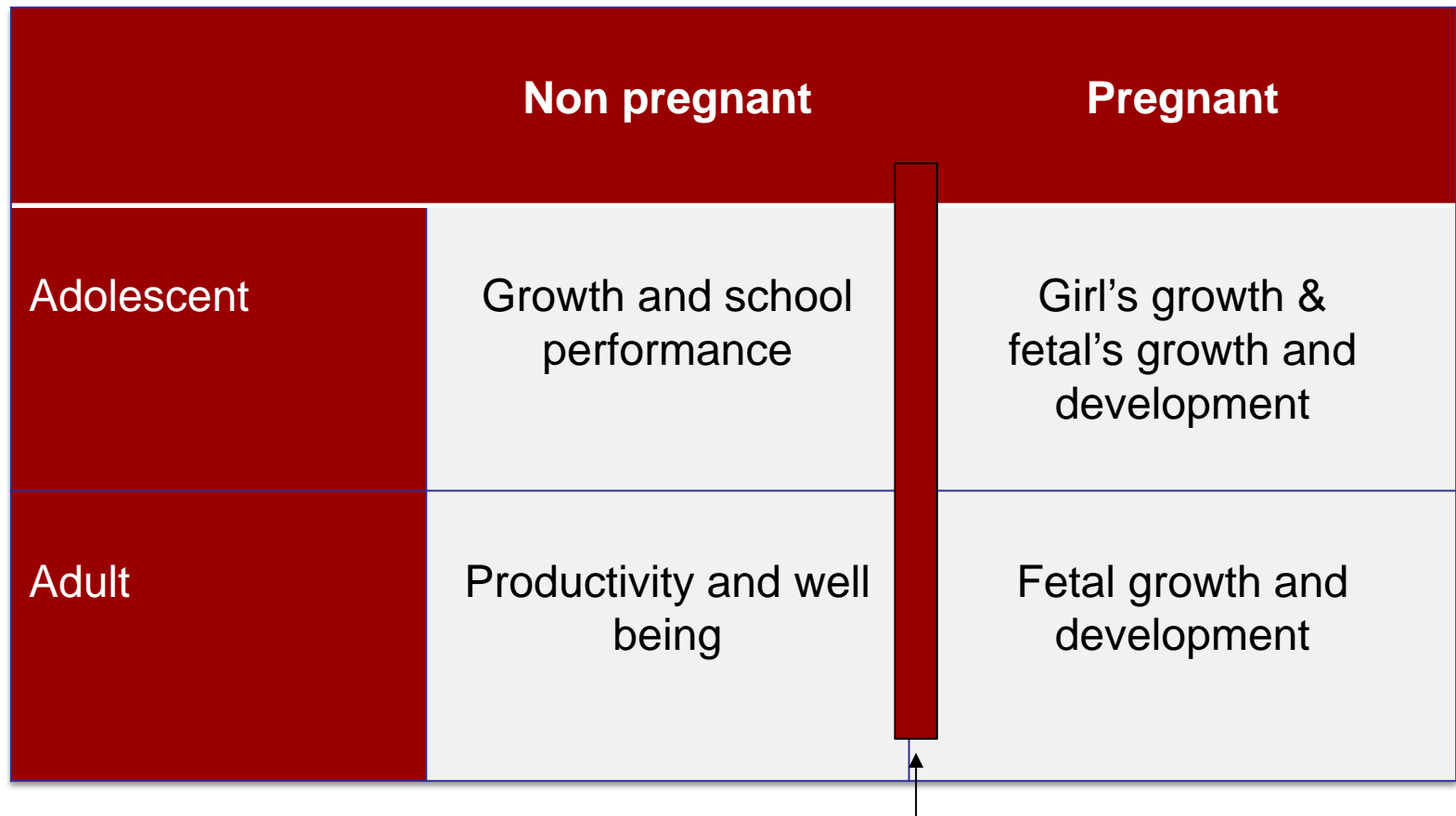


Nutritional Status of Adolescent Girls, guidelines and practices to address malnutrition: Global Picture

