

OBAASIMA

A demand-driven approach to reduce micronutrient malnutrition in Ghana

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Key messages

- > Around two billion people, almost one-third of the global population, receive insufficient micronutrients from the food they eat.
- > Women of reproductive age, including adolescent girls and pregnant and breastfeeding women, have an increased requirement for micronutrients.
- > In Ghana, despite two decades of sustained economic growth and reductions in some forms of malnutrition, progress on minimizing micronutrient deficiencies has been slow.
- > The provision of healthy, nutritious, affordable food can play an important role in starting to address these deficiencies.
- > OBAASIMA is a demand-driven approach that aims to increase and improve the local production of affordable, micronutrient-rich foods while ensuring products have a sound nutrition profile supporting healthy eating principles.

The challenge

Around two billion people, almost one-third of the global population, receive insufficient micronutrients from the food they eat.¹ 'Hidden hunger' or micronutrient malnutrition refers to the insufficient intake of vitamins and minerals, known as micronutrients. Malnutrition weakens the immune system and makes malnourished population groups more vulnerable to infectious diseases.

Women of reproductive age, including adolescent girls and pregnant and breastfeeding women, have an increased require-



ment for micronutrients. Improving the nutritional intake of adolescent, pregnant and lactating women ensures an adequate supply of nutrients during the critical window of the first 1,000 days of a child's life. The first 1,000 days, from conception to a child's second birthday, provide a unique opportunity to provide the essential nutrients for brain development, healthy growth and a strong immune system.² Micronutrient deficiencies negatively impact the health of the mother and the course of her pregnancy.³

In Ghana, despite two decades of sustained economic growth and reductions in some forms of malnutrition, progress on minimizing micronutrient deficiencies has been slow. A recent micronutrient survey conducted by the Ghana Health Service (GHS) revealed deficiencies in key micronutrients including vitamin A, iron and folate, particularly in pregnant women.⁵ While micronutrient deficiencies persist, over 40% of women in Ghana are overweight or obese.⁵

OBAASIMA: An innovative solution

Women in Ghana often suffer from an insufficient intake of vitamins and minerals because of a poor and/or monotonous diet. This increases the risk of retarded fetal growth, birth defects and preterm birth for their children, and also of their own mortality.⁶

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OBAASIMA in the Akan language translates as ‘women in all their beauty, morals and kindness’ and aims to increase and improve the local production of affordable, micronutrient-rich foods while ensuring products have a sound nutrition profile supporting healthy eating principles. The project was developed by Affordable Nutritious Foods for Women (ANF4W) in cooperation with the Ghana Standards Authority (GSA) and the Association of Ghana Industries (AGI). Taking ANF4W to scale resulted in the creation of OBAASIMA, an initiative working across the food chain from supply to demand. It is currently a public-private partnership that includes AGI, GSA, the German Development Cooperation (GIZ), DSM, *Sight and Life*, and the Bill & Melinda Gates Foundation.

OBAASIMA: Core principles

Three key principles are essential to the success and sustainability of OBAASIMA:

1. Provide the opportunity for business-to-business solutions with local food processors

Local food processors, especially small and medium-sized enterprises (SMEs), often have difficulties meeting basic standards of manufacturing practice, food quality and fortification standards. OBAASIMA’s private-sector partners assist local food processors through training, technical advice and business development. This helps local SME food processors to start fortification, enabling them to register their food products and to develop their business. Currently, OBAASIMA supports four companies in Ghana developing supplementary fortified food products targeting women of reproductive age and is working hard to increase the number of food companies engaged.

2. Create demand for nutritious foods

A focused ethnographic study was conducted in Ghana to determine how cultural, social, physical and economic factors influence food consumption patterns and food choices of adolescents and pregnant and breastfeeding women from low-income households in Ghana. Creating a sustained demand for nutrient-dense foods for women in resource-constrained environments has a greater chance of success if the foods fit into the underlying values that inform and guide consumption decisions and choices.

Instead of disseminating knowledge, creating demand for nutritious foods should address the convenience, affordability and aspirational value of nutritious foods. These areas are key to creating demand for OBAASIMA products and form a central role in marketing campaigns.

3. Regulatory environment

Quality standards for voluntarily fortified foods produced by SME food processors are usually lacking. Developing a national standard for voluntarily fortified foods for women of reproductive age has been a key part of the OBAASIMA initiative (www.obaasimaghana.com). A trademark has been developed, the OBAASIMA Seal, regulated by the Ghana Food Standards Authority. This OBAASIMA Seal is assigned to products that adhere to the minimum fortification content as well as nutrition criteria on maximum allowable content of sugar, salt, fat and trans-fat. This trademark helps to inspire healthy food choices by making products easily identifiable and recognizable.

OBAASIMA in action

Companies in Ghana, in partnership with OBAASIMA, have developed ready-to-eat, fortified, processed and packaged foods that are low in sugar, salt and fat. One innovation is the instant Tom Vita,² which only requires the addition of hot water for preparation. Another product currently being developed and earmarked to come on stream will be the first extruded corn-soy blend (CSB)³ to be sold on the market by a local company. The use of extrusion technology, in addition to other treatment, will bring out an instant CSB that requires no cooking before consumption. This is a natural wholesome blended food that is highly nutritious, precooked and affordable for people of all ages.

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“All OBAASIMA products are fortified with 18 vitamins and minerals as part of a specifically designed premix”

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All OBAASIMA products are fortified with 18 vitamins and minerals as part of a specifically designed premix developed with the support of DSM. Codex and WHO/UNICEF guidelines for supplementation during pregnancy have been used as a reference in ensuring appropriate levels of vitamins and minerals.^{6,7} The premix added to each product can be adjusted taking into consideration the production process, while the local food producers conduct various tests to ensure safety and acceptability for the fortified product.

All products carrying the OBAASIMA Seal must adhere to a ‘healthy criteria’ portfolio. This is essential in ensuring that



From left: fortified ready-to-eat milk biscuit; fortified ready-to-eat vegetable sauce; fortified ready-to-eat corn-soy blend

improving micronutrient intake does not result in consuming products with higher fat, salt, or sugar levels – a double-duty action.

Conclusion

As much as fortified foods have been proven to help alleviate micronutrient deficiencies, they are not a panacea. In light of the double burden of malnutrition emerging in low and middle-income countries, projects such as OBAASIMA, and the development of a trademark seal in particular, are encouraging examples that illustrate the possibility of addressing two challenges at once (micronutrient deficiencies and the risk of overweight and obesity). Perhaps most importantly, they are the result of reflecting on an essential nutrition intervention and redesigning it in a way that it is tailored to one of the biggest challenges the world is currently facing.

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