

# Fortification Assessment Coverage Toolkit (FACT)

Rebecca Spohrer  
Global Alliance for Improved Nutrition (GAIN)  
QA/QC Training Workshop Harare, Zimbabwe  
13 May, 2015



# Presentation outline



- The need for evidence to guide programs
- The challenges to measuring LSFF program impact
- Determining factors for effective LSFF programs
- Fortification Assessment Coverage Tool
- Example in Practice: Selected results from Senegal

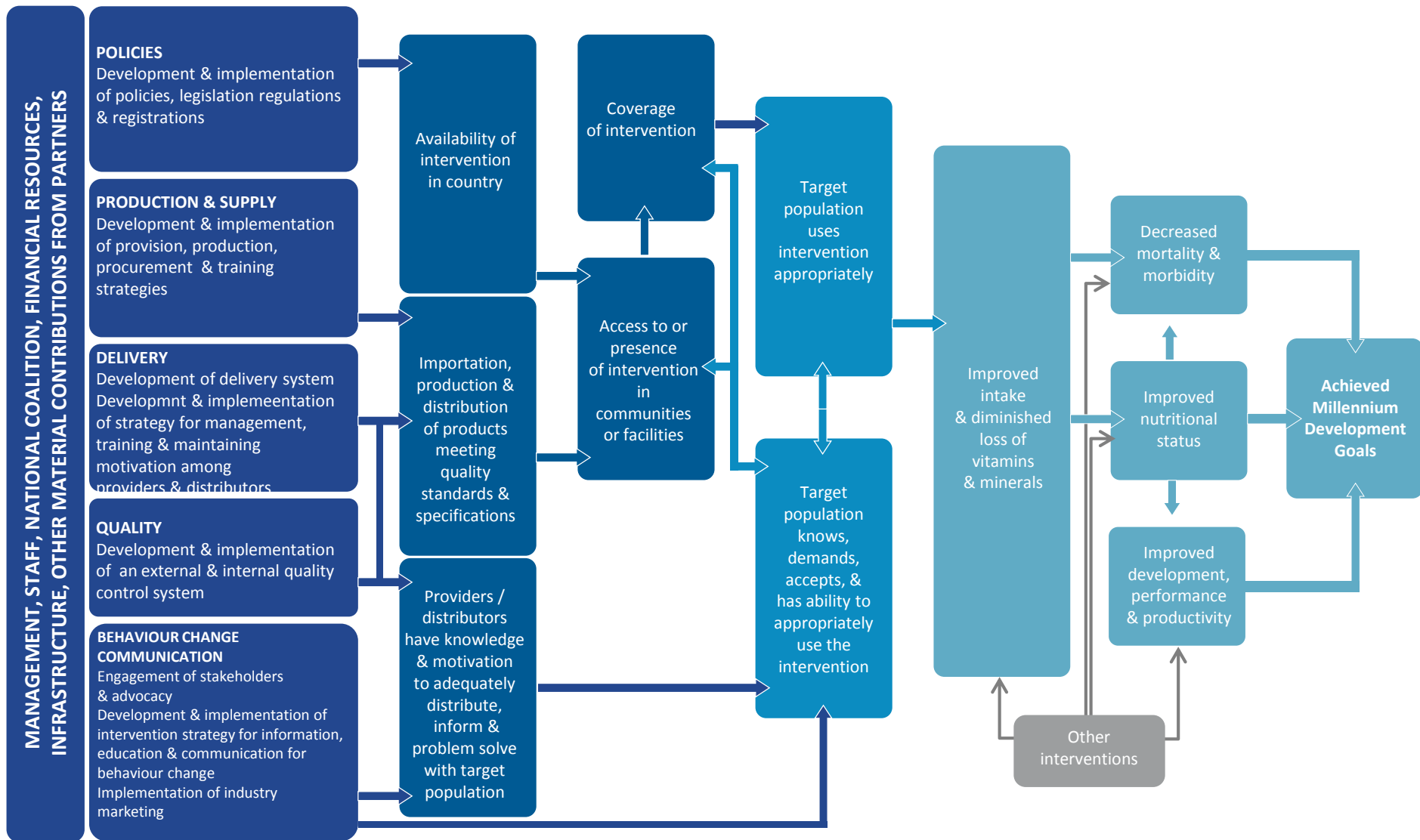
# Why measure impact of an intervention?