Luz Maria De-Regil, DSc, MSc

7-Sep-2016

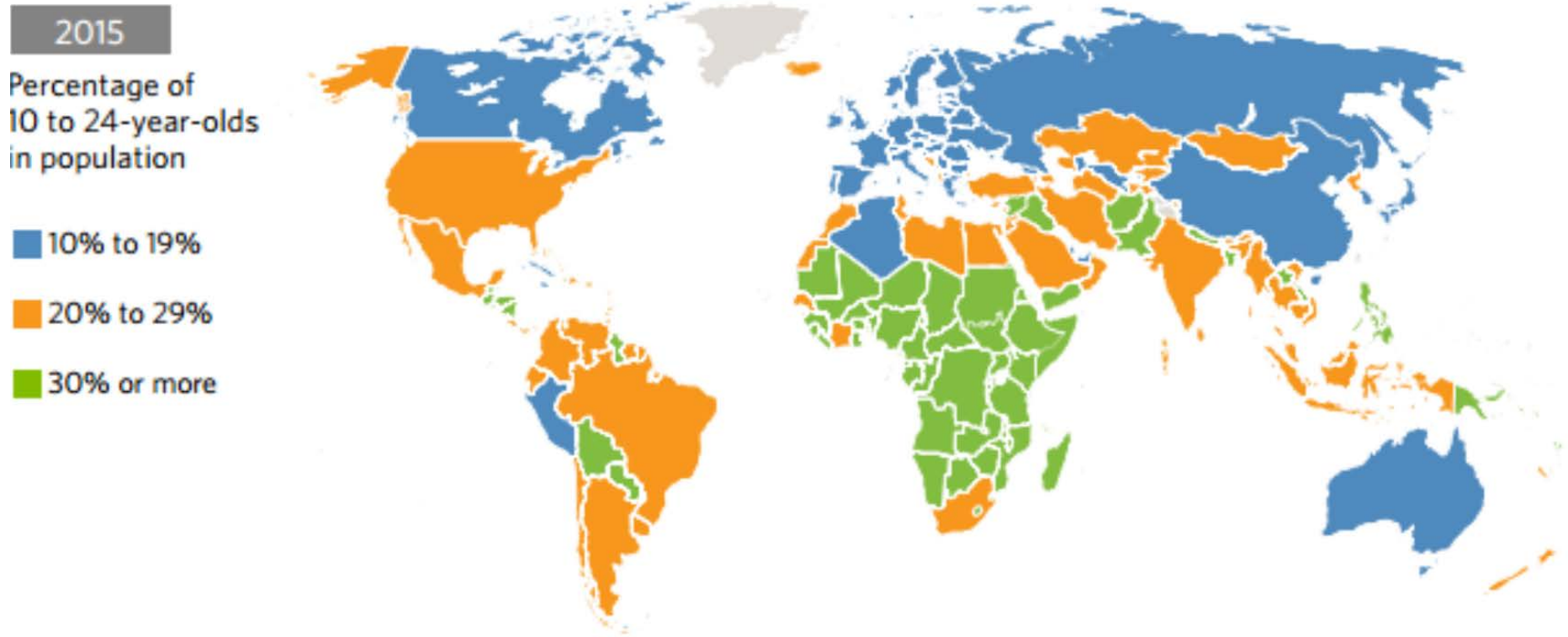
Before starting: Adolescent nutrition ≠ preconceptional nutrition



Preconceptional (interpregnancy) nutrition



Adolescents today – 1.8 billion!



