



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 2019**

# Introduction and Governance Structure

Welcome to VALID Nutrition's Annual Review 2019. 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 2019, 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. Five Members (Trustees), four of whom form the Board of Directors, govern the company. The Board is chaired by company founder, Dr. Steve Collins (a Medical Doctor and also holding a PhD in Nutrition, Steve is an internationally recognized expert in humanitarian nutrition interventions, as well as a respected academic); and includes Howard Dalzell (former Director of Policy at Concern Worldwide), Dr. Hans-Jürgen Koch, (former CEO of Deutsche Bank (Suisse) SA) and Caroline Keeling (Chief Executive of Keelings). The Company Secretary is Claire Collins, (wife of Steve Collins and former development worker with Concern Worldwide). 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, P75 PD60, Ireland – "virtual office".
- **Charity Registration Number:** 20065737
- **No. of Employees:** 4.
- **Turnover:** €242,051 (for year ending 31st March 2019, 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** affects 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 affects 149 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. Currently the market does not provide such choices to consumers. The reason that market force matters here is that free provision of suitable products at the scale required is never going to be feasible in a context where governments, UN Agencies and other NGOs cannot even afford to treat the numbers of starving children alone.

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 2019, and in preparation for a move from our current and modest (converted warehouse) premises, and to facilitate a new collaboration involving a local investor, **AgDevCo**; **VALID Nutrition Malawi** temporarily ceased production of our **Ready-to-Use Therapeutic Food (RUTF)** products for the treatment of **Severe Acute Malnutrition (SAM)**. This exciting relocation and expansion project is gratefully supported by the Irish Government's **Africa Agri-Food Development Programme (AADP)** – involving **Irish Aid** and the **Department of Agriculture, Food and the Marine**, **tcc Foundation** in the UK, and **Concern Worldwide**. It 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.

Despite modest beginnings, and 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 to date has 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, **VALID's** operation in Malawi assists 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 the construction of a new purpose-built, “state of the art” manufacturing facility locally, **VALID Nutrition Malawi** continues to act as a progressive and innovative research and development hub supporting **VALID's** broader objectives, which recently have included activities in collaboration with **World Vision Malawi** and designed to generate further operational evidence of effectiveness (through a **Community-based Management of Acute Malnutrition (CMAM)** pilot programme, of **VALID's** recent breakthrough **Soya-Maize-Sorghum (SMS) RUTF** recipe. This innovative, and new plant-based RUTF can facilitate the treatment of an additional 1 million children within existing donor budgets. For more detailed information about the product, see our R&D section further below.



Also in 2019, 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, and together with pre-use, qualitative research to develop an appropriate marketing mix and brand, **VALID's** new RUCF product “**GrowStrong**” will be trialed in due course from the new factory. It will then enter a small scale retail market which, in turn, will then guide a much larger scale test-market. 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 as we move forward in Malawi and surrounding regions. This work is focused on addressing the process used to reach children affected by Chronic Malnutrition. These are first steps in a progressive programme designed to start the process of unlocking this potentially massive market, and bringing autonomy and food choices to individuals affected by malnutrition.



## India

The goal of the **VALID/Amul** collaboration which was supported by the UK's **Department for International Development (DFID)** 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 quality 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.



# Research and Development

## Soy Maize Sorghum RUTF

In 2018 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. Only 23% 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 plant-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*.

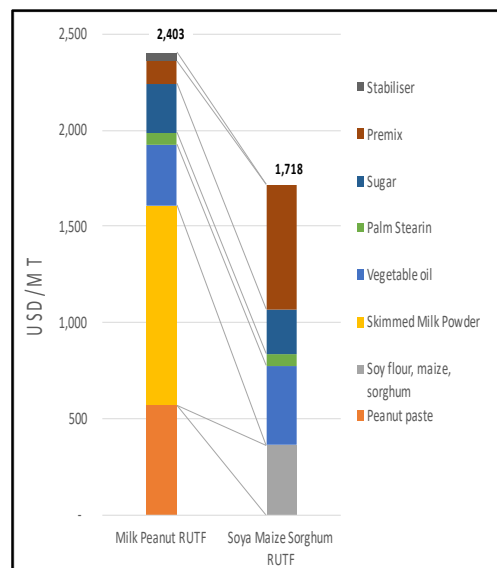
The outcome represents a major breakthrough. **For the first time since RUTF was developed, we have a lower cost, plant-based product that is as efficacious as the sole standard recipe.** Containing locally sourced ingredients (96%) and with demonstrated superiority in treating anaemia, and in the replenishment 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 this new plant-based 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.

