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

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Before starting: Adolescent nutrition ≠ preconceptional nutrition

<table>
<thead>
<tr>
<th></th>
<th>Non pregnant</th>
<th>Pregnant</th>
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</thead>
<tbody>
<tr>
<td><strong>Adolescent</strong></td>
<td>Growth and school performance</td>
<td>Girl’s growth &amp; fetal’s growth and development</td>
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<tr>
<td><strong>Adult</strong></td>
<td>Productivity and well being</td>
<td>Fetal growth and development</td>
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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

Source: 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

\(^{a}\text{UNICEF, 2012, }^{b}\text{Woodruff and Duffield, 2000}\)
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

UNICEF 2014
Adolescent nutrition is not in countries’ agenda yet

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

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Direct</th>
<th>Indirect</th>
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<tbody>
<tr>
<td>Iron supplementation</td>
<td></td>
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<tr>
<td>Provision of nutritious/delicious food</td>
<td></td>
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<td>Improved sanitation</td>
<td></td>
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<tr>
<td>Improved cleanliness</td>
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<tr>
<td>Increased access to health services</td>
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<td>Education by delay prevention</td>
<td></td>
<td></td>
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<tr>
<td>Promotion of hygiene practices to households</td>
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<tr>
<td>Nutrition education in schools</td>
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<td>Promotion of economic empowerment and income generation</td>
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<td>Cash transfers for households with disabilities</td>
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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

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

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 preconception period of women paves the way for healthy pregnancies and healthy babies

Think of the children

FITNESS AND HEALTH

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

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

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

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!