additional 1 million children within existing donor budgets. For more detailed information about this breakthrough product, see our R&D section further below.

Also in 2018, and as part of a major research project to include a Test Market, further development of our new line of **Ready-to-Use Complementary Food (RUCF)** designed to prevent chronic malnutrition (which affects 43% of children in Malawi and on average over 30% of all children in Sub Saharan Africa) continued. Following a **Willingness to Pay Study** as well as a **Landscaping Study** to understand Infant and Young Child (IYC) feeding practices in Malawi, VALID's new RUCF product was trialed locally and will now enter a small scale retail market which, in turn, will then guide a much larger scale test-market in due course.



Supported by **Irish Aid** and the **Department of Agriculture, Food and the Marine** (through their **Africa Agri-Food Development Programme - AADP**), these studies form part of the evidence base to enable the development of further finished prototypes of product and proposition during 2019. This work is focused on addressing the process used to reach children affected by Chronic Malnutrition. These are first steps in a progressive programme we have designed to start the process of unlocking this potentially massive market, and bringing autonomy and food choices to individuals affected by malnutrition.

Finally, and to sustain and advance our significant achievements to date - including capitalizing on our breakthrough SMS-RUTF recipe - VALID Nutrition Malawi has successfully secured a mixture of loan and grant funding to undertake the required move from what is effectively a converted warehouse to a larger, state-of-the-art and purpose built factory facility during 2019. This relocation and expansion project is gratefully supported by the Irish Government's **AADP Programme, tcc Foundation** and **Concern Worldwide**, and is designed to consolidate all of the work and investment made by the VALID Nutrition charity to date, as well as, securing a revenue stream for the Charity from the sale of product that will support our research and development programme, and longer-term objectives in terms of tackling chronic malnutrition.

## India

The goal of the VALID/Amul collaboration which was supported by **DFID India** is to stimulate and shape the global market, introducing more competition to the established and dominant European and US based players. The Amul factory is certified by UNICEF and is providing a top class ready-to-use therapeutic food product that is priced competitively. Amul is India's largest Dairy Co-Operative and is owned by its 3.6 million milk producers, most of whom are smallholder farmers. Our initiative in India therefore is a further step in our efforts to establish a better balance in this vital market.



<sup>1</sup> Median calculation of 12.5kg or 135 sachets of RUTF product per child treated.

# Research and Development

## Soy Maize Sorghum RUTF

In 2017 globally, 16 million children under 5 suffered from Severe Acute Malnutrition (SAM) according to UNICEF. The WHO recommended method of treating SAM is VALID's Community-based Management of Acute Malnutrition (CMAM) model, which involves provision of Ready to Use Therapeutic Food (RUTF) to the patients. Less than 25% of SAM cases globally are currently being reached, leaving millions of children with a greatly increased risk of death. **A significant contributing factor to the low coverage is the high cost of RUTF.** To reduce cost and improve coverage, developing alternative lower cost recipes that are at least as efficacious in treating SAM as the existing standard milk-peanut based RUTF formulation, is essential.

**VALID Nutrition** has undertaken over 10 years of research to develop an effective, locally sourced, non-milk based recipe. During this period, it has completed three clinical (efficacy) trials involving an innovative **Soya, Maize and Sorghum (SMS)** based RUTF recipe. In research partnership with Ajinomoto Co. Inc., and together with funding support from the **Japanese International Cooperation Agency (JICA)** and the **Global Innovation Fund (GIF)**, a new generation version of the SMS based recipe was developed using innovative techniques and Ajinomoto's amino acid and food science technology, to optimise the formulation. A clinical efficacy trial was successfully completed in 2016 in Malawi, and a scientific Paper on the trial and outcome was published in August 2017 by the *American Journal of Clinical Nutrition*.

