

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 and industry locally."

Dr. Steve Collins, Founder & Director

ANNUAL REVIEW OF 2016

Introduction and Governance Structure

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 2016, including a brief 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 including a special dispensation from the Irish Revenue Authorities allowing it to trade.

Seven 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) and Dr. Hans-Jürgen Koch, (former CEO of Deutsche Bank (Suisse) SA). The Company Secretary is Derek Staveley, formerly Finance Director of Unilever Ireland. VALID Nutrition's small management team report to the Board through the 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: Bantry, Co. Cork, Ireland "virtual office".
- No. of Employees: 7.
- Turnover: €1,202,877 (for year ending 31st March 2016, our financial year).

Note: The above figure excludes turnover from our manufacturing partnership in Malawi.

Ending Malnutrition

Despite the extensive humanitarian efforts made over the last 40 years, **ACUTE Malnutrition (starvation)** affects over 50 million children today 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 or "stunting" is caused by a prolonged diet deficient in key essential nutrients and affects 159 million children in developing countries. This means that 159 million children are denied the opportunity to ever reach their full 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 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 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 <u>the</u> 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

VALID Nutrition Malawi, in collaboration with our business partner Exagris Africa (EAA), has produced over 8.5 million sachets of Ready-to-Use Therapeutic Food (RUTF) in 2016, sufficient to treat almost 63,000 children with Severe Acute Malnutrition (SAM). This represents an almost threefold increase in output compared with 2015. Whilst great news in terms of the achievements of the local manufacturing staff in Malawi to meet this increased demand, the situation also reflects the continuing and very serious drought conditions experienced in South East Africa in recent years.

Cumulatively since establishment, the Malawi factory has produced about 40 million sachets of RUTF. This amount has been sufficient to treat approximately 296,000 children with severe acute malnutrition.

By producing locally in Malawi and with the support of customers such as UNICEF and the Clinton Foundation (CHAI), we are preventing the need for any RUTF to be imported from Europe or the USA. 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.

40 000 35,000 30,000 Ä 25,000 20,000 15,000 10,000 5,000

2011

2012

2013

2014

Figure 2 UNICEF RUTF Procurement by Production Region of Origin 2007-2016

Source: UNICEF Supply Division

A frica

Our effort here is vital because the percentage of RUTF globally that is purchased from "offshore" as opposed to within developing countries and regions is still very high.

In November 2016, VALID Nutrition Malawi formally launched our new line of Ready-to-Use Complementary Food (RUCF) in Lilongwe. Ready-to-Use Complementary Foods are designed to prevent chronic malnutrition which affects 43% of children in Malawi and on average over 40% of all children in Sub Saharan Africa. USAID's South African Trade Hub (SATH) generously provided the Grant that enabled the purchase of a specialist pack-filling machine for the new product. We also intend to commence pilot production of an upgraded/new specification Ready-to-Use Complementary Food in association with the World Food Programme in Malawi. Additionally, and with support from Irish Aid and the Department of Agriculture (through their Africa Agri-Food Development Fund- AADF), we have commenced a consumer research study as part of a major research project including a Test Market, using Ready-to-Use Complementary Foods in Malawi. This will focus on addressing the process used to reach children affected by Chronic Malnutrition. This is the first step 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.

To sustain the significant achievements during 2016, VALID Nutrition Malawi is actively seeking grant funding in addition to borrowings already secured, to support the requirement for a move to a larger, purpose built, state-of-the-art factory facility during 2017.



India

With funding support from the UK's Department for International Development (DFID), VALID Nutrition is also now producing RUTF in India in an exciting manufacturing collaboration with Amul Dairy in Gujarat. The goal of the VALID/Amul/DFID collaboration is to stimulate and shape the global market, introducing real competition to the established and dominant European and US based players. The Amul factory is certified by UNICEF and is providing a top class RUTF 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.

Kenya, Ethiopia and Nigeria

These three countries are of particular interest to VALID Nutrition in terms of establishing suitable collaborations that will help shift the global market to Africa (i.e. away from Europe & USA) as well as promoting local economic growth. Discussions are ongoing but all details are confidential at the moment. We will provide further information when available.

Research and Development

Soy Maize Sorghum RUTF

In March the American Journal of Clinical Nutrition published our Paper on the clinical trial on our new innovative RUTF recipe undertaken in the DRC in 2014. This trial demonstrated (for the first time) an efficacy equivalent to the established milk-peanut based RUTF formula in children suffering from SAM, over two years of age. Unfortunately, in the younger group (under two years), the recovery rate was slightly slower with the SMS RUTF.

We have since used innovative techniques to optimise the formulation and have just completed a further major Cilnical Trial, this time in Malawi. This latest recipe development has been undertaken in collaboration with **Ajinomoto Co. Inc.**, together with support from the **Japanese International Cooperation Agency (JICA)** and the **Global Innovation Fund**. A formal Paper is currently being prepared for publication and release by mid-2017.

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 for 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.