- Provide evidence of impact of government or donor investments
- Improve program performance based on evidence
- Modify programs in response to changing environments
- Minimize risks
- Consider and support complementarity of interventions

**... So you can tell if the program is working!**

# Understanding program pathway to impact



# LSFF programs are by nature difficult to measure impact



## Methodological issues

- Lack of control group
- Biomarkers only modifiable in subset of population

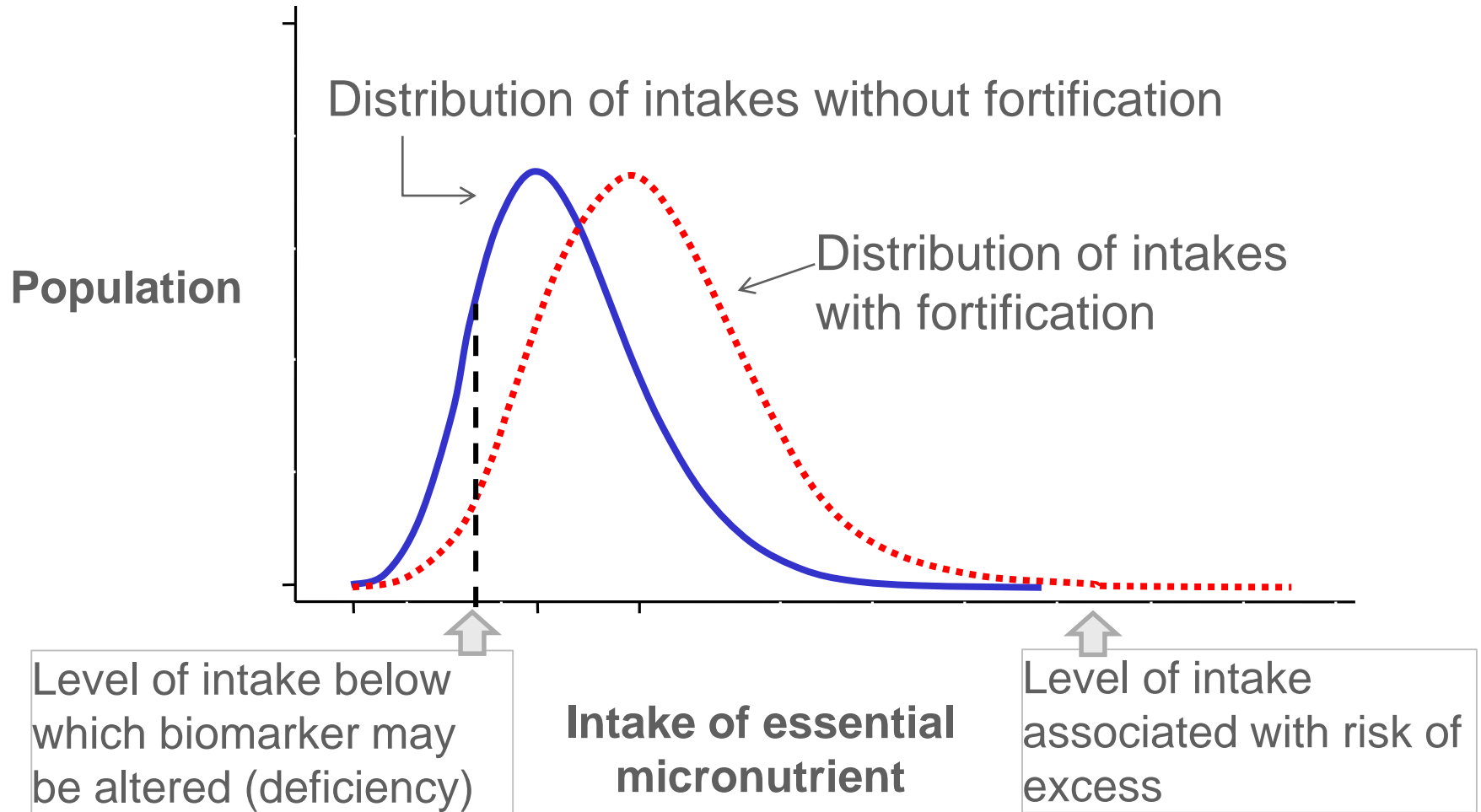
## Difficult to determine if programs are “evaluation ready”

- Compliance monitoring and quality assessments imperfect
- Implemented inconsistently; often at factory only; assumptions about community or household level