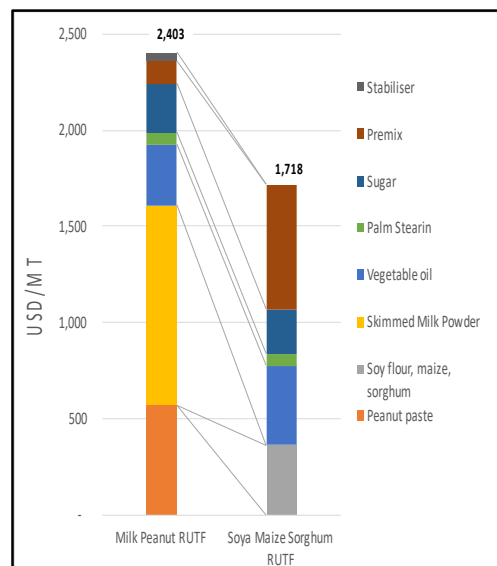
The outcome represents a major breakthrough. **For the first time since RUTF was developed, we have a lower cost product that is as efficacious as the sole standard recipe.** Containing locally sourced ingredients (96%) and with demonstrated superiority in treating anaemia, and in the replenishment of body iron stores, this is a transformational development for the international RUTF market; and most importantly, for children affected by SAM.

### In summary, Soya, Maize, Sorghum (SMS)-RUTF:

- Is as efficacious as the standard milk-peanut RUTF recipe in treating SAM.
- Is superior to the standard milk-peanut RUTF in treating anaemia and replenishing body iron stores – a highly significant benefit, both for SAM and for application in improved supplementary foods, especially for the critically important group of pregnant and lactating women.
- Costs substantially less, allowing more children to be treated within existing donor budgets - with ingredient costs in developing countries expected to be 15~25% lower, depending on prevailing market prices (see graph above).
- Is easier to manufacture in developing countries, with the base ingredients grown locally, and avoiding the need to import expensive milk powder. This will make local manufacturers more competitive.
- Contains 10% less sugar than the standard RUTF recipe. Avoids lactose intolerance and nut allergy in children.
- Has a superior environmental profile with sustainability benefits from the use of cereals rather than animal sourced ingredients. Additionally, manufacture in programmatic countries reduces the carbon footprint associated with supply from offshore.

Making therapeutic foods out of local grains and pulses has long been a goal of international research and development efforts into Ready-to-Use Foods. Non-milk formulations reduce cost, reduce dependency on imported milk, make better use of locally grown ingredients and decrease the risks of fungal (aflatoxin) contamination. The cost of the new SMS RUTF will be considerably lower than the current milk peanut recipe. We estimate that the cost reduction will result in a global saving of several million dollars, and thereby enable the treatment of hundreds of thousands of additional cases within the same budget. As the cost of RUTF is a major factor in limiting the expansion of CMAM across the globe, we believe that this research marks only the start of an exciting and very significant change in the way that these products are made.

Recipe Cost Comparison – Estimate (Malawi)





