



## **STAKEHOLDERS CONSULTATION ON FOOD FORTIFICATION**

**WEDNESDAY, 6TH MAY 2015: MUMBAI**

### **PROCEEDINGS**

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## Stakeholders Consultation Session on Food Fortification

**1100 hrs. : Wednesday, 6<sup>th</sup> May 2015: Mumbai**

### A. WELCOME ADDRESS

**Dr. K. N. Shashikanth**, Senior Consultant (Food Safety & Quality), Confederation of Indian Industry, welcomed all the participants and the eminent speakers at the session on Food Fortification.

**Mr. S Chandrasekhar**, Past Chairman CII Karnataka & MD - Bhoruka Power Corporation Ltd., appreciated the joint effort of CII and GAIN towards Edible Oil Fortification.

### INCREASE DEMAND OF FOOD FORTIFICATION IN INDIA

- Today, health and nutrition, occupies the centre stage in consumer mind with the key preferences in the areas of digestive health, cardiovascular health, low sugar and natural products which is reflected in the increased usage of micronutrients and supplements like vitamins, probiotics, omega-3 / omega-6 fatty acid etc.
- The business strategy of food manufacturers in terms of innovation and product development are changing with the increasing shift in consumer preferences towards healthier diet.
- Fortification is not new to India, efforts had been made in the past to fortify food products with vitamins to curtail malnutrition. Vansapati and salt are some products being fortified from ages
- Food fortification continues to gain momentum in terms of acceptance in India. Rapidly changing lifestyles leading to increasing consumption of processed foods has been a major driver of fortification.

## INITIATIVES IN FIELD OF FORTIFICATION

- Most of the leading players have started fortification of their product range like ITC in atta,; Cargill India has been fortifying oils with micronutrients. Ruchi Soya has started their range of fortified oil brands.
- Many projects have been initiated to distribution of fortified flour, oil, salt, and condiments through the Mid-Day Meal Programme to children in parts of Gujarat, Andhra Pradesh, Bihar, and West Bengal; fortified wheat through the Targeted Public Distribution System (TPDS) to low-income households; “nutri-candies”, fortified with vitamin A, iron, and other nutrients, through Anganwadi centers to children and pregnant and lactating women; a fortified powder called Vita Shakti that is added to rice and lentils; and a powder called Anuka for weaned infants.

## CHALLENGES OF PROMOTING FOOD FORTIFICATION IN INDIA

- Generating consumer demand for fortified foods via advertisement, re-branding and training is the need of the hour.
- Severely malnourished segments at the base of the pyramid (BoP) still have little to no ability to afford or access fortified products
- To create community awareness about benefits of food fortification in a highly competitive and price sensitive market
- India faces special challenges because of its size: programs that work in one state may not work in states with a different culture and regional foods. Thus, despite the many pilots and other promising studies, vitamin A-fortified foods are not routinely consumed in most of India.

## NATIONAL ALLIANCE FOR EDIBLE OIL FORTIFICATION (NAOF)

- The Confederation of Indian Industry (CII) with support from Global Alliance for Improving Nutrition (GAIN) has launched an initiative on National Edible Oil Fortification. The project aims at building consensus

around fortification as an Industry-led initiative and making industry a stakeholder in India's fight against malnutrition.

- A **National Alliance for Edible Oil Fortification (NAOF)** has been constituted to bring the Indian Edible oil industry under a common umbrella to build consensus around voluntary fortification, with the broader objective of meeting the nutrition requirements of the Indian population.
- This Alliance adapted a three pronged approach
  - Work with consumer organizations to create awareness and demand for fortified edible oil
  - Work with the state governments to promote voluntary fortification as a cost-effective strategy for delivering needed micro-nutrients to populations and share best practices among states;
  - Encourage an enabling environment for the industry to market fortified products, as a value added product.

## INITIATIVES TAKEN UNDER THE NAOF

- Media Campaigns with NDTV called "Sawasth Bharat Sashakt Bharat" has been initiated with NDTV to create awareness and ascertain partnerships in driving fortification in India. The campaign comprises of -Documentary featuring fortification as a vehicle to curtail malnutrition and its benefit to society at large, include global perspective and substantiated with Indian case studies of MP and Rajasthan.
- CII partnered with Consumer organization VOICE to sensitize consumer across India, as the part of the efforts.
- State Level Interactions were organized with stakeholders including industry, academia, consumers etc. in Mumbai, Lucknow and Delhi to sensitize stakeholder on Fortification and to engage with State Government's in a Private Public Partnership (PPP) Mode.

## **B. ADDRESS NATIONAL PROJECT ON EDIBLE OIL FORTIFICATION & INDUSTRY PERSPECTIVE ON FORTIFICATION**

**Mr. Siraj Chaudhry**, Chairman, National Alliance on Edible Oil Fortification and Cargill India Pvt. Ltd. shared the success story of the Cargill India and its efforts to fortify edible oil. This initiative started in 2007 with the consumer surveys over a small sector of population and then in 2008, the Cargill India took the decision to fortify their edible oil brand. It's encouraging to have participation of different stakeholders including Industry, scientists, consumer organizations and others who are willing to contribute in this initiative.