Around a half are women
3 out of 4 live in LMIC

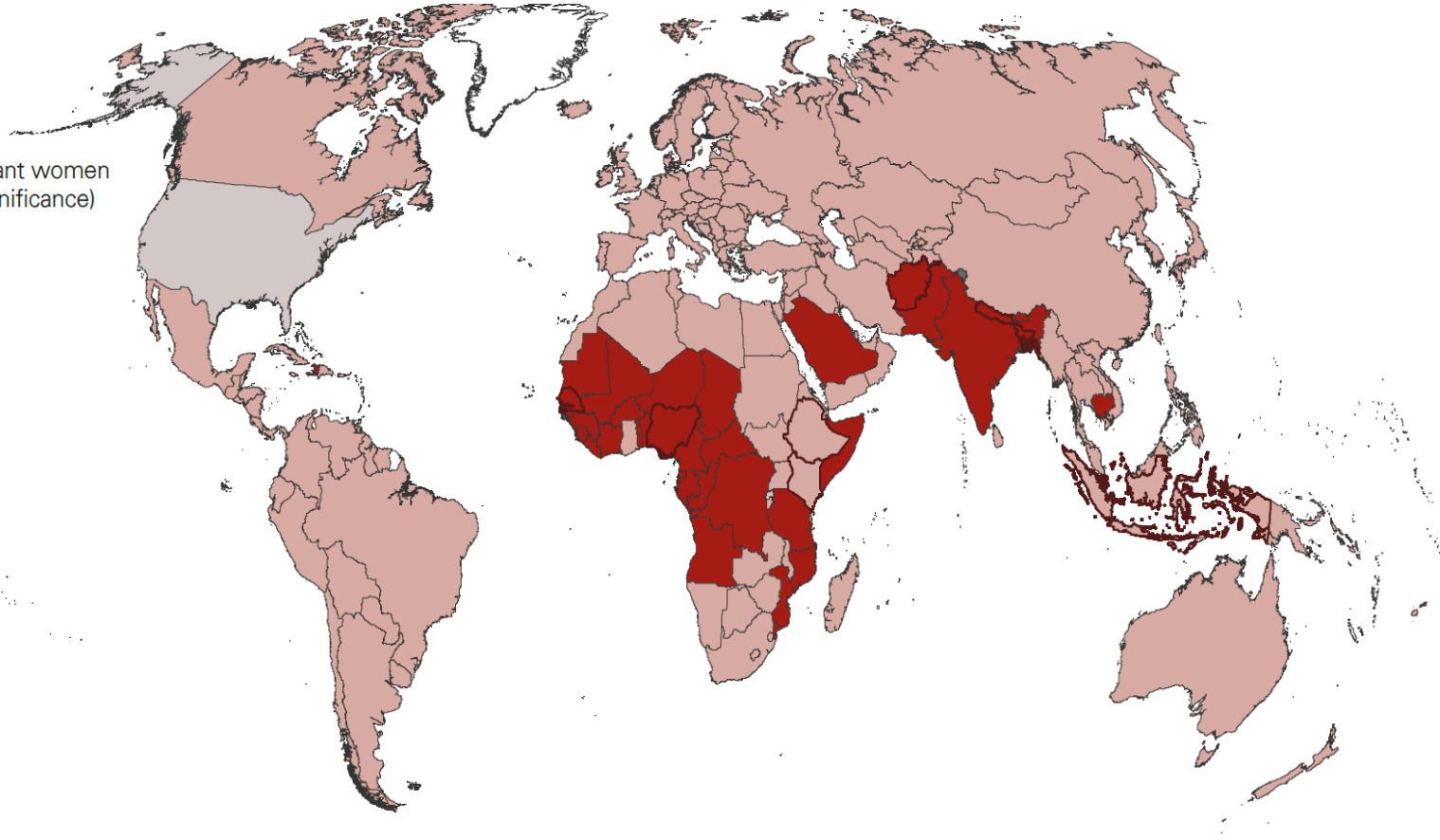
UNFPA, 2014



Women today - anaemia

Prevalence of anaemia in pregnant women
(categorized by public health significance)

- Normal (<5%)
- Mild (5.0-19.9%)
- Moderate (20.0-39.9%)
- Severe ($\geq 40\%$)
- No data



