

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



Amino-acid enhanced, plant-based formula.

Lower cost and adaptable to alternate product formulations.

ANNUAL REVIEW OF 2020

"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

Introduction and Governance Structure

Welcome to VALID Nutrition's Annual Review 2020. 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 2020, 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 of the seven Irish Members (Trustees), four of whom form the Board of Directors, actively 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 widely published and 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 (IRE & UK): Grant Thornton, 13-18 City Quay, Dublin 2; Azets, 5-7 Beatrice St, Oswestry, Shropshire SY11 1QE.
- 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 Numbers (IRE, UK, USA): 20065737, 1141922, 990366981.
- No. of Employees: 4.
- Turnover: €43,321 (for year ending 31st March 2020, our financial year).
 Note: The above figure (temporarily) excludes turnover from our foods manufacturing partnership in Malawi.

Ending Malnutrition

The hugely damaging impact of Covid-19 further highlights the extent of meaningful public-private partnerships that are required if we are to really embrace and achieve the opportunity of ending malnutrition in our life-times. This prospect has never been more achievable and yet **ACUTE Malnutrition** continues to affect 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 and de-facto "customers" (by providing them with affordable nutritional choices) rather than as 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 longer-term, 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 - Market Operations

Malawi

In September 2019, and in preparation for a move from our modest (converted warehouse) premises, and to facilitate the build of a new state-of-the-art facility in collaboration with 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). Whilst project commencement was formally postponed in June 2020 following some administrative delays which were then compounded by the onset of Covid-19; this exciting relocation and expansion project is hopefully going to be relaunched by mid-2021 and is 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 up until decommissioning, had 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 had and will continue to have, a hugely **beneficial multiplier effect** on the local economy.

In addition to the construction of a new purpose-built manufacturing facility locally, VALID Nutrition Malawi will continue to act as a progressive and innovative research and development hub supporting VALID's broader objectives, which up to (temporary) decommissioning have included activities in collaboration with World Vision Malawi and that were 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.

In 2020, and as part of a major research project to include a Test Market, further groundwork to support 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) continues. 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.





Research and Development

Plant-based (Soya, Maize, Sorghum) RUTF breakthrough

In 2019 globally, 16.6 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. Even before the impact of Covid-19, only 23% of SAM cases globally were 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.

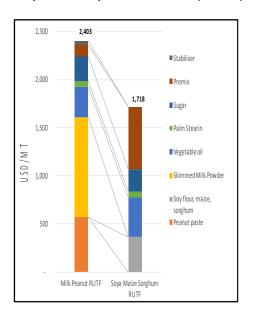
VALID Nutrition has undertaken more than a decade of research to develop an effective, locally sourced, non-milk based recipe. During this period, it has completed three clinical (efficacy) trials involving an innovative Soya, Maize and Sorghum (SMS) based RUTF recipe. In research partnership with Ajinomoto 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 prestigious 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.
- 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 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.
- 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.
- 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.

Recipe Cost Comparison - Estimate (Malawi)







- Contains 10% less sugar than the original standard RUTF recipe.
- Overcomes lactose intolerance and nut allergy in children.

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 and will allow African based manufacturers to be much more competitive. Once the current (and non-evidence based) block on plant-based formulations is removed by the **World Health Organisation**, 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. Indeed, it is extraordinary given that even before COVID-19 had emerged, and when less than 20% of children needing treatment for SAM were being reached, that the WHO has yet to remove what are arbitrary barriers to the full benefits of a significantly lower cost, plant-based recipe — a recipe that is environmentally more friendly and safer and easier to manufacture in developing countries from locally available ingredients. VALID's understanding and indeed our experience in Malawi, is that the UN appreciates and values local manufacturing due to the developmental, economic, environmental and supply chain advantages, all of which have intensified relevance in a post Covid-19 landscape and where resilience is more important now than ever.

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 including Twitter, LinkedIn and Facebook.