### **MICRONUTRIENT FORTIFICATION**

- Micronutrient fortification of food items commonly consumed can be a powerful strategy to combat micronutrient deficiencies in a sustainable manner
- Edible oil is the best carries of micronutrients like Vitamin A and Vitamin D having maximum penetration in the Indian household.
- 30-40% of the edible oil in India sold to the consumer is fortified.

### **INITIATIVES IN FORTIFICATION BY GOVERNMENT AND ORGANIZATIONS**

- Food fortification is gaining momentum in terms of acceptance in India. Various State Governments in India have identified fortification as an effective mechanism to address the micronutrient gaps in our regular diet and have included it as part of their mission to curtail malnutrition. Examples include Gujarat & Rajasthan introduced fortification of staple products.
- From last couple of years, the UN millennium goal on fortification has became top of the agenda item and the whole fortification along with micronutrient deficiency came up in public domain. The government is focused on it and many activities are going forward in the field.

- Many State Government represented in Food Fortification program in Tanzania and showed interest in promoting fortification through PDS system.

## INITIATIVES TAKEN UNDER THE NAOF

- CII partnered with VOICE create awareness among the consumers about the benefits of the fortified food products.
- Many doctors and health professional have joined the initiative.

## C. INITIATIVES TAKEN BY GAIN IN FIELD OF MALNUTRITION

**Mr. Tarun Vij**, Country Manager- India operations, Global Alliance for Improved Nutrition (GAIN) share a brief about the GAIN and their efforts towards curtailing malnutrition through various initiatives across the globe.

He highlighted the following points:

- By June 2013, GAIN had reached an estimated 811 million people including women and children out of which forty-eight percent of these individuals are in Africa and 52 percent are in Asia.
- He shared that the child and maternal malnutrition rates, including micronutrient malnutrition are at very high levels and their impact has been devastating even after the incorporation of new technologies, high levels of income and deliveries; Government commitment in the society which is not acceptable.
- He emphasized on the need for a stronger political will, policy implementation framework and industry participation to promote large scale food fortification.
- GAIN is intervening in India at multiple levels through projects through Production & Distribution' Legislation & Quality Control, Social Marketing & Communication, Monitoring & Evaluation and Project Management

- Breadth of GAIN work is wide and focused on complete spectrum approach in the states and constituency.
- The challenges the GAIN have includes :
  - Nutrition and Food Fortification are not sufficiently prioritized in India and resources not optimized
  - Lack of effective overall consensus and coordination
  - Insufficient capacities at national and decentralized level to design, implement and monitor interventions
  - Mainstreaming fortified wheat flour in the Public funded programs like PDS, ICDS and MDM
- The need to integrate nutrition and health program giving due importance to sanitation and hygiene.

## D. SHARING PERSPECTIVE ON NUTRITION

**Dr Sangeeta Pandey**, Head Department of Nutrition, Mount Carmel College, shared about the technology of food fortification and micronutrient deficiencies.

- The three main aspects of food fortification are affordability, accessibility and cost effectiveness.
- There lies a need to make fortified foods affordable and accessible to the people at the bottom of the pyramid.
- The strategies to tackle malnutrition through food fortification should focus on affordability, consumer awareness about fortified food available in the market; accessibility, target vulnerable population and development of nutritious food habits among population.

## E. NUTRITIONAL PORTFOLIO OF FORTIFICATION

**Dr. Shruti Pandey** Scientist, Grain Science Technology, Central Food Technological Research Institute, appreciated the multistakeholder approach to addressing the nutritional challenges and the importance of such a platform

- She mentioned briefly about food fortification and bio-fortification of food.

## INTERNATIONAL AND NATIONAL STATUS ON NUTRITION

- Salt iodization was introduced in the early 1920s in both Switzerland and the United States of America
- From the early 1940s onwards, the fortification of cereal products with thiamine, riboflavin and niacin became a common practice. Margarine was fortified with vitamin A in Denmark and milk with vitamin D in the United States
- In more recent years, folic acid fortification of wheat has become widespread in America, a strategy adopted by Canada and the United States and about 20 Latin American countries.
- In India GAIN (Global Alliance for Improved Nutrition) has taken up fortification programmes in Madhya Pradesh, Rajasthan, Andhra Pradesh and Orissa by fortifying wheat flour and biscuits.
- In Gujarat the government has initiated ANTODAYA SCHEME under which fortified wheat flour is given through Public Distribution system. Tata group has taken up Double Fortification of Salt.
- Karnataka State Health Department provide nutritional tablets to children in schools in collaboration with Karnataka Drugs Logistics and Warehousing Society.
- Akshaya Patra Foundation (APF), which supplies mid-day meals to 1.3 million school children across the country is planning to launch a food fortification initiative.