Stevens, et al, 2013



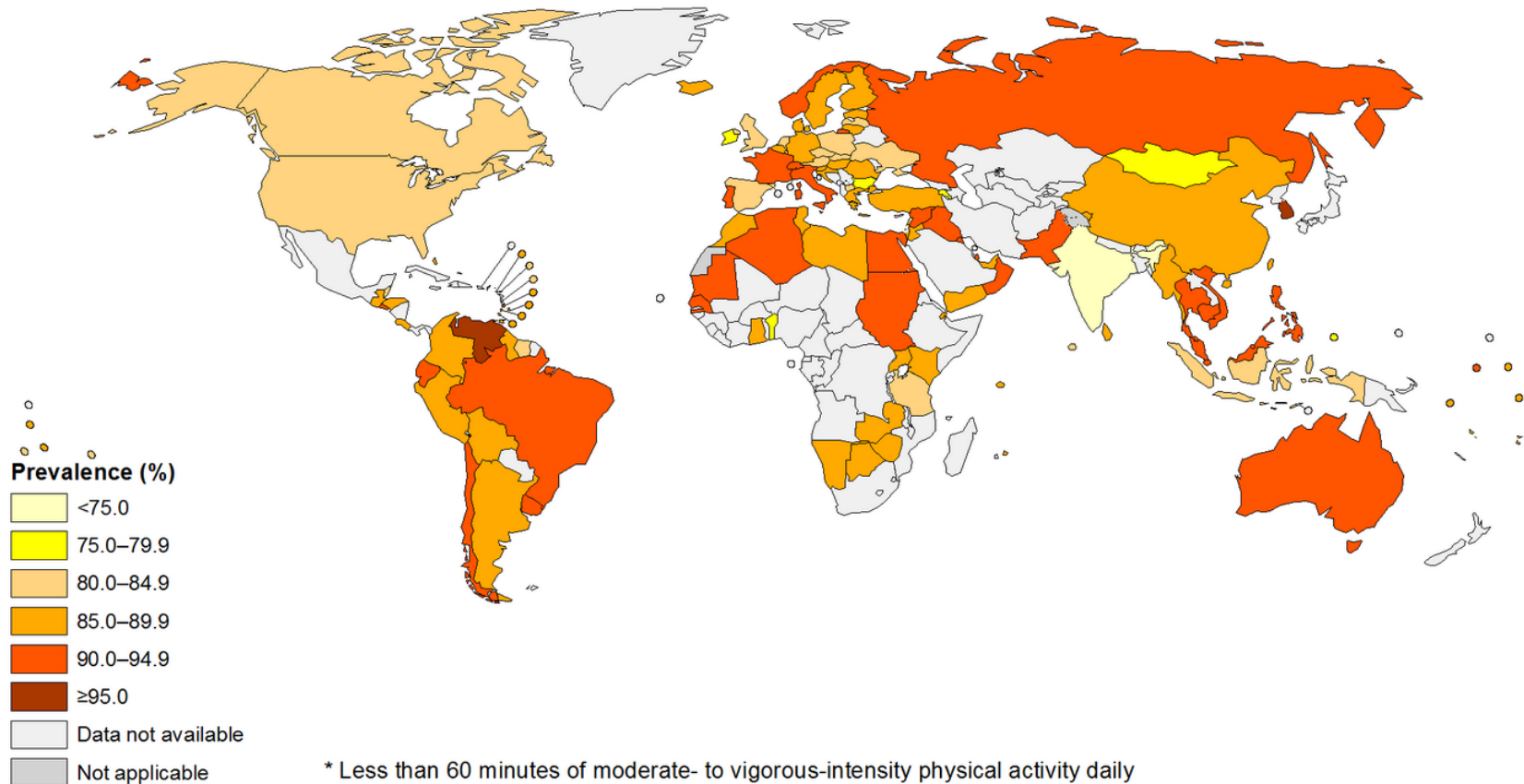
Anemia in Adolescent Girls & Women

- 21 countries assessed by UNICEF, > 1 in 3 girls are anaemic ^a
- 4 of 8 African countries reviewed >40% anemia in 12-14 years of age
- In India 55.8% of adolescents aged 15–19 years are reported to be anaemic
- Higher needs for micronutrients: Iron, vitamin D, calcium & Zinc
- Low dietary availability of iron
- Parasitic infections add to iron deficiency burden

(^aUNICEF, 2012, ^bWoodruff and Duffield, 2000)