USAID (virtual) Summit - The Future of Food Assistance for Nutrition (5th - 8th October 2020)

The highlight from what were numerous virtual meetings imposed by Covid-19 in 2020, came about on 8th October when VALID's founder Dr Steve Collins, MBE gave a very eloquent but challenging presentation at the "The Future of Food Assistance for Nutrition: Evidence Summit II" organized by USAID. Steve took part in the session titled: "What do we still need to know" and addressed the specific issue of "barriers to innovation". This is a topic close to Steve's heart because since the adoption in 2007 of the proven model of care that he pioneered with support from Concern Worldwide - Communitybased Management of Acute Malnutrition (CMAM) - there has practically been no RUTF product innovation and we are still only reaching around 10% of children who need treatment. Steve believes that these two facts are linked and stated that whilst the "rhetoric" coming from the nutrition sector in support of public/private partnership is strong; "the reality is that we have a dysfunctional nutrition sector with multiple barriers blocking innovation, competition and meaningful private sector engagement. At the same time, we are taking little practical action to help address climate change, to improve land utilisation or to integrate treatment into prevention."

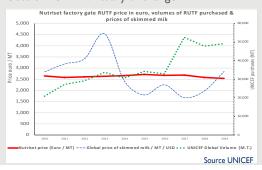


To illustrate his fears, he used the case of Ready-to-Use Foods (RUFs) and the treatment of Severe Acute Malnutrition (SAM) as an example. Steve's aim was to stimulate thought, not just about the need for individual scientific data on food aid products, but more generally about how that data is used and operationalised, and how the sector deals with collaboration, the private sector, innovation, increasing resilience and mitigating climate change – and specifically the barriers that we have (inadvertently) in place preventing these. He used the following image to illustrate where we have got to with the roll out of CMAM and access to Ready-to-Use Therapeutic Food (RUTF), versus the progress made on rolling out Pentavalent vaccines over a similar time period.

The Treatment of SAM

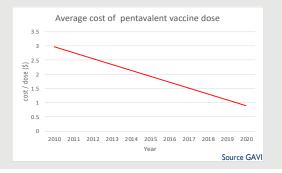
The Future of Food Assistance for Nutrition: Evidence Summit II

- · Medicalised Supply Driven Approach
 - Coverage for < 1% in 2000 to ~10% in 2019
 - Cost major barrier to increasing coverage & RUTF is 50% of total costs
- Supply of RUTF
 - · Dysfunctional market
 - · No real product choice
 - Original supplier with franchise network retaining ~70% market share
 - · Cost of RUTF virtually unchanged



GAVI & Pentavalent Vaccines

- Business Orientated, Demand Driven Approach
 - Coverage from 1% in 2005 to 81% in 2018
- · Supply of Pentavalent
 - Highly competitive market
 - Choice of multiple large competitive suppliers
 - · Original manufacturer now left market
 - Cost reduced by 75%



Steve was not suggesting that the two scenarios are directly analogous – instead he was highlighting that the past 15 years of efforts to really scale CMAM have been a failure - and that we need to question our supply side, medical approach to SAM and to look carefully at other models of how we can go about this. He also looked specifically at the development of VALID's new lower cost, plant based RUTF.

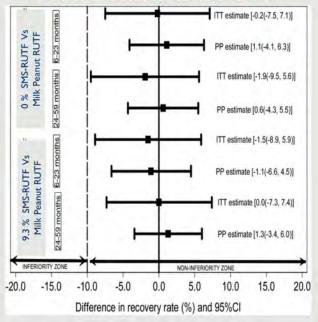
[Note: The plant-based recipe was created by VALID Nutrition - the public charity that Dr Collins founded in 2008 and of which he is a Trustee and long-term volunteer - and forms a core part of VALID's strategy to decrease the cost of treatment of Acute Malnutrition and to link treatment to prevention by strengthening local food value chains.]

Using the example of the **WHO Guideline Development Review of non-milk RUTF** in July 2020, Steve highlighted many of the barriers that the sector is unnecessarily putting in the way of innovation, private sector engagement, integrating treatment with food systems and lowering the carbon footprint of our activities. His point (as illustrated in the graphs below) was that all products have advantages and disadvantages – at present the bar for any new RUTF product to be accepted appears to be that it has to be superior on ALL criteria. Steve stressed that in focusing on the rate of weight gain whilst ignoring cost benefits and the superior treatment of anaemia and iron deficiency, the sole and exclusive pursuit of the "perfect" product only serves to block innovation and progress.

Whilst he acknowledged that "we have an important obligation to make sure that products are safe and effective and a high quality RCT is an important tool to check this", he highlighted that "we also have an obligation to treat more than 10% of those that require treatment and increasing product choice and competition in the RUTF market is a clear way to achieve this".