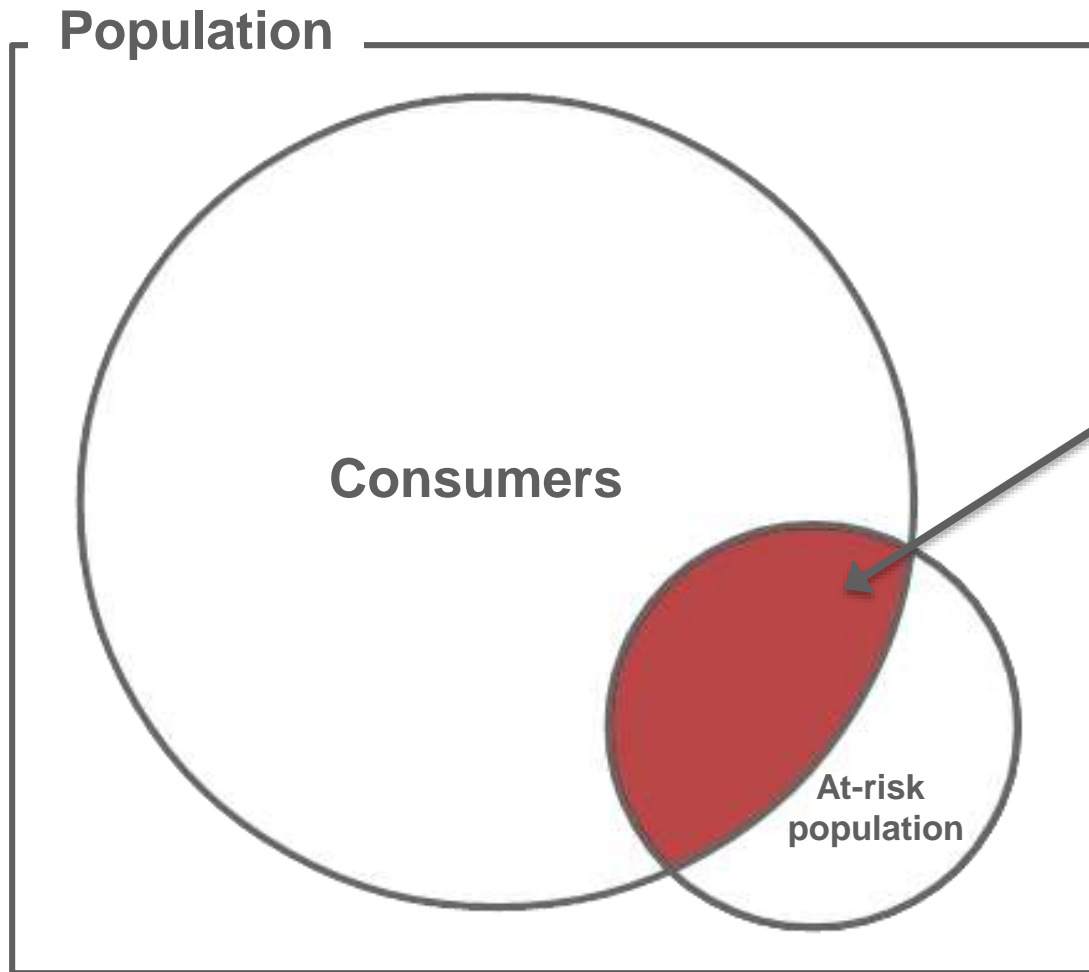
## Dietary data to quantify nutrient gap and assess intake of fortified foods is lacking

- Sugar fortification in Guatemala
- Cake flour consumption in South Africa

# The goal of LSFF is to shift distribution of nutrient intakes



# Who has the potential to benefit from LSFF?



**At-risk population  
who are consumers**

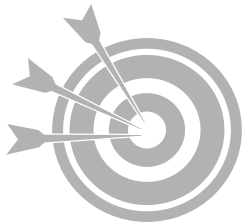
## Determining factors of impact for LSFF



**Potential to benefit:** Who within population do we want to benefit? What is their dietary gap? Does this vary by region, economic group?



**Coverage:** What proportion of the population consume fortified food? Are those with potential to benefit (e.g., women of reproductive age; in poverty) consuming the fortified food?



**Utilization:** How much of the fortified food is consumed and how regularly? Does this vary by region, economic group? Are some at risk of high intakes?



**Quality of the product at point of consumption:** Is the product reaching the communities/ households adequately fortified?

**... in other words, what is the “effective coverage”**



# Fortification Assessment Coverage Tool (FACT) measures effective coverage



## Coverage

- Coverage of fortified foods
- Bottlenecks and enhancers
- Coverage of additional micronutrient interventions

## Utilization

- Quantity consumed at household & individual level
- Dietary intake from modified food recall
- Intake of additional fortified products

## Nutrient contribution

- Samples collected at community level
- Fortification level linked to household use
- Contribution calculated from consumption & quality