Insufficient physical activity: 81%

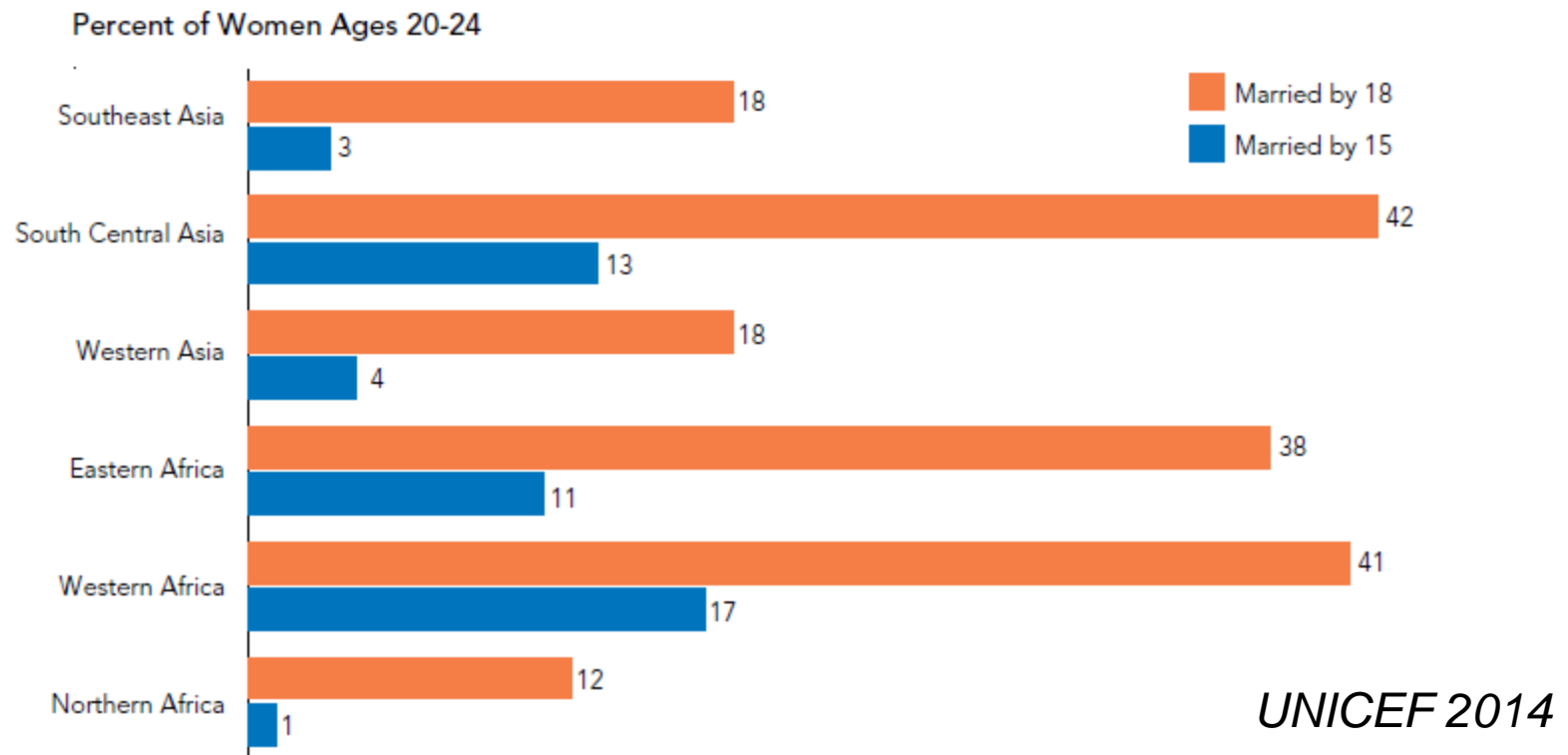


Children and youth aged 5–17 should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity daily.



Nutritional status is linked to age of first pregnancy and number of pregnancies

- Adolescent pregnancies: 17-20 M
- 95% occur in low- and middle-income countries



Adolescent nutrition is not in countries' agenda yet

ADOLESCENT NUTRITION

TABLE 2: INTERVENTIONS TARGETED TO ADOLESCENT GIRLS IN SUN PLANS

Intervention	Bangladesh	Benin	Ethiopia	Guatemala	Indonesia	Kenya	Madagascar	Mozambique	Nepal	Sierra Leone
DIRECT										
IFA supplementation	x		x							
Nutrition and health counselling	x	x	x	x						
Provision of nutrient-rich food		x								
Deworming			x							
Iodised salt access			x							
Education for obesity prevention										
Adolescent-friendly reproductive health services			x						x	
Promotion of hygiene practices to households with adolescents										x
Promotion of girls' education			x						x	
Nutrition education in schools			x						x	
Promotion of economic empowerment and income generation										
Cash transfers for households with adolescents										x
INDIRECT										

Of the SUN countries for which plans were available (22), just fewer than half (10) included any detail on adolescent nutrition.