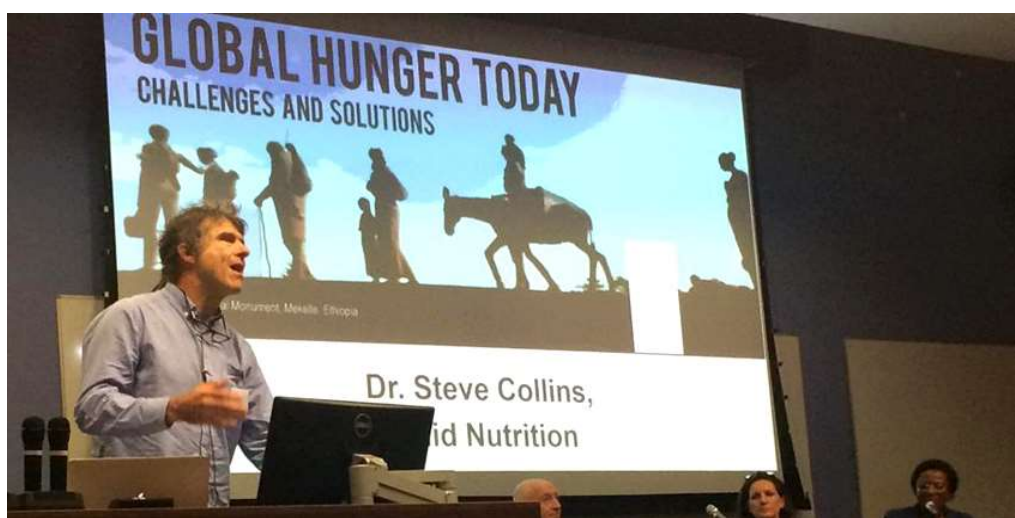
## Smallholder Farmer Project

In collaboration with **University College Cork** and funded initially by **Irish Aid** and subsequently by the **Irish Research Council**, the Smallholder Farmer Project forms part of VALID's overall aim to develop and support a locally based value chain for the production of Ready-to-Use Foods. Our objective is that, through partners and value chain stakeholders, we can support farmers to produce commercial grade groundnuts for use in RUTF, thus creating a reliable source of high quality local groundnuts. Our Reports to date are available on our website at (<http://www.validnutrition.org/?s=small+holder>) and suggest that with appropriate policy changes, Malawi and countries like it, which experience high rates of malnutrition, can competitively produce effective nutritional products. This has the potential to save buyers considerable time and money in the procurement of goods like RUTF, thus increasing the number of lives saved and greatly increasing the proportion of the aid and development budget that remains in the developing world. There are also significant benefits to the local economy through the purchase of raw materials from smallholder farmers and through employment creation along the value chain.

## Communications

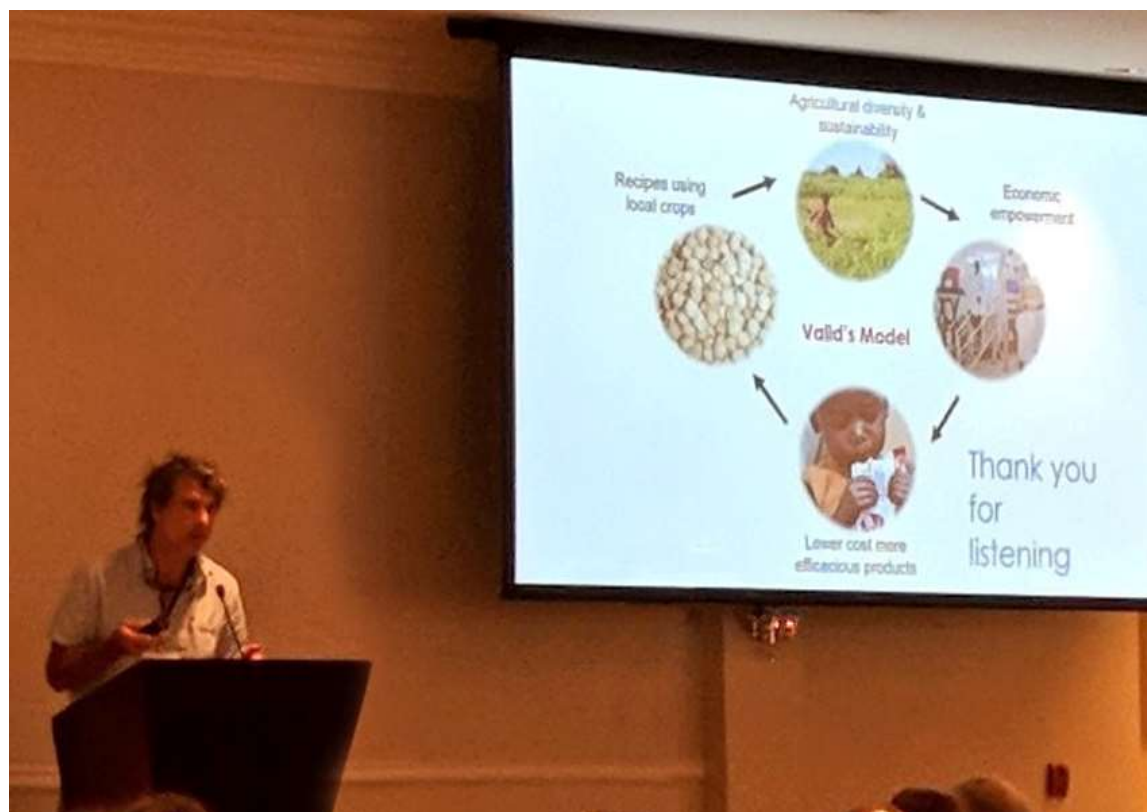
We continually review our website material and social media streams, providing regular updates to our supporters. Relevant items are shared frequently on our social media platforms of Twitter, LinkedIn and Facebook.