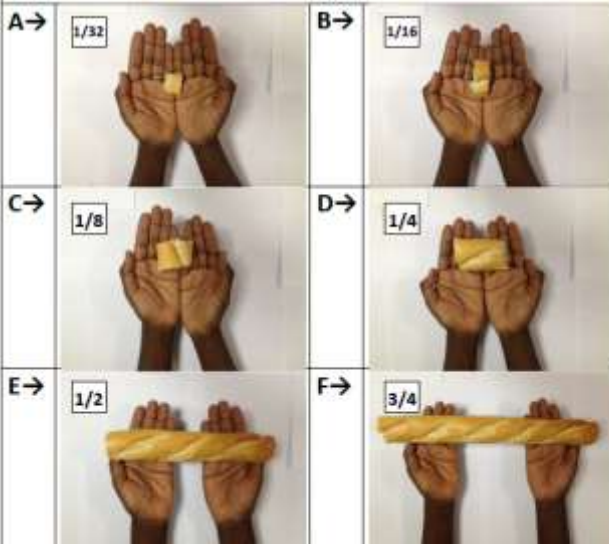
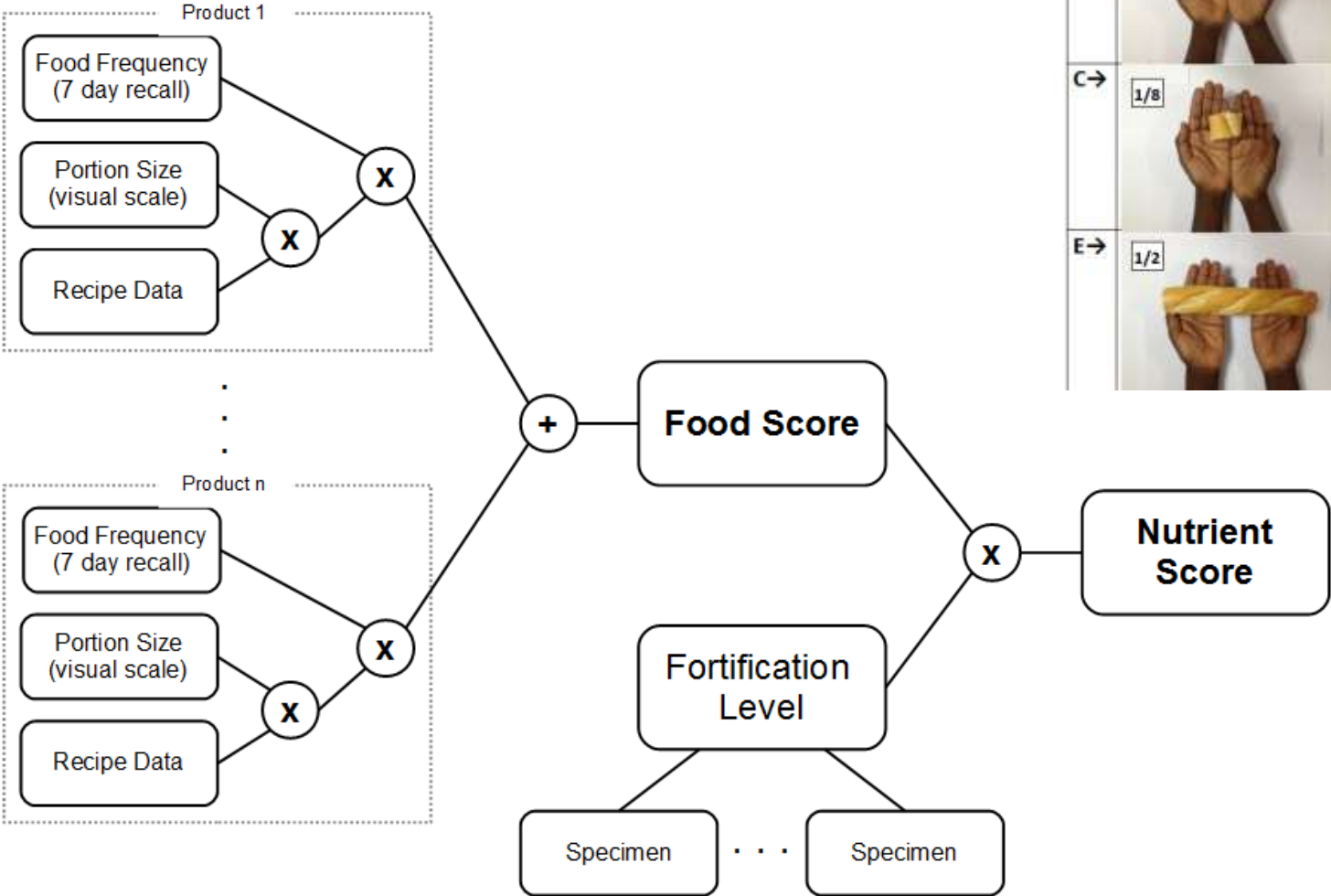
## Strategic sampling

- Large representative sample stratified by factors that might modify coverage, utilization, and risk of inadequate diet
- Region of residence; poverty; education; others