Smallholder Farmer Project

In last year's annual review we reported on the Results of a pioneering study funded primarily by Irish Aid - the Smallholder Farmer Project. The Project was a four year livelihood analysis study which commenced in 2010 and looked at smallholder farmers' experiences with groundnut production for commercial markets. Our objective was that, through partners and value chain stakeholders, we could support farmers to produce commercial grade groundnuts for use in RUTF, thus creating a reliable source of high quality local groundnuts. The Results (http://www.validnutrition.org/latest-news/smallholder-farmers-project-research-papers/) suggested 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.

Building on this work, research commenced in the last quarter of 2016 by way of further iteration of the household surveys undertaken since 2010, but now being in the position to provide a better indication of the medium-term effects and impacts of the value-chain interventions on the lives and livelihoods of involved smallholders, as this work is being conducted after four years of implementation. This latest research examines the many attributes and aspects of smallholder lives, from an examination of their assets through consumption patterns and dietary diversity, to issues around morbidity. It will gather detailed information on agri-production cycles, from preparation and planting through to harvest and subsequent sales and consumption. This allows for in-depth analysis of smallholder lives and livelihoods, allowing for determination of changes in wealth status, in nutritional intake, in dietary diversity or in areas like cropping patterns and practices. This work is then supplemented by focus groups with stakeholders, a scan of current practices to determine if any recommendations from the research have been accepted and implemented, and a scan of the current macro environment. The research will follow preestablished analysis methods, allowing for comparison with previous years, and will be supported by two experienced academics who have project-led the original research. Results from this work will be available in the first half of 2017.

Research Funding

We are seeking funding for a number of innovative initiatives, including for a pro-biotic product trial and for our Ready-to-Use Supplementary Food (RUSF) recipes. Funding in this area will allow us to undertake clinical trials in order to start commercialising.

Communications

In addition to reviewing our website, regular updates and relevant items are shared frequently on our social media platforms of Twitter, LinkedIn and Facebook.

Ready-to-Use Complementary Food Launch in Malawi



As mentioned earlier, this new product line was formally launched in Lilongwe on Friday, 18th November 2016 by the Honourable Dr Peter Kumpalume, MP and Minister for Health in Malawi. The product is approved by the Malawi Bureau of Standards and conforms fully to UNICEF specifications and standards. Further information is available on our website (http://www.validnutrition.org/wp-content/uploads/2016/06/646 RUCF-Product-Factsheet WebReady.pdf) and we look forward to extending the access of effective, appealing and affordable nutrition to consumers in Malawi and beyond.

Forbes.com

In June 2016, Fiona Koch from the Global Social Innovators Network - **Ashoka** published an interesting article on **Forbes.com** in relation to an interview conducted with our Founder, Dr. Steve Collins - and this is available to access as follows: (http://www.forbes.com/sites/ashoka/2016/06/10/disrupting-charity-how-social-business-can-eradicate-starvation/#434e026e3d46). Steve was awarded an Ashoka Fellowship in 2010 for his work in developing the Community-based Management of Acute Malnutrition (CMAM) model of care which has transformed how starvation is treated in over 60 countries worldwide.



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 2016, our most recent Financial Year.

Summary Actual Figures	Year Ending 31 March 2016
Total Incoming Resources	€1,202,877
Total Resources Expended	€1,114,100
Surplus/(Deficit) on Ordinary Activities	€88,777

Incoming resources, which consist of income from grants, voluntary income, revenue from consultancy services and royalties, has reduced by 15% from the prior year. The reduction primarily reflects a reduced dependency on voluntary income (i.e. donations which have reduced by 60%), and further steps taken towards financial self-sustainability.

VALID Nutrition has also reduced outgoing resources by 15% 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 which is in line with the prior 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 869 million KWACHA which is an increase of 35% on the same period in the prior year, and demonstrates the continued growth and strength of our local partnership.

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 we require to enable us to continue to pioneer real change in the way that malnutrition is addressed will remain a challenge.

Looking Ahead

We are confident that our new generation, Ready-to-Use Therapeutic Food has the potential to deliver a better and more cost effective solution to a global problem that kills between 1-2 million children per year. This innovative new product can directly impact and improve upon the ability of local manufacturers to compete and thus reshape a global market worth approximately USD 150 million.

We believe that 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 realistic and autonomous choices that harness their capacity to take control and responsibility for their own malnourished children.

VALID Nutrition is also determined to achieve sufficient funding to unleash 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 159 million children annually.



VALID Nutrition—2016 at a Glance:

- Produced 8.5 million sachets of ready-to-use therapeutic food in 2016—enough to treat almost 63,000 children.
- Invested further in developing a "new generation" Ready-to-Use Therapeutic Food recipe that has the capacity to transform the global market in favour of local producers.
- Has been one of the first local producers to launch a new Ready-to-Use Complementary Food line to tackle Chronic Malnutrition.
- Established local manufacturing collaboration in India to help reshape global supply of Ready-to-Use Foods in favour of developing countries.
- Local production of 40 million sachets of Ready-to-Use Therapeutic Food since establishment.
- Has produced products to treat over 296,000 children with severe acute malnutrition to date.