### Global Hunger Today – Challenges and Solutions, May 2018, University College Cork



In May 2018, at the **Global Hunger Today** Conference held at **University College Cork**, Dr Steve Collins raised challenging questions about undue delays in the implementation of robust, scientific evidence that can transform the numbers of malnourished children receiving treatment within existing budgets. Dr Collins presented the results of VALID's large-scale randomised controlled research study, demonstrating that an innovative new RUTF product made exclusively from ingredients grown in developing countries, is more effective than the currently available UN gold standard product, and around 20% lower in cost. He asked why, given the potential to treat almost an additional 1 million severely malnourished children within existing budgets, and the sustainable benefits that local manufacture of this recipe will have on developing countries' agriculture, has the UN acceptance process so far made no progress in allowing this innovative life-saving product to be made available to those who need it? In a display of sincere frustration and concern, Dr Collins questioned whether this scandalous waste of resources would be tolerated in other sectors?

## Food Assistance for Nutrition Evidence Summit, June 2018, Washington D.C.



**“It is scandalous that a product with several critical advantages and high quality scientific evidence to support it, can be blocked because of bureaucracy and vested interests.”**

*Dr. Steve Collins, Food Assistance for Nutrition Evidence Summit, June 2018, Washington D.C.*

Dr Steve Collins, Valid Nutrition’s Chairman, spoke candidly about his frustration at the shamefully slow pace of innovation and approval of better products to treat acute malnutrition. He presented the specific example of Valid Nutrition’s new recipe for therapeutic food (RUTF). This breakthrough, which follows from 14 years of research and development (largely funded by RUTF donors), has several clear benefits including: significantly lower cost, far better sustainability profile and is easier to produce in developing countries / regions where these products are needed. He stated that it was scandalous that a product with high quality scientific evidence to support it, can be blocked because of bureaucracy and vested interests, and challenged those empowered to allow this recipe to be used, to act now. Doing so, he said, will immediately lower the cost of treatment allowing hundreds of thousands more children to be treated within existing aid budgets.

### Africa Agri-food Development Programme (AADP)

As part of VALID’s longer-term strategic plan and with support from **Irish Aid** through their **Africa Agri-food Development Programme (AADP)**, VALID is driving ground breaking operational research into providing effective, affordable and appealing branded nutritional products to those at risk of Chronic Malnutrition (stunting). To date, AADP funding has been deployed for small scale consumer and market research activities including a **Willingness-to-Pay** and a **Landscaping Study** to help our understanding of Infant and Young Child (IYC) snacking practices in Malawi. In 2018 the development of enhanced prototypes of product was undertaken which included a **Product Trial** in Malawi. A follow-up, small scale test market is currently underway to test customers and retailers response to our product in a commercial scenario.

### SUN Business Network

VALID Nutrition continues to be a member of the **Scaling up Nutrition (SUN) Business Network** which is working in association with GAIN to intensify business efforts in support of better access to affordable nutrition.

## Funding and Finance

The table below presents a summary for the year ending 31st March 2018, our most recent Financial Year.