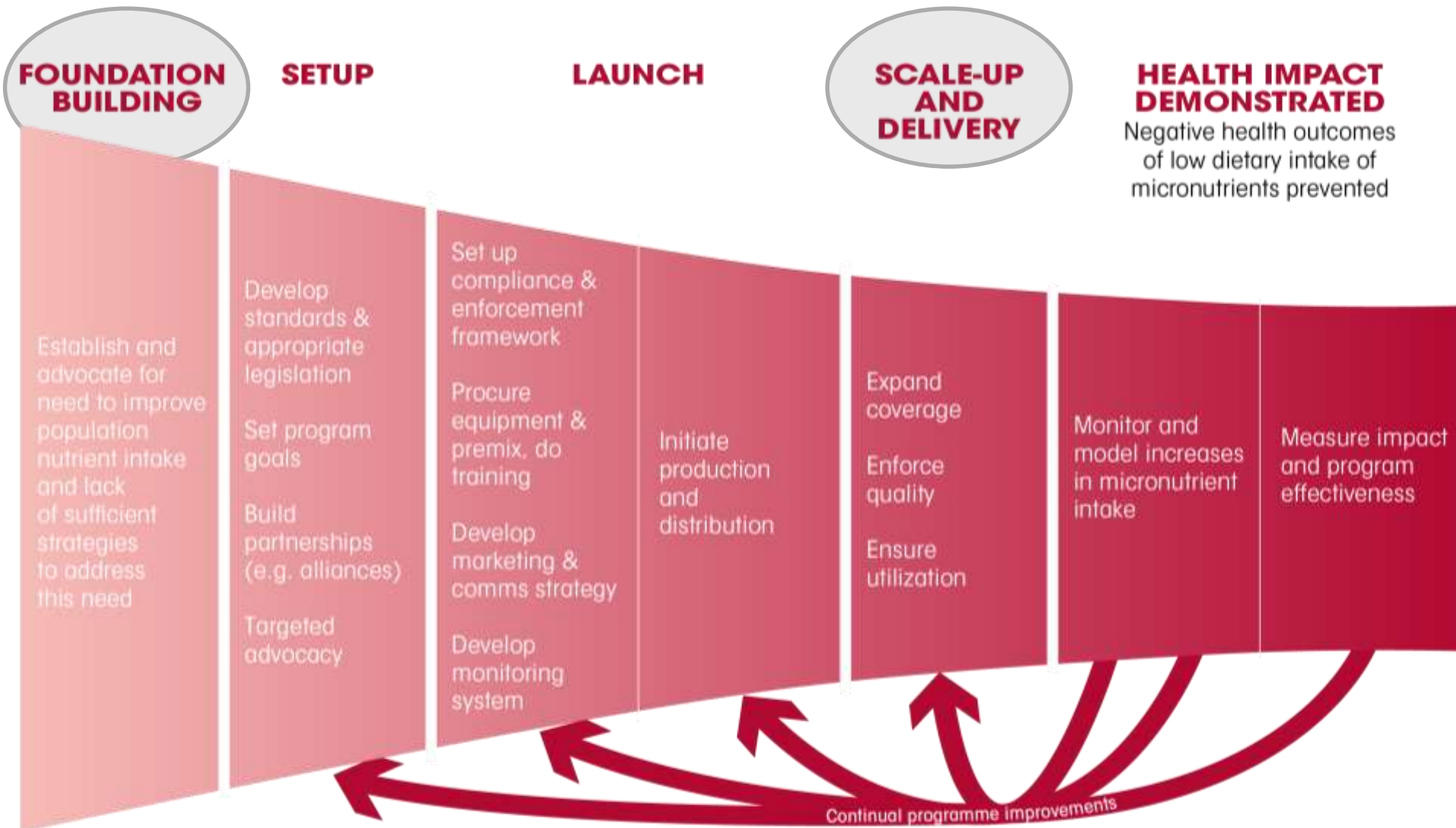
## Feedback to countries

- Fast turnaround to provide feedback to stakeholders

# Assessing coverage and intakes at individual level



# FACT appropriate to be implemented at program start and after running



# Example: FACT survey in Senegal (2014)



Micronutrient deficiencies highly prevalent in women of reproductive age and children (2011):

