The USAID Micronutrient and Child Blindness Project

# Elements of a Food Fortification Program: Functions and Players

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USAID FROM THE AMERICAN PEOPLE

AED Academy for Educational Development

# Favorable claims about food fortification

**"Food fortification resolves many issues of equity and access because it is population based and the fortification of staple foods reaches those most vulnerable to nutritional deficiencies."**

**"Food fortification is also cost-effective."**

In: Benefit of Food Fortification. Food Fortification Approaches.
www.sph.emory.edu/PAMM/IH552/Jan28fortification/

# One more optimistic statement

**"Among the several proven approaches available for addressing the problem of micronutrient malnutrition, fortification is currently the most cost-effective and sustainable."**

Jere H. Haas and Dennis D. Miller

Symposium of food fortification in developing countries:

*J Nutr* 2006;**136**:1053-1054.

# A supportive but cautious note

**"We conclude that iron fortification is economically more attractive than iron supplementation."**

**"The results should be interpreted with caution, because evidence of intervention effectiveness predominantly relates to small-scale efficacy trials, which may not reflect the actual effect under expected conditions."**

Rob Baltussen, Cécile Knai and Mona Sharan

Iron fortification and supplementation are cost-effective.

*J Nutr* 2004;**134**:2678-2684.

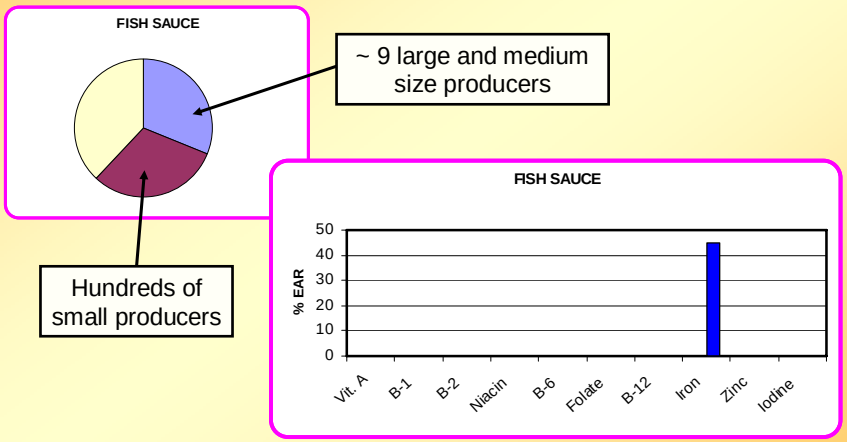
# But only "if"…….

| Country | Food (Nutrient) | Additional Intake EAR (P-50) | Coverage |
|---|---|---|---|
| Worldwide | Salt (Iodine) | ~200 % | > 80 % |
| Central America | Sugar (Vit. A) | > 150 % | > 75 % |
| Chile, USA/ Canada, RSA | Cereal Flours (Folic Acid) | 90-200 % | > 70 % |

# Estimating the potential benefit

9

## Coverage and potential impact of fortified fish sauce




OD-2007-21-CambodiaFF

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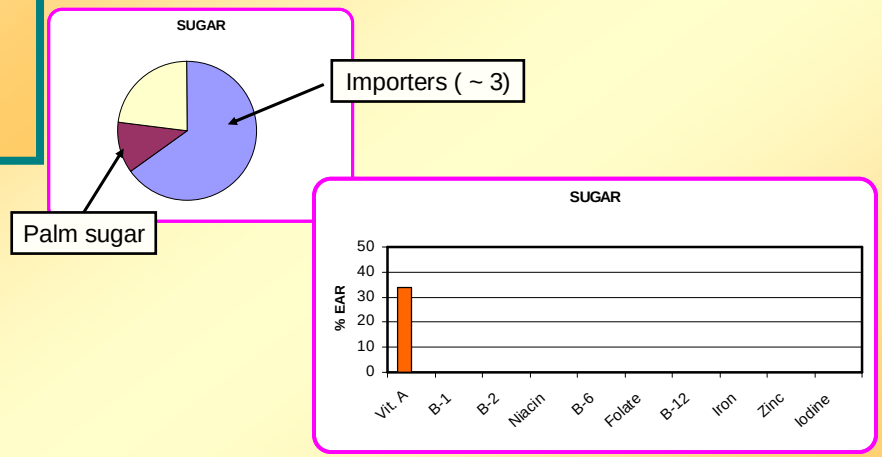
## Coverage and potential impact of fortified sugar