## LOGO FOR FORTIFIED FOOD

- She urged on the need to design a logo for fortified foods to differentiate from other foods.

## CFTRI STUDY ON RICE FORTIFICATION

- She shared about the work CFTRI is carrying out on rice fortification and that it is important to consider the kind of fortificants to be used, their impact on the appearance and taste of the food.
- The result of the study states that fortified rice developed has significant amount of carotene and iron, and has acceptable physical, textural and functional properties, with acceptable sensory attributes.
- As a future agenda CFTRI will continue with the fortification work (folic acid and B12), Shelf life studies of the developed fortified rice and refinement of technology

For a successful fortification programme, a coordinated program must be firmly embedded with primary health care systems. A high degree of commitment from government and industry is required for the successful implementation of the program.

## F. SHARING PERSPECTIVE ON NUTRITION IN MID DAY MEAL

**Mr. R Madan**, Chief Project Officer, The Akshaya Patra Foundation shared the shared their efforts towards curtailing malnutrition through by providing mid day meal to the children in States across India.

- As per the AC Nielsen survey the Enrolment rate in class 1 is increased by 23% and drop out rates are decreased from 18 to 8% in Bangalore and similar results are seen in Jaipur and Vrindavan.
- Recently, Akshaya Patra Foundation has partnered with Government of Maharashtra and Tata Trust. Government of Maharashtra has build up the plan to tackle malnutrition in Nasik and Thane district by opening **Ashram Tribal School** where most of the malnourished children from age of 3-14 years are facilitated.
- He pointed out that it is important for the manufacturers and researchers to work closely with the government to have clarity on issues related to regulations, the kind of fortified foods that can be used in large scale programs and the potential impact on the consumers.

- He also mentioned that pricing will be a critical factor in ensuring fortified foods are affordable to all sections of the population.

## G. INTIATIVES BY GOVERNMENT

**Ms. Subhasini**, Manager, Public Distribution System, Government of Karnataka, mentioned about fact that the National Food Security Act does not mention about making fortified foods available in the public distribution system.

- She mentioned that the cost of providing fortified oils in this case and the cost to the Government in terms of subsidy are important considerations for the state to engage.
- Food and Civil Supply Corporation keeps a quality check on the mechanism adopted at supply centers and batches are drawn through third party investigation agency and again done randomly before supplying to the consumers.
- Food and Civil Supply Corporation is in a process of making National Food Security rules as per the act and will try to put forward it with the Government and cabinet.

## H. SHARING CONSUMER PERSPECTIVE ON FORTIFICATION

**Mr. Ashim Sanyal**, Chief operating officer, VOICE, mentioned about the consumers perspective towards fortified food.

- The three basic concerns of consumers are towards Accessibility, Availability and Acceptance.
- The significance of engaging with the consumers and enhancing their awareness and education about the benefits of food fortified. In order to ensure the success of food fortification on a large scale, it is extremely important to have the consumer on board. This will provide the demand pull for fortified foods.

- He also reiterated the need to link nutrition programs with Swachh Bharat initiative to ensure better absorption of nutrients and improved nutrition and health outcomes.
- The involvement of Government in promoting fortification is important for creating mass awareness.
- Cohesiveness can be built among the consumers by creating awareness about the long term benefits of fortification.

## G. INDUSTRY'S INITIATIVES AND PERCEPTION ON FORTIFICATION

**Mr. Krishna Kumar Joshi**, Head Regulatory Affairs – ITC Ltd., shared the initiatives taken up by the ITC in field of fortification.

- He also shared the importance of regulatory mechanism in fortification of food.
- The knowledge creation among the regulators is an important way to promote fortification.

**Dr. Dhruti Bal**, Manager Nutrition, Britannia Industries Ltd shared the initiatives taken up by the Britannia Industries in field of fortification by fortifying food products like biscuits etc.

- Projects have been carried out by Britannia Industries with Navjyoti Foundation; AIIMS and EDMC etc.
- Britannia Nutrition Foundation worked with GAIN, Nandi Foundation, NGOs and Karnataka Nutrition Mission to curtail malnutrition.

**Mr. Himanish Das**, Head QA & R& D, MTR Foods Pvt Ltd share his perspective on fortification and the importance of regulatory framework in promoting fortification in India.

## II. KEY TAKEAWAYS

1. **Voluntary Fortification:** Fortification of the food should be on voluntary basis as an Industry led initiative supported with evidences.
2. **Creation of Standards /protocols for oil fortification** is required to identify the minimum dosage of the micronutrients in the edible oil as the vitamin stability varies from oil to oil. The technical and policy expert groups formed in collaboration with GAIN will focus on the development of the quality assurance and quality control protocols for the edible oil fortification which will be available in public as standard guidelines for SMEs and industries planning to fortify their products.
3. **Logo** depicting the food is fortified – In India a large sector of population is uneducated or not aware about the claims and labeling on the packs. To differentiate between the fortified and non fortified foods, there is need to promote and build confidence in the existing logo on food fortification.