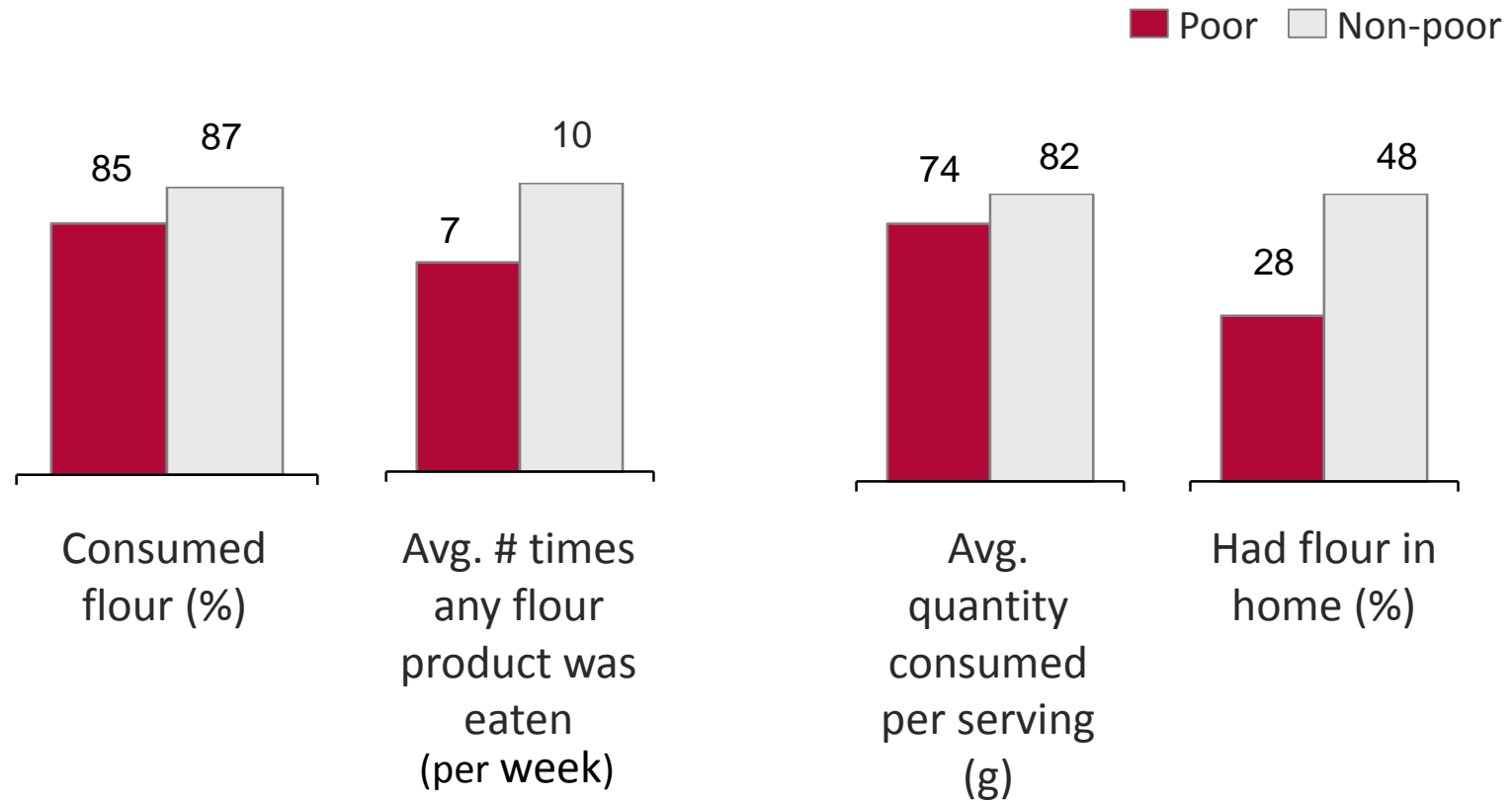
## Fortification in place since 2009:

Cooking oil – Vitamin A  
Wheat flour – Iron, folic acid

Children < 5 y of age	Poor <sup>1</sup> (%)	Non-poor (%)
Vitamin A deficiency	26.8	13.3
Anemia	49.5	44.1
Iron deficiency	46.0	45.7
Iron deficiency anemia	30.4	27.6

