# Where are We with Flour Fortification? Global Status and African Situation Analysis

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#### **Presentation Outline**

- Global progress
- Wheat Flour and Maize Meal Production and Consumption in Africa
- Fortification phases and experiences
- Lessons learned

- www.sph.emory.edu/wheatflour
- www.fortaf.org



# Global Progress

- More than 350 million MT wheat and maize flours milled annually in commercial roller mills – consumed as noodles, bread, pasta.
- Mandatory wheat flour fortification
  - 2004: 33 countries
  - 2008: 55 countries
- 2008: Estimated 2 billion people have access to fortified wheat flour

#### LANDMARK FORTIFICATION EFFORTS

•	1920's	Switzerland Salt Iodization
	1930's	N. Europe Vitamin D in dairy
	1930's	Denmark Vitamin A in margarine
	1940's	N America Vit B, Iron in flour
	1974	Guatemala Vitamin A in sugar
•	1992	Universal Salt Iodization
	1996	N America Folic Acid in Flour
	1996	Venezuela Vit A,B's Iron in Flour
	1998	Philippines Vitamin A in flour
	1999	Zambia Vitamin A in sugar
	1999	Egypt Iron in Biscuit flour
	2000	Mexico Addition of Zinc to fortified flour
	2002	Jordan, Kuwait, Qatar Iron Folic Acid

**2003** 

2004

South Africa Wheat and Maize flour

Nigeria wheat and maize flour

# A Decade of Technical Progress

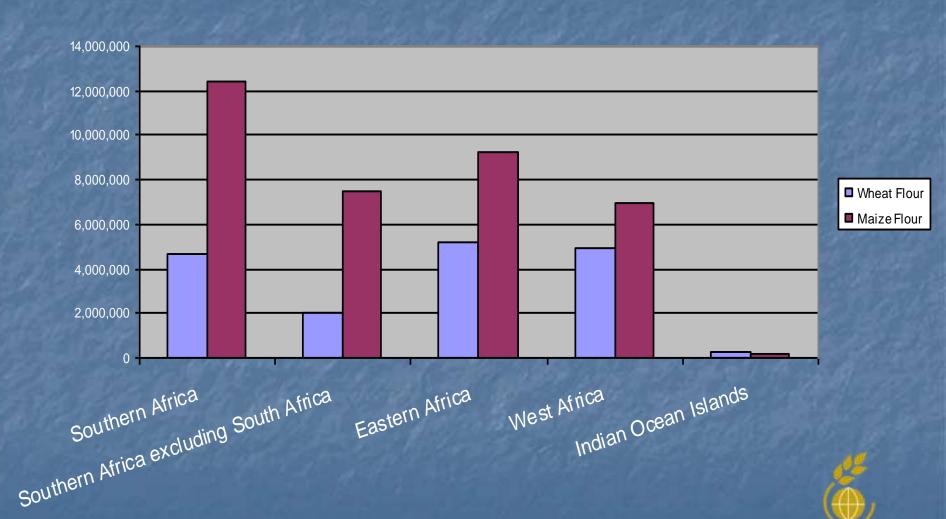
- 1998: Beginning to discuss universal fortification of flour
- 2002: Global Alliance for Improved Nutrition launched new funding for fortification
- 2004: FFI launched and technical meeting Cuernavaca, Mexico
- 2006: WHO/FAO Guidelines on Fortification published
- 2008: Technical meeting in Atlanta and First African Flour Fortification Meeting in Arusha

# Wheat Flour and Maize Meal production and consumption in Sub-Saharan Africa

- 400 million people eat centrally processed flours
- Net grain imports, very low flour imports
- Wheat flour:
  - 17 million metric ton
  - 92% processed in SSA
  - Central processing of flour increased by 40% between 1998 and 2002
- Maize meal:
  - 36 million metric ton
  - 100% processed in SSA



#### Maize and Wheat Flour Consumption in Sub-Saharan Africa



Source: FORTAF Brochure

# Fortify West Africa

- Aims to reach 70% of population in Economic and Monitory Union of West Africa (UEMOA);
  - 8 countries; 85 million people (Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo)
- Range of partners involved, spearheaded by HKI and WAHO
- 13 millers recently decided to form an association for fortification: AIM-UEMOA
- Plans to expand initiative to include all 15 countries in ECOWAS (Economic Community of West Africa)

### Flour Fortification — a Phased Approach

- Get Started:
  - Awareness raising, initial information gathering:
- Get Serious:
  - Consensus building, resolution of technical, institutional issues
- Get Going:
  - Program launch, roll-out, QA/QC
- Keep Going:
  - Review, M&E, adjustments, celebrations



# Getting Started

- Examples of countries: Benin, Guinea-Bissau, Mali, Niger, Rwanda, Togo
- Enabling policy environment
- Have started collecting information, doing surveys etc
- Key Challenges:
  - Data gaps e.g. on production and consumption levels;
  - Credibility gaps does it work?
  - Collaboration gaps getting key players to the table

#### Success factors

- Support from development partners
- Availability of large companies interested in fortifying
- Experience with fortifying other products e.g. oil
- Existence of a regional program for the fortification of flour (e.g. the West Africa program)
- Existence of regional norms and standards on fortification of flour with iron and folic acid, e.g. UEMOA

# **Getting Serious**

- Examples: Angola, Burkina Faso, Congo, DRC, Kenya, Lesotho, Malawi, Tanzania
- Have made a start (e.g. voluntary fortification by few companies; or fortifying other commodity)
- Forming PPPs, doing technical studies
- Key challenges: building strong PPPs, getting buy-in; moving from voluntary /regional, to mandatory/country-wide; moving to YES, lets do it!



#### Success factors

- Keep partners on board by incorporating concerns and different perspectives: Firm leadership and give-and-take needed.
  - E.g. finding local solutions to cost issues re equipment and premix
  - Listening to different views, e.g. on standards, AND moving toward finalization – scientific input and global consensus documents are helpful

# **Getting Going**

- Examples: Cote d'Ivoire, Egypt, Ghana, Sudan, Uganda, Zambia
- Legislation is ready, factories equipped and staff trained, social mobilization has started, and QA/QC arrangements made
- Key Challenges: Finalizing and moving legislation through, resolving final technical, financial issues; resolving lastminute practical issues, maintaining momentum



#### Success Factors

- Ensure there is capacity to resolve practical issues on factory floor or in testing labs - 'just in time' technical support
- Maintain advocacy, communication, mobilization through the launch and initial implementation phases.

# Keeping going

- Examples: Nigeria (80%), South Africa (90% wheat flour, 70% maize meal)
- Mandatory fortification programs implemented for several years; experience with resolving practical issues
- Key tasks: Enforcement, responding to M&E results and new findings including adjusting standards; maintaining public awareness.

#### Lessons learned

- Country context shapes what can be done and how to do it
  - Political space
  - Openness to partnering with civil society
- Evidence-based advocacy builds a strong case for fortification
  - Decision makers want facts and examples that fortification is doable and effective
- Ongoing open communication with the public builds trust and helps maintain quality
  - "Half-truths and rumours breed resistance"
  - An informed public can strengthen quality



#### More Lessons

- Strong public-private partnerships are essential from beginning to end
  - Dynamic government leadership
  - Buy-in from organized business
  - Civil Society voice
- Monitoring, enforcement and evaluation are both necessary and challenging
  - Start planning early
  - Build capacity in regulatory systems
- Development partner support is vital, and most effective when it is flexible and attuned to local conditions
  - Access to state-of-the-art global knowledge and experience
  - Build own understanding of political and economic conditions in country, to match global knowledge and local circumstances

