What mass fortification can and cannot do

and

Implications for other micronutrient interventions

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Mass fortification of flour with iron, folate, and other micronutrients

FORTIFICANT LEVELS

- Aim to meet 30%-60% of daily adult nutrient requirements

WHAT MASS FORTIFICATION CAN DO

- Adult target groups
  - Reduce iron deficiency anemia
  - Reduce neural tube defects
  - Large economic benefits
- Children
  - Some, but limited evidence of improvements in micronutrient status
  - Benefits more like among older children

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LIMITATIONS OF MASS FORTIFICATION

- Special groups will have limited benefits
  - Infants and young children
    - [Some indirect benefits possible (e.g. improved breastmilk micronutrient content]
    - Flour intakes insufficient to meet nutrient demands
    - May require targeted fortification through use of industrially produced complementary foods or micronutrient powders
  - Pregnant women
    - Iron needs after the first trimester far exceed iron/folate intakes through flour
  - ‘Hard to reach’ groups (poverty, remote locations)
    - May not be reached through fortified products

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IMPLICATION FOR OTHER MICRONUTRIENT INTERVENTIONS

- Even though mass fortification is an important complementary strategy to fight micronutrient deficiencies in a population, current micronutrient control strategies need to continue *even in the presence of well-established national mass fortification programs*
  - Dietary diversification to improve diet quality
  - Infant and young child feeding strategies
    - Optimal breastfeeding practices, high-quality complementary foods (e.g. centrally processed, fortified complementary foods; home fortification)
  - Micronutrient supplementation
    - Twice-yearly high-dose vitamin A supplementation for children 6-59 months
    - Postpartum maternal vitamin A supplementation
    - Maternal iron-folate supplementation during pregnancy