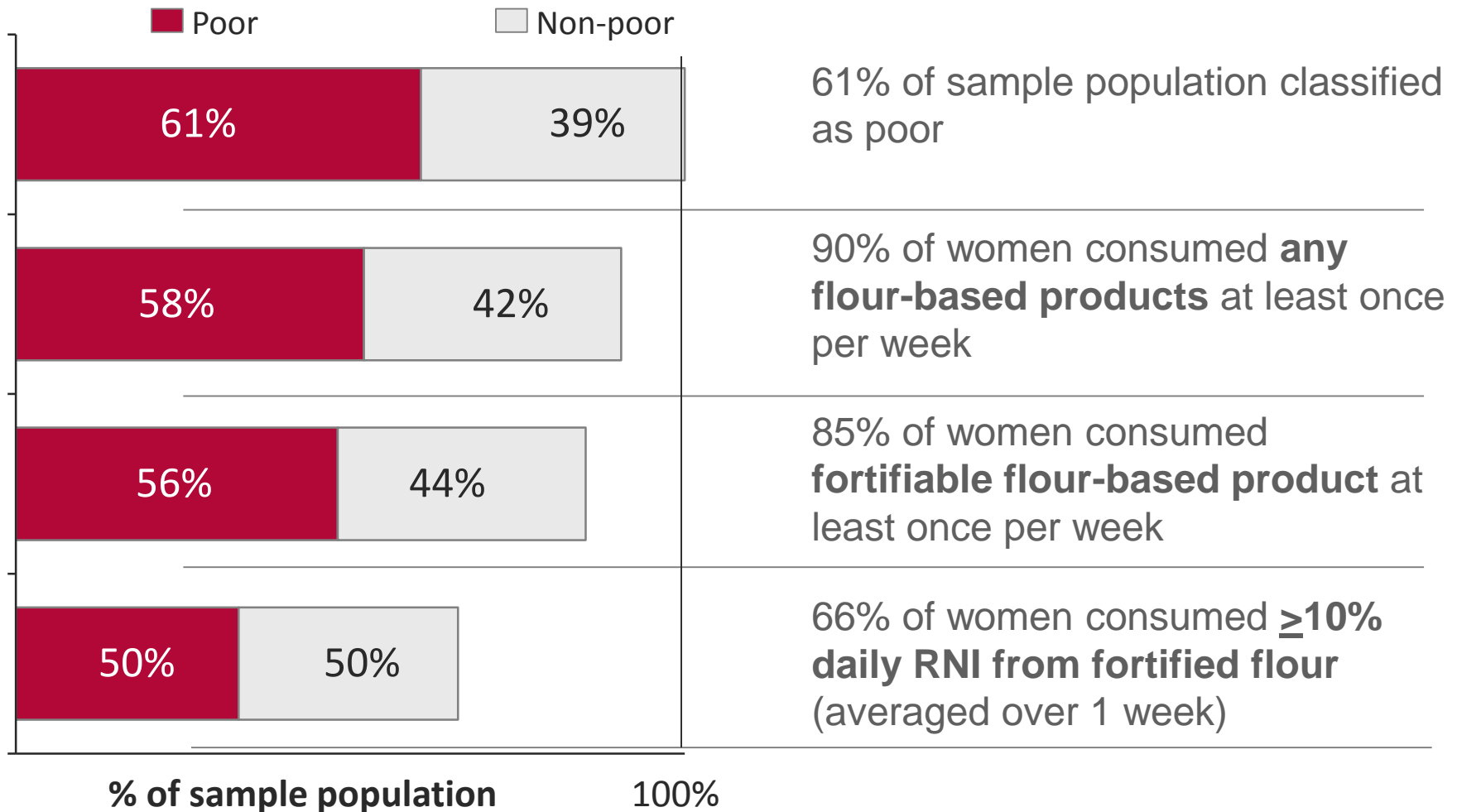


# Fortifiable flour is consumed regularly by the poor and non-poor

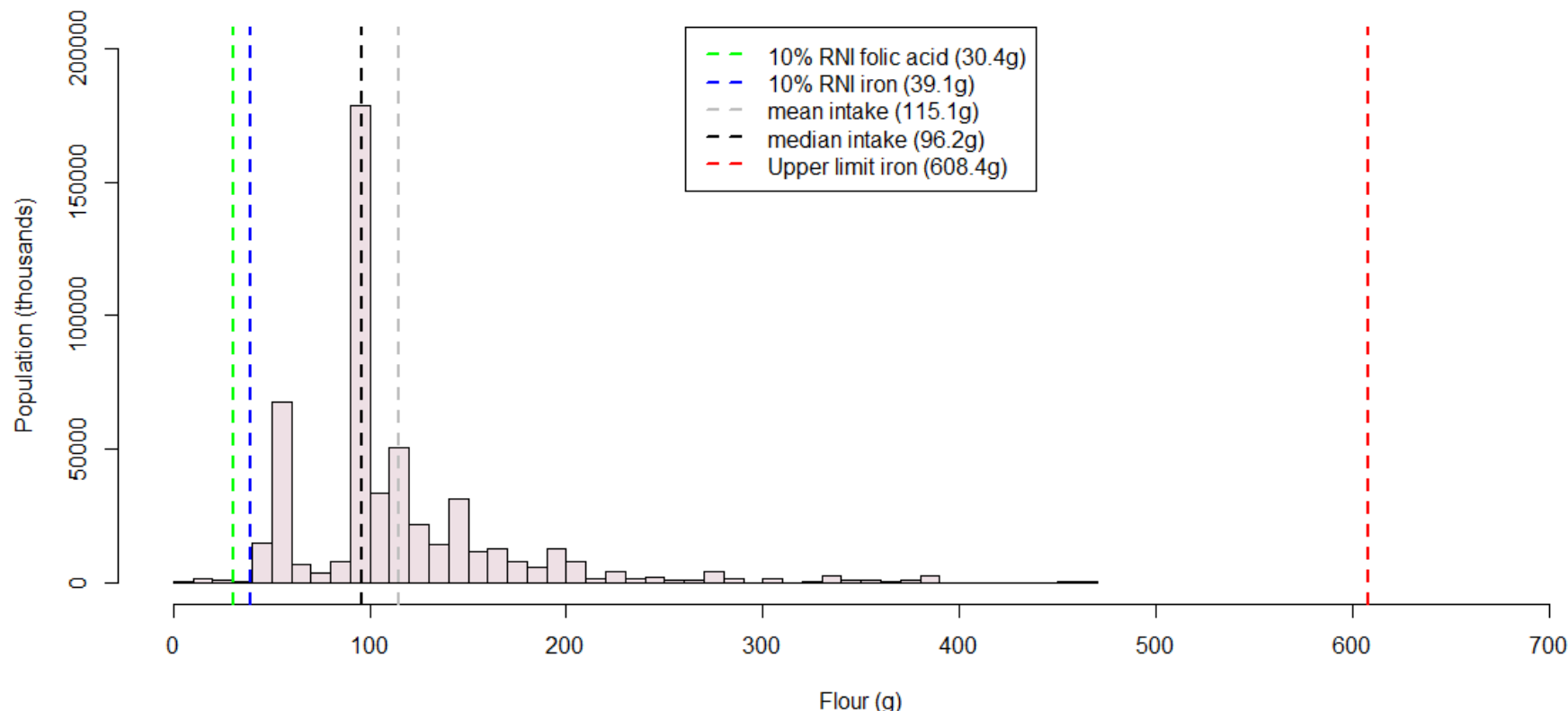


- Flour is mainly consumed as commercial products, bread, etc. from local and/or larger producers, and not as products prepared in the home