Save the children 2015

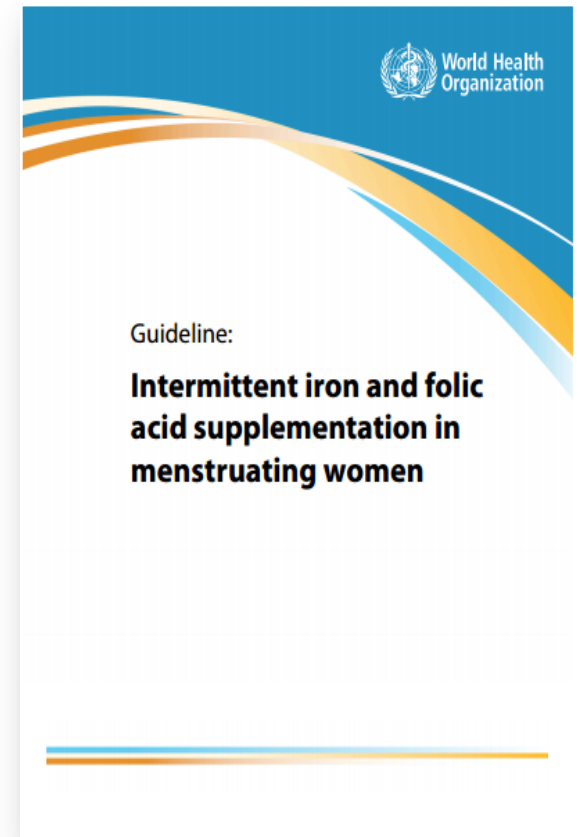


Intermittent Iron and Folic Acid Supplementation

WHO Recommendation

*Intermittent iron and folic acid supplementation is recommended as a public health intervention in menstruating women living in settings where anaemia is highly prevalent, to **improve their haemoglobin concentrations and iron status and reduce the risk of anaemia***

- *Complement with deworming*



http://apps.who.int/iris/bitstream/10665/44649/1/9789241502023_eng.pdf



Approaches for iron supplementation

Characteristic	Daily (2016)	Intermittent (2011)
Frequency	Daily	One, twice or three times a day on non-consecutive days
Dose	30-60 mg/d	60 mg per week
Duration	3 months/year	3 months/semester
Cost	Low	Very low
Adverse effects	Frequent	Less frequent
Adherence	Low	High
Efficacy	High	High
Delivery system	Clinical-based	Schools/Community-based



Delivery platforms and channels:

- **For weekly IFA supplements**
 - Schools: teachers are key for distribution, monitoring encouragement and counseling
 - health sector: do not assume that adolescents access the services
 - women's & community organizations, including faith based, can help reach girls outside school
 - Peer to peer outreach
 - Workplace settings:
- **For messages**
 - peers, teachers, radio, SMS and text messages, TV, local markets/billboards, faith based leaders, workplace





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Weekly iron and folic acid
supplementation programmes for
women of reproductive age

An analysis of best programme practices

SHORT VERSION

Best practices

1. Assess anemia burden
2. Anaemia control strategies
3. Advocacy and policies
4. Strategy for accessing IFA supplements
5. Composition, presentation and supply of IFA supplements
6. Procurement and delivery of IFA supplements
7. BCI
8. Capacity development
9. Monitoring
10. Evaluation

WHO 2011



Generating Demand for Weekly IFA to reduce Anemia

- Need engagement from government (health, education, industry) and potential partners (workplaces & schools, communities)
- Products and Programs need to appeal to adolescents
- Reach adolescents where they already spend their time
- Distinct strategies for different segments of adolescents (in school, out of school, married, unmarried)
- Appeal to their motivations –short term benefits, social norms, aspirations, strength, autonomy
- Willingness and ability to pay for IFA more challenging for lower SES girls in this group, free distribution more appealing



Engagement of medical associations

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The International Federation of Gynecology and Obstetrics (FIGO) recommendations on adolescent, preconception, and maternal nutrition: "Think Nutrition First"^{a,b}

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Conflict of interest

The authors have no conflicts of interest to declare.



A mother brings her child for a check-up at a clinic in Kenya. Photograph courtesy of Micronutrient Initiative.