Arbitrary barriers to innovation and progress – Example One:

Recovery Rates with Amino Acid Enriched SMS-RUTF



The Future of Food Assistance for Nutrition: Evidence Summit II

The Barrier

- The background review for the WHO RUTF Guideline Development Group meeting used a meta analysis that pooled dissimilar recipes:
 - 3 out of the 6 studies included were Valid Nutrition studies as part of the 15 year development process of SMS-RUTF
 - 2 of these had been rejected by Valid Nutrition because they did not meet efficacy criteria
- Pooling data from different recipes, some of which we know don't work, in a meta study, can only come to one conclusion.

Source: Am | Clin Nutr. 2017 Oct; 106(4):1100-1112

Example Two:

Treatment of Body Iron Stores & Anaemia by the Amino Acid Enriched SMS-RUTF

Body Iron Store (BIS)		n	Admission BIS	n	Discharge BIS	Difference	p-value ¹
Levels			mean (SD)		mean (SD)	∆ (95%Cl)	
	0%_SMS-RUTF	115	1.9 (4.3)	64	3.9 (2.7)	2.0 (1.0;3.1)	<0.001
All patients	9.3%_SMS-RUTF	92	2.0 (4.1)	46	3.1 (3.3)	1.1 (-0.2;2.4)	0.093
	25%_ PM-RUTF	136	2.0 (4.3)	84	2.0 (3.4)	0.0 (-1.0;1.1)	0.962
	p-value ²		0.972		0.001	0.011	

The three arm trial clearly showed that the restoration of body iron stores and treatment of anaemia were superior in the milk free product and inversely related to milk content not iron content.

Iron deficiency is present in the majority of cases of SAM.

Anaemic	25%_PM-RUTF p-value ²	72	9.0 (1.4)	45	11.2 (1.2)	2.2 (1.7; 2.7)	<0.001
	9.3%_SMS-RUTF	59	9.1 (1.4)	40	11.4 (1.5)	2.3 (1.8; 2.9)	<0.001
	0%_SMS-RUTF	58	9.1 (1.3)	38	12.1 (1.1)	2.9 (2.4; 3.4)	<0.001

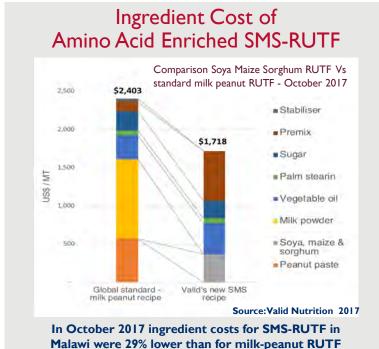
Source: BMC Public Health. 2019 Jun 24;19(1):806.

The Future of Food Assistance for Nutrition: Evidence Summit II

The Barrier

- The WHO RUTF Guideline
 Development Group meeting
 approached the rate of weight
 gain as a primary outcome
 indicator
 - the rate of weight gain is slightly lower in the SMS-RUTF equivalent to an 8% increase in length of stay.
- The rate of weight gain is a proxy outcome indicator affected by many other factors and has always been a secondary SPHERE indicator.

Example Three:



The Future of Food Assistance for Nutrition: Evidence Summit II

The Barrier

- The WHO RUTF Guideline
 Development Group did not
 commission the cost effectiveness
 background review paper (1/3 of the
 scope of the review)
 - Relied on UNICEF historical commercial cost data showing decreases in cost < 5%
- UNICEF itself admits this data is not a cost effectiveness analysis
 - In the absence of a cost effectiveness analysis the UNICEF data is being taken as precisely that
 - UNICEF's data is primarily historic prices from country of manufacture - does not cover true cost of supply to programmatic

In his closing, and looking back to the GAVI example – Steve outlined that critical to its success were demand side measures to encourage business to get involved and to de-risk that involvement through long-term, high-volume and predictable demand from those countries. He said that this is not the case in the RUF sector – and despite all the rhetoric suggesting otherwise, that full engagement (not just financial backing/donations) of large companies is actively discouraged, and so we are again left with the same small group of actors and a dysfunctional market - and most shamefully, millions of children continue to go untreated. Steve and VALID are determined to continue to challenge these shortcomings and to help change the situation so that the Nutrition sector acts, first and foremost, in the best interests of its clients, the malnourished of the world - rather than preserving a convenient but inefficient status quo that suits those who control this sector. To learn more about this event please visit (https://t.co/keW97vGWxq).

