

Improving the Nutritional Status of Women of Reproductive Age

The use of fortified food products in Ghana

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Key messages

- > In Ghana, more than half of women of reproductive age are anemic, and estimates suggest that one in five is vitamin A deficient. Ghanaian women are therefore at risk of micronutrient deficiencies.
- > Affordable Nutritious Foods for Women (ANF4W) is developing a market-based solution to micronutrient malnutrition.
- > This article reports on the ANF4W project in Ghana, which aims to:
 - > Develop and introduce fortified food products that are sold on the Ghanaian market
 - > Promote appropriate consumption of fortified foods in addition to other healthy food options by women of reproductive age.

The challenge

Around two billion people, almost one third of the global population, receive insufficient micronutrients from their daily diet. “Hidden Hunger” refers to the insufficient intake of vitamins and minerals (also known as micronutrients). Women of reproductive age especially, including adolescent girls, pregnant and

breastfeeding women, are more vulnerable to micronutrient deficiency, as they have an increased requirement for micronutrients such as iron, vitamin A, folic acid, calcium, iodine and zinc. In cases of severe iron deficiency that leads to anemia, women are at increased risk of dying during childbirth. Children with micronutrient deficiencies experience poor cognitive development and reduced learning capacity. The deaths of women and the loss of cognitive development in children have a profound and lasting impact on human capital.

In Ghana, more than half of women (57%) of reproductive age are anemic, with the higher prevalence among adolescents of 15–19 years (63%), and pregnant women (70%). Furthermore, the WHO estimates that one in five women in Ghana is vitamin A deficient, and that only 50% of mothers in the postpartum period are reached with vitamin A supplementation. According to the MICS Survey in 2011, approximately 65% of Ghanaian households do not use adequately iodized salt in meal preparation. Taken together, these data suggest that Ghanaian women are at risk of poor micronutrient intakes.

Developing a comprehensive approach to food and nutrition security is therefore one of the key future global challenges, especially as an estimated nine billion people worldwide will have to be fed by 2050.

“The deaths of women and the loss of cognitive development in children have a profound and lasting impact on human capital”



ANF4W is supporting the development of new food products that are fortified with micronutrients tailored to meet the needs of women of childbearing age

The approach of ANF4W in Ghana



Affordable Nutritious Foods for Women (ANF4W) is a development partnership with the private sector that seeks to im-

prove the micronutrient intakes of women of reproductive age, particularly during the critical period of pregnancy and lactation. ANF4W was launched in July 2013 in Bangladesh, Ghana, Kenya and Tanzania, receiving funding from the German Federal Ministry for Economic Cooperation and Development (BMZ) through the developpp.de program and from the Bill & Melinda Gates Foundation.

In Ghana, we have received additional funding through the Children’s Investment Fund Foundation (CIFF). Our private-sector partners are *Sight and Life* on behalf of DSM, and Ajinomoto. We also work with the Association of Ghana Industries. Our local public-sector partners are the National Development Planning Commission, Ghana Health Service, Food and Drugs Authority, and Ghana Standards Authority.

ANF4W is developing a market-based solution to micronutrient malnutrition. At the beginning of the project, a set of five comprehensive assessments was undertaken to help understand the supply and demand factors that would influence product concepts and the selection of local food companies. Our assessments led us to select four product concepts: instant porridge, spicy shito sauce, soy beverage, and biscuits. We are working with four local food processors that either already have unfortified versions of their products on the market or else have the capacity to develop a new, fortified product line. ANF4W has supported their business case development, premix formulation, and the modifications to their production processes necessary to facilitate fortification.

“ANF4W is developing a market-based solution to micronutrient malnutrition”

The new food products are fortified with micronutrients tailored to meet the needs of women of childbearing age. The micronutrient premix formula includes 18 vitamins and minerals, at varying levels. The food products themselves were selected because they contain sufficient amounts of protein, which is required especially by adolescents, pregnant, and breastfeeding women. We have also placed upper limits on trans-fat, salt, sugar and total calories, in accordance with international guidelines.

In order for the consumer to distinguish between a fortified and a non-fortified product, we have supported the development of a seal to certify that the products meet voluntary fortification standards and other nutrition criteria (protein, calories, trans-fat, sugar, salt). All of these criteria must be met for a product to bear the seal. All four products will display this seal on the front of the package, as a trusted symbol of fortified foods for women. Under the chair of the National Development and Planning Commission (NDPC), government authorities have agreed on the ownership and criteria for a quality seal that certifies the products as ‘healthy’ and ‘fortified’.

“A seal certifies that the products meet voluntary fortification standards and other nutrition criteria”

A *seal promotion campaign* is currently being prepared to encourage women to choose fortified products. This mass-media campaign draws on the ethnographic assessment conducted at the start of the project, where women expressed a tension between eating food tailored just for them and eating from the family pot. A *branded marketing campaign* is also being prepared with the aim of creating demand for the new products, with market launch planned for February 2017 in two regions in Ghana – Brong Ahafo and Northern Region.

Local food processor

ANF4W supports the following four local food processors to develop fortified food products for women:

Soy drink

Healthilife Beverages Ltd. is the most modern Tetra Pak manufacturing plant in sub-Saharan Africa, and also one of the largest, with state-of-the art machinery to guarantee food quality and safety. The company is based in Accra, where it manufactures and distributes its beverage products.

Milk shortcake biscuit

Mass Industries Ltd. produces a wide array of biscuits products to target the middle- and lower-income segments of the market. Thanks to its parent company ‘Forewin Ghana Ltd.’ (a well-known Ghanaian distribution company), Mass Industries has a wide distribution network throughout the country, as well as in other countries in the West African sub-region.

Shito sauce

Samba Foods Ltd. is a wholly Ghanaian-owned indigenous food processing and preservation business based in Tema, specializ-



A young mother with her baby: Women of reproductive age, especially pregnant and breastfeeding women, are highly vulnerable to micronutrient deficiency.

ing in the condiments and seasoning market. The company was the first to commercialize the production and distribution of the local traditional pepper sauce known as *shito*.

Instant porridge

Yedent Agro Group of Companies Ltd. is a food processing company located in Sunyani. Yedent’s product portfolio seeks to offer solutions that address malnutrition. Yedent produces a range of cereal-based products for children and adults containing protein, amino acids, vitamins, and minerals. Yedent sells its products in markets in Ghana and Nigeria. This would be the first instant porridge available on the Ghanaian market.

For further information, please visit:

www.sightandlife.org/library

“My dream has always been to support the fight against micronutrient deficiencies in women and children in Ghana. This partnership is a chance for my business to make my dream come true.”

Ms Leticia Osafo-Addo, CEO Samba Foods

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