Summary Actual Figures	Year Ended 31 March 2018
Total Incoming Resources	€576,509
Total Resources Expended	€528,139
Surplus/ (Deficit) on Ordinary Activities	€48,370

Incoming resources, which consist of income from grants, voluntary income, revenue from consultancy services and royalties, has reduced by 24% from the prior year. The reduction reflects an overall decrease in voluntary and grant income and a decrease in earned royalty income also (due to some market irregularities outside our control); however we are still showing that steps are being taken towards financial self-sustainability. VALID Nutrition has also maintained reduced outgoing resources as a result of continuing strategic control measures. The effect on income and expenditure lines has resulted in a surplus on operating activities again this year. This in turn has allowed us to reduce creditors and further improve our balance sheet position. Separately, manufacturing operations in VALID Nutrition Malawi have reported income of over 1,051 million KWACHA which is a decrease of 52% on the same period in the prior year (and for reasons mentioned in brackets above).

VALID Nutrition is striving and nudging closer each year to becoming a self-sustaining social enterprise funded through the sales and marketing of effective low cost nutritional products. Key to the model is the complete alignment of revenue generation with social impact. In contrast to traditional aid and development organisations, VALID Nutrition does not invest revenue into public fundraising activities, preferring instead the autonomy of basing our competitive advantage on the quality and effectiveness of our products and services. As highlighted above, we have several exciting projects underway and in the pipeline. However, it will take some time before the full benefits of our work to date filters through to providing sufficient revenue to fully fund VALID Nutrition. In the meantime, finding the “bridge” funding required to enable us to continue to pioneer real change in the way that malnutrition is addressed remains a challenge.

## Looking Ahead

Following 14 years of collaborative research effort, VALID and its partners have developed a lower cost and more effective Ready-to-Use Therapeutic Food product that now provides an opportunity to deliver a superior and more cost effective solution to a global problem that kills between 1-2 million children per year. Whilst formal review and approval of the product for use remains ongoing, once endorsed by the World Health Organisation and commercialised, this innovative new product will enable the treatment of up to 1 million additional cases of severe acute malnutrition within existing global aid budgets for Community-based Management of Acute Malnutrition (CMAM). Additionally, this new recipe will directly impact and improve upon the ability of local manufacturers to compete and thus reshape a global market which still involves significant amounts of imported product into Africa, and worth approximately USD 250 million.



We believe that ending the scourge of malnutrition and the devastation it causes is not a problem that can be resolved without combining the efforts, skills and resources of both the public and private sectors. Indeed, market driven solutions are imperative to providing sustainable solutions to malnutrition in local communities. Through the development of ethical market mechanisms we can deliver at scale, nutritious food options at affordable prices - thus enabling mothers and communities with autonomous choices that harness their capacity to take control and responsibility for their own malnourished children over the longer term.

VALID Nutrition is also determined to source funding that will facilitate the provision of evidence-based solutions for tackling chronic malnutrition – solutions that will demonstrate to aid and food industries alike, that there is a viable market for providing people with the missing nutrients their children need and, that by developing and investing in this market, we can reduce and eventually eliminate this scourge once and for all. Harnessing the private sector to bring vast new resources to bear on

this age old problem is crucial if we are to reach and prevent malnutrition in over 150 million children annually.

## VALID Nutrition - 2018 in brief:

- VALID Nutrition Malawi has produced 4.6 million sachets of ready-to-use therapeutic food in 2018. This equates to the **treatment of almost 35,000 local children** with Severe Acute Malnutrition.
- VALID Nutrition Malawi has secured funding to build a new state-of-the-art manufacturing facility in 2019. This Project will help to lower production costs and to expand and diversify product output capacity to meet regional demand.
- VALID continues to actively pursue formal approval of their **lower cost and more effective Soya, Maize, Sorghum (SMS), Ready-to-Use Product**. A WHO review is scheduled to get underway in 2019 and once approved, the cost reductions associated with this new recipe will mean that its global roll out will allow an additional 1,000,000 starving children to be treated each year within existing global aid budgets for CMAM.
- Undertook operational research to develop and test additional products to tackle Chronic Malnutrition.
- Local production of 48 million sachets of Ready-to-Use Therapeutic Food since establishment.
- Has produced specialized products to treat over 355,000 children with severe acute malnutrition to date.
- VALID Nutrition Malawi now has capacity to supply RUTF, RUSF and RUCF products.

## VALID Nutrition - March 2019