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.

The future of pro-biotics in tackling malnutrition

In the latter quarter of 2020 VALID has re-engaged with leading experts and scientists at **University College Cork** and **Teagasc** (Ireland's research, advisory and education agency on agriculture, horticulture, food and rural development) on the potential of a new pro-biotic, plant-based product and building on the learnings from research conducted by VALID over the past decade. With the impact of COVID-19 on malnutrition, we believe this prospect remains pertinent and is even more relevant than ever.

The project will build on the early pioneering work that VALID has previously undertaken on the application of probiotics and prebiotics in the treatment of severe acute malnutrition in Malawi in 2009 [Ref: Kerac, M. et al (2009), *Probiotic and prebiotic enhanced Ready-to-Use Therapeutic Food (RUTF) in the treatment of Severe Acute Malnutrition (SAM) in Malawi: a double blind randomized controlled efficacy trial.* The Lancet (374)]. We are also engaged with the Kennedy Institute of Rheumatology in Oxford to examine the role of pre and probiotics in RUTF.

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.

NUTRITION 4 GROWTH (N4G)

In the lead-up to the N4G Summit in Tokyo (now postponed to December 2021) and by way of continuing to inform global leaders about programs and practices that are proving successful in the fight to end all forms of malnutrition, the process of spotlighting commitment progress on their website and via social media has commenced. According to the global pledging movement, for every \$1 invested in nutrition, \$16 is returned to the local economy. As detailed earlier and following 15 years of R&D, the VALID charity has developed a plant-based, lower cost, ready-to-use therapeutic food (RUTF) recipe that when barriers for use are removed by the WHO, will allow choice and provide local manufacturers in Africa with a competitive advantage versus those supplying product from offshore. In addition to the direct benefits to local agriculture and supply chains, this is a hugely positive forward step for local children suffering from the adverse effects of malnutrition. Local solutions save lives and grow stronger economies and communities. See N4G's assessment and endorsement of VALID's commitment here:

https://globalnutritionreport.org/resources/nutrition-growth-commitment-tracking/valid-nutrition/

Funding and Finance

Incoming resources which consist of income from grants, voluntary income, revenue from consultancy services and royalties, have been temporarily interrupted and thus reduced. The transitory absence of earned royalty income due to the preparations (outlined above) for the new factory relocation and build in Malawi was extended initially by Project delays incurred in early 2020, and then compounded and further extended by the impact of Covid-19 from March 2020 onwards. Despite the unprecedented circumstances, the potential from the new factory build remains and coupled with our new product IP, is still demonstrating 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 an ongoing but temporary deficit on operating activities. Understandably and for the same reasons as there is no royalty income this year, manufacturing operations in VALID Nutrition Malawi have also reported a significant decrease on income for the same period.

Whilst Covid-19 has been untimely and considerably disruptive to our overall strategic and business objectives, VALID Nutrition continues to strive towards and is poised for 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 exciting projects underway and/or in the immediate pipeline. However, it will take some time before the full benefits of our significant achievements 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.

Our day-to-day activities are strongly supported by a distinguished group of Directors from both the public and private sectors, and we benefit directly and hugely on a pro-bono basis from their time and inputs. Our lean structure is deliberate and designed to reduce costs and enabling smarter, progressive and more efficient work methods. A full set of our audited Financial Statements is available to the public upon request to: office@validnutrition.org

Looking Ahead

Following 15 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 the struggle to remove the (non-evidence-based) barriers that are blocking the use of plant-based products 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, 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 2021. This Project will help to lower production costs and to expand and diversify product output capacity to meet local and regional demand.
- ► VALID is actively pursuing formal approval of their lower cost, plant-based, ready-to-use product. When the (arbitrary) barriers to plant-based alternatives are removed by the WHO, 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.
- VALID continues to engage with operational research to develop and test additional products to tackle various forms of malnutrition, including chronic malnutrition.
- > VALID Nutrition Malawi will resume capacity to supply RUTF, RUSF and RUCF products in 2021.