### **Fifth Annual Conference of the Irish Forum for International Agricultural Development (IFIAD), at Headquarters of the Department of Foreign Affairs and Trade, Iveagh House, Dublin.**



*"When it comes to malnutrition, and for too long now, governments and NGOs have too often operated in a well-meaning but misguided, risk averse and supply only focused echo chamber. We need to regard the people we are targeting as legitimate customers and provide solutions that they as consumers want. That means moving way beyond supply and CSR driven thinking to more demand and market driven initiatives. Yes, there will be some risk involved, but there will also be much higher social reward and return..."*

**Paul G.J. Murphy, Chief Executive – Valid Nutrition – at the 2019 Annual IFIAD Conference**

In October 2019, Valid's Chief Executive – Paul Murphy – spoke candidly about tackling barriers to private sector engagement in the manufacture and distribution of foods to address malnutrition. With over 27 years' experience in the FMCG industry (Mr Murphy is a Former Chief Executive of Unilever Ireland), and with over a decade of work dedicated to re-shaping humanitarian markets for ready-to-use food products, Mr Murphy delivered a considered and thought-provoking presentation - challenging the ideological barriers to private sector engagement in scaling nutrition solutions (including increased innovation and choices for "poor" consumers), via genuine public sector support for private sector engagement - well beyond that of CSR projects. Mr Murphy discussed the huge social and economic costs of malnutrition and offered some potential solutions that "will *encourage and not discourage*" private industry from entering these markets and to help generate effective, appealing and affordable nutritional solutions - at scale.

*The Irish Forum for International Agricultural Development (IFIAD) was established in 2016 as a voluntary, multi-disciplinary platform to share knowledge and good practices, capitalising on Ireland's excellence in the agri-food sector for the benefit of development programming and policy, in support of Ireland's development objectives.*

## 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 and 2019 the development of enhanced prototypes of product was undertaken which included a **Product Trial** in Malawi. A follow-up, small scale test market will follow construction of the new Factory in Malawi and to test customers and retailers response to our product in a commercial scenario.



**A pictorial account of the physical effects of "stunting".**

(This is not a photograph of an older and younger sibling. These boys are classmates that were born on the same day).

## 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 2019, our most recent Financial Year.

Summary Actual Figures	Year Ended 31 March 2019
Total Incoming Resources	€242,051
Total Resources Expended	€339,486
Surplus/ (Deficit) on Ordinary Activities	(€97,435)

Incoming resources, which consist of income from grants, voluntary income, revenue from consultancy services and royalties, has reduced 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 preparations outlined earlier above for the new factory relocation and build in Malawi); however we are still showing that tangible steps are being taken towards financial self-sustainability. Consequently, and temporarily, VALID Nutrition has had to radically reduce resource and cut back on business development. The effect on income and expenditure lines has resulted in a temporary deficit on operating activities for this year. Separately, manufacturing operations in VALID Nutrition Malawi have also reported a significant decrease on income for the same period in the prior year (and for the 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, plant-based Ready-to-Use Therapeutic Food product that 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 plant-based 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 and future partnerships 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 149 million children annually.

## VALID Nutrition - 2019 in brief:

- VALID Nutrition Malawi has produced 48 million sachets of ready-to-use therapeutic food to date.
- 48 million sachets of ready-to-use therapeutic food products, equates to the **treatment of almost 355,000 local children** with Severe Acute Malnutrition.
- VALID Nutrition Malawi has secured funding to build a new state-of-the-art manufacturing facility in 2020. This Project will help to lower production costs and to expand and diversify product output capacity to meet local and regional demand.
- VALID continues to actively pursue formal approval of their **lower cost, plant-based, ready-to-use product**. A WHO review is currently underway 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.
- VALID Nutrition Malawi has capacity to supply RUTF, RUSF and RUCF products.