

A fishy tale:

creating better snacks to support Cambodia's future



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Scaling Up Nutrition Business Network (SBN) Cambodia member Danish Care Foods (DCF) specialises in making fish-based ready-to-use therapeutic and supplementary food products to treat child malnutrition. As the first runner-up in the 2020 Global Scaling Up Nutrition (SUN) Pitch Competition, DCF was awarded USD 10,000 for its innovative 'Nutrix' bar – recognised by the Cambodian government as one of the world's first ready-to-use therapeutic products using local fish species.

Cambodia has one of the worst levels of child stunting (32%) and wasting (9%) in the region, and child undernutrition remains a serious public health concern. In addition, 48% of women of reproductive age are malnourished, and the Government of Cambodia spends USD 250-400 million annually to combat malnutrition in vulnerable groups.

Approximately 2.6% of Cambodian children are diagnosed with severe acute malnutrition. To treat them, ready-to-use therapeutic foods are prescribed – without which many children may need to be hospitalised. However, [research](#) shows there is low up-take of the products currently available within Cambodian health facilities due to their lack of appeal.

To tackle this, Cambodian entrepreneur Lyndon Paul, and Danish investor Christian Philip Unmack, joined forces with the United Nations Children's Fund (UNICEF), the French National Research Institute for Sustainable Development, and Copenhagen University, in collaboration with the Royal Government of Cambodia, to make more appealing products using locally-available nutritious ingredients.

Ingredients such as Siamese mud carp fish, mung, soy beans, and rice are incorporated into DCF's ready-to-use therapeutic and supplementary food products, which include

"Nutrition has become key, especially for children in Cambodia, as a result of the pandemic. We want to help feed the future and give the next generation the best chance to have a nutritious life."

Lyndon Paul, Co-founder,
Danish Care Foods

wafer snacks, snack bars, and fortified powder to help improve nutritional health and wellbeing. The company's Nutrix bar is 20% cheaper than imported peanut and dairy-based therapeutic foods, and has been officially recognised by the Cambodian government – making it the one of the world's first ready-to-use, therapeutic foods using local fish species.

A winning formula

"Malnutrition effects are seen in rural and urban communities alike," says Lyndon, DCF's Managing Director. He explains that the company's products are high in energy and provide the required levels of protein and micronutrients as stipulated by the World Health Organization's [standard](#) for treating moderate acute malnutrition.

As an affordable, snack-like, therapeutic food, the Cambodian government can provide Nutrix through local health facilities to treat severe acute malnutrition in children under the age of five in remote and poor communities. It is estimated between 60,000 to 90,000 children in Cambodia need specialised medical treatment annually, which includes therapeutic food. "Even six-month-old children can hold the product, eat it, and get the benefits," Lyndon emphasises.



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The consumer response has also been overwhelmingly positive: “Our customers are very happy, and there are good results on nutrition and acceptability. Currently, we are serving about 100,000 customers and targeting to reach half a million in the next two years,” enthuses Lyndon.

Since gaining recognition in the Global SUN Pitch Competition in July 2020, DCF reports an increase in orders. “With the current COVID-19 pandemic and the increased awareness about the need for good nutrition, this has really benefited us; particularly as the award was picked up by the local media. Plus, we have had referrals from many other organisations now the SBN has launched here in Cambodia, which has also led to new clients,” Lyndon adds.

According to Lyndon, distribution of DCF’s Nutrix bar has also contributed to a reduction of therapeutic food imports in the last six months. “We have supplied more than 15,000 kg of supplementary products, and still have 40,000 packs [each containing six wafers and weighing 85g] worth of orders on the waiting list. I think that is enough proof of the impact created by our products,” he says.

In addition to increased recognition, the win has also provided DCF with mentoring, training, and a much-welcomed cash prize. The first portion of the money was used to buy a generator for the factory – particularly important as ingredients for the fortified snacks have to be extruded using a machine at high temperatures, which the national grid cannot support. The second tranche of money bought micro-nutrients for testing a new product – a fortified snack to address nutrition deficiency and compete with the unhealthy snacks in the market – and to get a license for selling therapeutic/supplementary products in the free market.

Tackling challenges posed by success

Although positive overall, the government’s recognition of DCF’s products has increased demand so much as to create some challenges in terms of producing adequate supply of the snack bars. As such, Lyndon’s aim is to scale up production so they can also meet requirements from individual customers, who may want to buy only a few packs and purchase other supplements over the counter. “The need

for food supplements and fortified products has dramatically increased with the focus on good nutrition for children, as well as women of reproductive age. This is particularly true for developing countries and is something that really has to be understood by every food manufacturer," states Lyndon.

Despite the company's growth and success, the pandemic has resulted in significant challenges: reduced staff numbers) and delayed imports of raw materials, particularly the edible oils that provide essential energy in DCF's fortified products. To meet the increase in orders, the enterprise has had to reorganise work shifts and operating hours. Still, stresses Lyndon, the company has been fortunate compared to so many during this time.

Transport limitations have also been an issue. The fish is sourced from three communities who have been trained in dried fish production, but movement restrictions have led to limited supplies in 2021. The product's other primary ingredients – rice and mung bean – are not yet sourced directly from farmers and are currently bought from wholesalers.

Visions for the future

To make the product more widely available to those in need, Lyndon aims to supply the product to pharmaceutical companies and hospitals across Cambodia. However, ethical concerns over potential misuse must be overcome before this can be realised. "As producers, we are responsible for what we produce and the effect it has on people. Currently, there is a lack of understanding about taking therapeutic/supplementary products which must be addressed," he says.

His advice to other entrepreneurs echoes this diligent approach. "When it comes to nutrition, you should not gamble. Take your time to understand the consumer and develop a sustainable product that can really make an impact."

Despite the challenges faced during the pandemic, the future is looking bright for DCF – with a rising number of orders and staff returning to work. And, to capitalise on its vision and meet increasing local demand, DCF is seeking further investment to introduce a new fortified snack and open a food-grade, fish-meal production factory.



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