# Most women are obtaining a meaningful % of RNI weekly from fortified flour



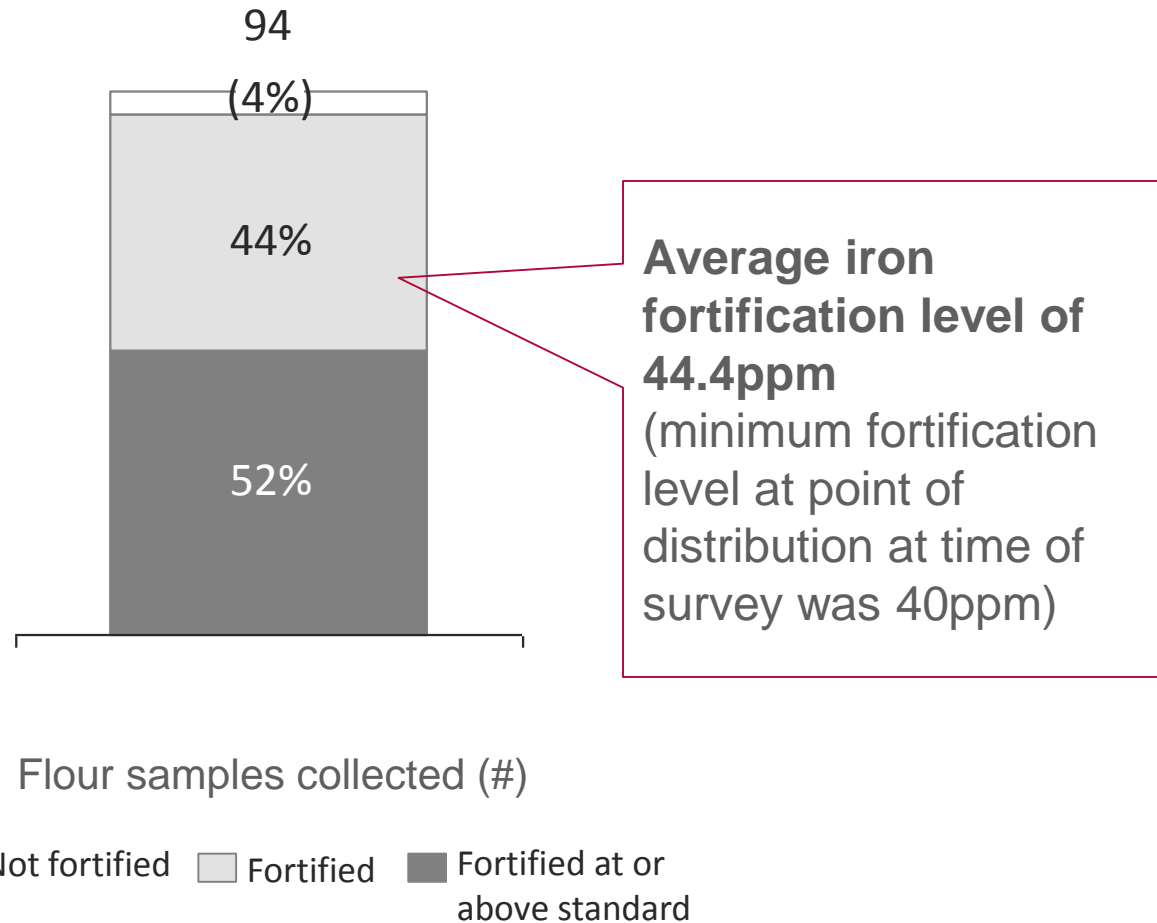
# Based on distribution of intakes, Senegal is well below upper limit for iron



Among daily consumers, median intake of fortifiable flour was 96.2g daily. This amount of flour provides close to 30% iron RNI and almost 40% folic acid RNI

# On average, retail samples collected met or exceeded minimum fortification standard

94 flour samples collected at the retail level; on average, they contained the mandated level of iron





# Conclusions

**Although efficacy well proven, evidence of effectiveness of food fortification programs limited because...**

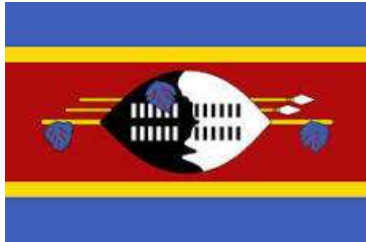
- complexity of impact evaluation in population-based programs
- evaluations carried out before programs are “evaluation-ready”

**Accurate estimates of *effective coverage* could help fill this gap**

To permit feedback to programs and recommendations for improvement, surveys should be agile, permitting rapid turn-around from data collection to synthesis and dissemination

**... FACT is a survey method to fulfill this objective**





Thank you



For further information: [rspohrer@gainhealth.org](mailto:rspohrer@gainhealth.org)