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FIGO Initiative on Adolescent, Preconception and Maternal Nutrition

Good Nutrition Matters

UNDERNUTRITION causes approximately **3.5 million DEATHS** of women and children

OVERNUTRITION is producing an increase in chronic **NON-COMMUNICABLE DISEASES** such as **DIABETES AND HYPERTENSION**

MICRONUTRIENT DEFICIENCIES affect **2 billion** people worldwide and are caused by an **INADEQUATE DIET** which lacks **VITAMINS AND MINERALS**

Think Nutrition First

Good nutrition → Good health IMPROVING NUTRITION and establishing healthy dietary habits in adolescent girls and in the preconceptional period of women paves the way for healthy pregnancies and healthy babies

Think of the children BENEFITS for the next generation include reduced risk of stunting, obesity, and chronic non-communicable diseases and improved cognitive and behavioral development

Building a prosperous future today A woman's **FITNESS AND HEALTH** is the foundation for her future health and that of generations to come

FIGO Recommends

Greater **ATTENTION** to the links between poor maternal nutrition and increased risk of later non-communicable diseases in the mother and offspring

Greater **ACCESS** to preconception services for women of reproductive age to assist with planning and preparation for healthy pregnancies and healthy children

ACTION to improve nutrition among adolescent girls and women of reproductive age

Public health **MEASURES** to improve nutritional education, particularly of adolescents, girls and young women

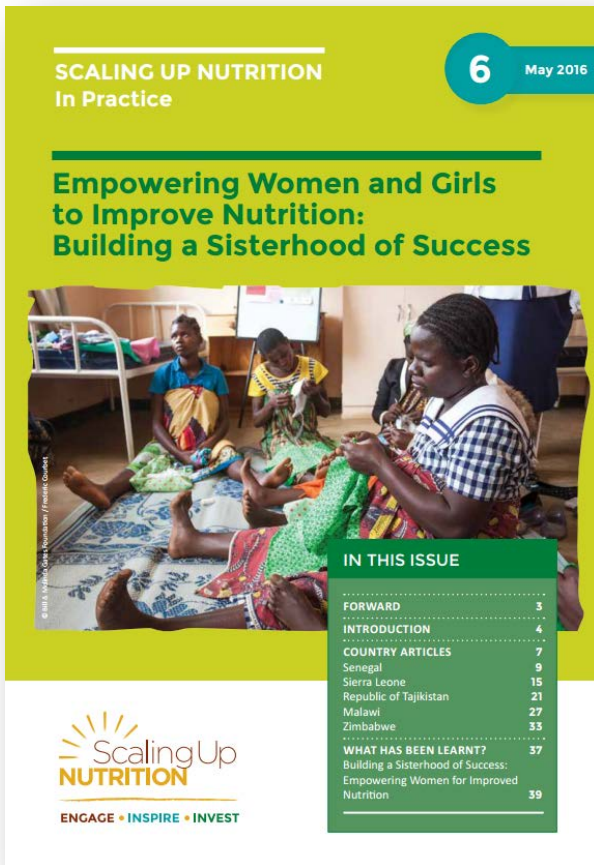
Increased **AWARENESS** of the impact of women's nutrition on themselves and on future generations

Taken from The International Federation of Gynecology and Obstetrics (FIGO) Recommendations on Adolescent, Preconception, and Maternal Nutrition: "Think Nutrition First." *Int J Gynecol Obstet* 2015;131(Suppl 4):5213–524. The FIGO Initiative on Adolescent, Preconception and Maternal Nutrition (Phase II) was supported by an unrestricted educational grant from Abbott.

Infographic produced by the Micronutrient Initiative




Girls and women need to be empowered



- Higher levels of gender discrimination are associated with higher levels of both acute and chronic undernutrition.
- Gender and nutrition are not stand-alone issues with some experts considering women to be the nexus of the agriculture, health and nutrition sectors
- Improvements in women's education are associated with positive impacts on their nutritional status and that of their families.

SUN Movement 2016



Enabling environment for adolescent nutrition

- Stronger political commitment:
 - International Conference of Nutrition - 2
 - Global nutrition targets: anaemia in WRA and low birth weight
 - Sustainable development goals
 - Global Strategy for Women's, Children's, and Adolescents' Health.
- Scaling Up Nutrition
- Progress monitoring: Global Nutrition Report 2014



Recommendations for policies that cover the adolescent nutrition

- Strengthen interventions to improve maternal nutrition and health, beginning with adolescent girls and continuing through pregnancy and lactation.
- Ensure universal access to and use of insecticide-treated nets
- Regulate the marketing of food and non-alcoholic beverages to children in accordance with WHO recommendations.
- Create a conducive environment that promotes physical activity to address sedentary lifestyle from the early stages of life.
- Reduce consumption of sugars sweetened beverages
- Implement policies and practices, including labour reforms, as appropriate, to promote protection of working mothers.



Thank you!

