LEVERAGING THE POTENTIAL OF LARGE-SCALE FOOD FORTIFICATION TO ADDRESS MICRONUTRIENT MALNUTRITION

Overview for Governance and Accountability for Food Fortification Webinar

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Our vision:

All women and children have the nutrition they need to live healthy and productive lives.
A CROSS-FOUNDATION APPROACH TO NUTRITION

All women and children have the nutrition they need to live healthy and productive lives

Our strategy is about biological Growth & Resilience, rather than addressing specific syndromes, with a focus on the 1,000-day window

Addressing vulnerability to survive and maximize growth and neurodevelopmental potential

Global Development
- Nutrition manages food fortification and private sector engagement
- MNCH manages Maternal, Infant and Young Child Nutrition (MIYCN)

Global Growth & Opportunity
- Agricultural Development manages the Food Systems portfolio in collaboration with the Nutrition PST

Global Health
- MNCH Discovery & Tools manages upstream research and development for nutrition products, diagnostics and tools

Data
Advocacy
Evidence Generation
WE ARE INCREASING OUR FOCUS ON LARGE-SCALE FOOD FORTIFICATION TO DRIVE SUSTAINABLE, EQUITABLE IMPACT

Our updated Nutrition strategy seeks to reduce micronutrient deficiencies and improve nutrition-related health outcomes by...

- ...building a **deep, targeted focus** on large-scale food fortification
- ...concentrating on **country-impact** and **downstream delivery innovations**
- ...creating focused alliances **integrating the private sector** into the **solution**
- ...establishing sustainable mechanisms for gathering **real-time market data** with better accessibility and insights
- ...preserving the “**One Foundation**” advocacy approach that has previously been successful in leveraging the Foundation’s voice for the Nutrition sector as a whole
FOOD FORTIFICATION IS A POWERFUL AND COST-EFFECTIVE INTERVENTION TO REDUCE MICRONUTRIENT DEFICIENCIES

Healthy diets are often not affordable, available or accessible to many around the world. Food fortification inexpensively adds essential vitamins and minerals to foods which people consume every day.

One of the best investments in development in terms of cost effectiveness, every $1 invested in fortification generates $27 in economic returns.

Food fortification programs with iodine, folic acid, vitamin A and iron have led to dramatic reductions in serious disease in LMICs:

- A 34% reduction in anemia from improved iron stores.
- A 74% reduction in the odds of goitre and a significant reduction in iodine deficiency.
- A 41% decrease in the odds of neural tube defects due to reductions of folate deficiency among women of reproductive age.
- An approximate reduction in vitamin A deficiency (VAD) for three million children (0-9 years) in just one year, significantly reducing mortality risk.

Sources:
1. Food Fortification Programs to Improve Vitamin A Status and Iodine Status (http://www.bioanalyt.com/oil-fortification-check-chroma/)
2. Doubling down on food fortification to fortify the future (https://www.bioanalyt.com/oil-fortification-check-chroma/

Iodized Salt
- $0.05 incremental cost
- 30:1 benefit cost ratio

Fortified Wheat
- $0.12 incremental cost
- 46:1 for folic acid benefit cost ratio
- 8:1 for iron benefit cost ratio

Fortified Maize
- $0.12 incremental cost
- 46:1 for folic acid benefit cost ratio
- 8:1 for iron benefit cost ratio

Fortified Oil
- $0.01-$0.13 incremental cost
- 50:1 benefit cost ratio
NUTRITION STRATEGY SEeks to ADDRESS FIVE KEY CHALLENGES IN FORTIFICATION; EACH CHALLENGE IS PAIRED TO A “BIG BET”

Current Situation Examples

Widespread MN Deficiencies

- Estimated prevalence of Vit A deficiency in U5 children, 2013

Weak or No Fortification Standards

- Number of MNs w/ standards set
- Beyond iodized salt, FF standards are weak or non-existent in many LMICs

Gaps in Compliance & Coverage Data

- Widespread non-availability/existence of data on fortified wheat flour coverage

The five top-priority challenges we identified and the corresponding big bets in our strategy

1. Persistent data gaps on MN deficiencies and FF coverage / compliance
2. Low market incentives for R&D, resulting in lack of innovation
3. Low technical fortification capacity for mills in LMICs (knowledge / training)
4. Many countries have weak or no food fortification standards
5. Where standards exist, evidence indicates low compliance rates

Big Bet #1: Fortification Data
Big Bet #2: R&D and Innovation
Big Bet #3: B2B TA Hub
Big Bet #4: LSFF SSA
Big Bet #5: Digital QA System

Sources:
1. World Health Organization (WHO) URL
2. Global Fortification Data Exchange (GFDx)

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## OVERVIEW OF OUR FIVE BIG BETS

### Clock model for LSFF

- Development of LSFF systems takes place along a phased “clock” model of increasing rigor / comprehensiveness.

- Coverage grows slowly for the first three quadrants of the model; critical to reach the final quadrant to effect real impact.

### Big Bet #1: Fortification Data

- Break down data silos, employ innovative big data approaches to model dynamic maps, and **provide an actionable, collaborative data landscape** for the LSFF & nutrition community.

### Big Bet #2: R&D and Innovation

- Invest in **critical near- and mid-term innovations** in micronutrients, vehicles, and devices, while identifying and supporting longer-term “blue sky” innovations with transformative potential.

### Big Bet #3: B2B Technical Assistance Hub

- Develop a catalytic PPP model to **pair mills with premix/tech suppliers and NGO partners for TA support**, accelerating adherence to standards and leading to scaled & sustainable impact.

### Big Bet #4: LSFF Standard Setting Accelerator

- Facilitate **adoption of “more and better” LSFF standards** in the ~35 countries with the highest burden of MN deficiencies to increase rollout and improve coverage.

### Big Bet #5: Digital QA System

- Work to increase **effective coverage of fortified foods through cost-effective industry self-monitoring & increased transparency** from trustworthy, independent, verifiable digital data.