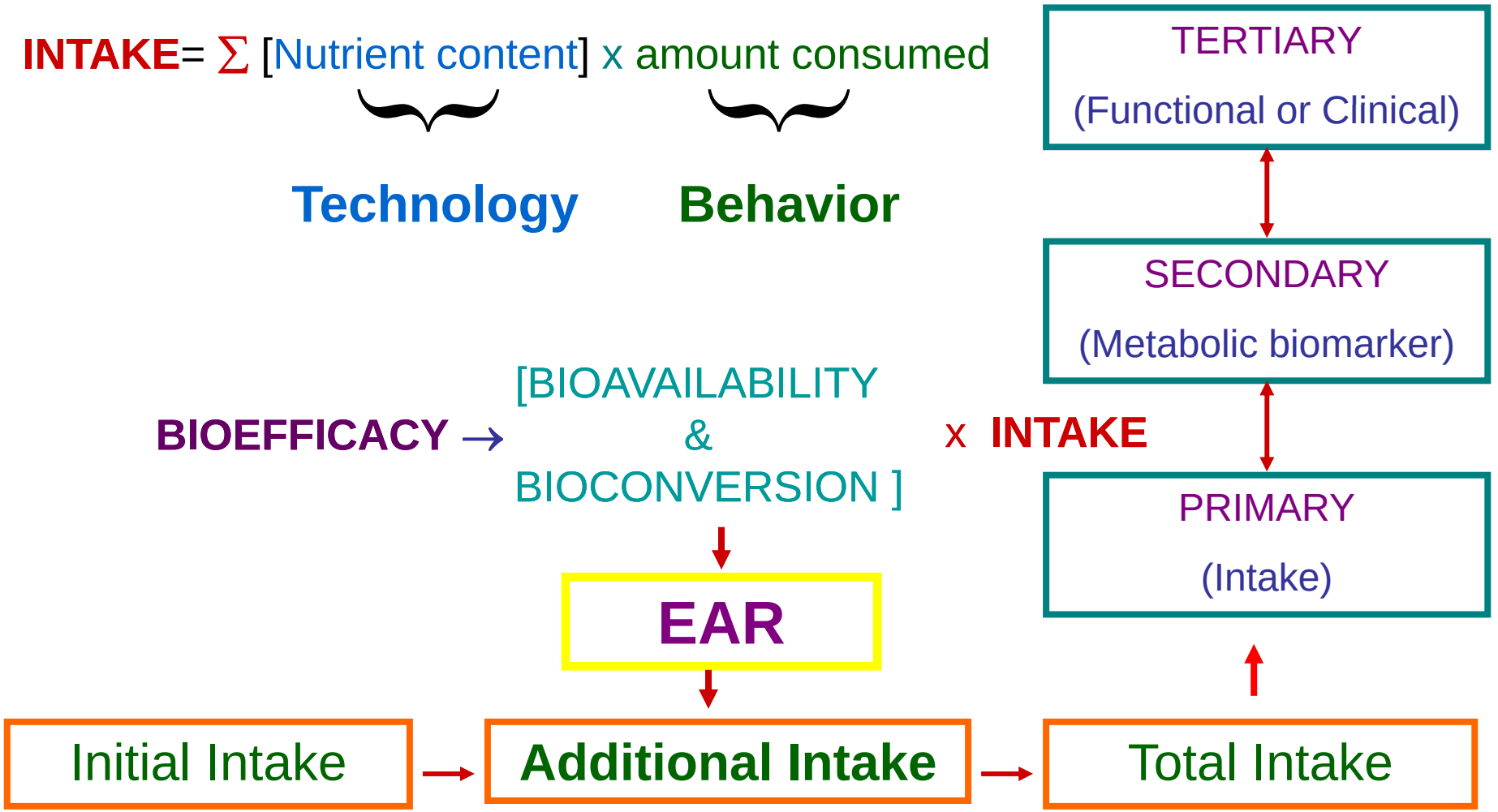

OD-2007-21-CambodiaFF

Cambodia, 2007.

# Reason of change: Additional intake

**INTAKE**= $\sum$ [Nutrient content] x amount consumed

**Technology** **Behavior**



# Need, solutions and strategies

## Need:

- **Size of the intake gap**
- **Per cent of the people affected**

## Solutions:

- **Additional Micronutrient Intake:** Provision + Utilization
- **Coverage:** Per cent of people who benefit

## Strategies:

- **Improve diet diversity ***
- **Food fortification ***
- **Preventive supplementation ***
- **[Health measures]**

* Increase micronutrient intakes

# A real program is more than a product