Adolescent Nutrition: Innovative programs and partnerships to reaching adolescents beyond the health system

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December 2nd, 2019
Adolescence is described as the ages of:

1. 15 - 19
2. 10 - 19
3. 14 - 18
4. 10 - 24
How many of the world’s 1.2 billion adolescents live in low- and middle-income countries?

1. 50%
2. 67%
3. 72%
4. 86%
What is the leading cause of disability (DALYS) in adolescent girls globally?

1. Road Traffic Accidents
2. Anxiety Disorders
3. Diarrheal Diseases
4. Iron Deficiency
   Anaemia
Adolescent Nutrition

• 16% (1 in 6) of the World’s population is between 10-19 years of age
  – 1.2 billion girls and boys

• After infancy, adolescence (10-19 years of age) is the most rapid period of growth with the highest nutritional needs
  – Ages 15–19 have the greatest total energy requirement compared to any age group (~2,420 kcal/day)
    – Higher needs for micronutrients: Iron vitamin D, calcium & Zinc
    – Both undernutrition and obesity or overweight in adolescents are public health concerns in low- and middle income countries
What adolescents eat?

Poor diets drive malnutrition in the world

- 50% of adolescent girls in low- and middle-income countries do not eat 3 meals per day; most skip breakfast.
- 40% of adolescent girls in Latin America and the Caribbean consume fast foods daily.
- 46% of adolescents in East Asia and the Pacific do not eat enough fruits and vegetables daily.

*Keats et al., 2017*
How physical active are adolescents?

- School-going adolescents spend 3 or more hours per day in sedentary activities*
- Only 23.8% of boys and 15.4% of girls meet the physical activity recommendations of at least 60 min of physical activity per day on at least 5 days per week*
- Sedentary behavior of ≥3 h/day was observed in 30.6% adolescents (ranging from 9.7% in Myanmar, to 52.6% in St. Lucia)**

Iron-deficiency anaemia number one cause of DALYs for adolescent girls

Figure E. Estimated top five causes of adolescent disability-adjusted life years (DALYs) lost by sex and age, 2015.

Figure from AA-HA! (Global Accelerated Action for the Health of Adolescents), WHO, 2017.
Potential consequences of anemia in adolescent girls

1. School performance

2. Loss productivity

3. Negative reproductive outcomes
Girls in low and middle income countries married

- Adolescent pregnancy: 17-20 M
- 95% occur in low- and middle-income countries
Gender Equality & Nutrition

- Improved Nutrition
- Healthy Adolescent Girls Contributing to Communities
- Gender Equality
- Improved School Performance
NI’s Adolescent Nutrition Programs and Innovative Partnerships

[Map showing countries and regions with different colors indicating WIFAS programming]
Double Duty Actions for Improving Nutrition: NI’s Right Start Program

• **Nutrition Specific:**
  - Weekly Iron Folic Acid Supplementation & Nutrition Education
    - In school and out of school platforms
Policy that informs programs

<table>
<thead>
<tr>
<th>Suggested scheme for intermittent iron and folic acid supplementation in menstruating women</th>
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<tbody>
<tr>
<td><strong>Supplement composition</strong></td>
</tr>
<tr>
<td>Iron: 60 mg of elemental iron*</td>
</tr>
<tr>
<td>Folic acid: 2800 μg (2.8 mg)</td>
</tr>
<tr>
<td><strong>Frequency</strong></td>
</tr>
<tr>
<td>One supplement per week</td>
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<tr>
<td><strong>Duration and time interval between periods of supplementation</strong></td>
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<tr>
<td>3 months of supplementation followed by 3 months of no supplementation after which the provision of supplements should restart.</td>
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<tr>
<td>If feasible, intermittent supplements could be given throughout the school or calendar year</td>
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<td><strong>Target group</strong></td>
</tr>
<tr>
<td>All menstruating adolescent girls and adult women</td>
</tr>
<tr>
<td><strong>Settings</strong></td>
</tr>
<tr>
<td>Populations where the prevalence of anaemia among non-pregnant women of reproductive age is 20% or higher</td>
</tr>
</tbody>
</table>

http://apps.who.int/iris/bitstream/10665/44649/1/9789241502023_eng.pdf
Strengthening Health Systems and Multisectoral Collaboration: Demonstration to Scale
Nutrition Curriculum for Adolescents

- Growth, puberty, reproductive health and nutritional needs
- Dietary Diversity & Balanced Diet
- Menstrual hygiene management
- Infections and Nutrition
- Physical Activity
- Healthy snacking and food choice
- Cultural value of foods
- Consider agency of adolescents
- Skills building – cooking, food preparation, budgeting/purchasing
WHO Effective actions for improving adolescent nutrition-2018

1. Promoting healthy diets in adolescents
2. Providing additional micronutrients through fortification and targeted supplementation
3. Managing acute malnutrition in adolescents
4. Preventing adolescent pregnancy and poor reproductive outcomes
5. Promoting preconception and antenatal nutrition in adolescents
6. Providing access to safe environment and hygiene for adolescents
7. Promoting physical activity for adolescents
8. Disease prevention and management
**Lessons from Delivering WIFAS & Nutrition Education**

**School Based Delivery**

1. Adherence & Participation is highly linked to attendance

2. Peer adolescent girl leaders are often already mobilized at many schools

3. Keeping teachers engaged is essential

4. Coordination with both Ministries of Education and Health at every level are critical

5. Lack of Water at schools makes consumption more challenging

**Reaching Out-of-School Girls**

1. Hard to reach approach, more resource intensive, adherence is harder to monitor and support

2. Low levels of adolescent access to health system for preventative services & intervention
Gender Equality and Nutrition Sensitive Interventions

• **Nutrition Specific:**
  - Weekly Iron Folic Acid Supplementation &
  - Nutrition Education
    - In school and out of school platforms

• **Nutrition Sensitive:**
  - Keeping Girls in School
  - WASH
  - Menstrual Hygiene Management, and overcoming Gender barriers to School attendance
  - Delaying Early Marriage and Adolescent Pregnancy
• **Projected Reach**: 585,000 school age & adolescent girls
• **Location**: Philippines, Sri Lanka, Tanzania, Madagascar
• **Key Interventions**: Girl Powered Nutrition Program
  o **Advocacy by Adolescent Girls**
  o **Nutrition Curriculum/Nutrition Badge**
    o WAGGGS co-creation process with adolescent girls + technical expertise from **NI**:
      - Nutrition Needs in Life Cycle
      - Nutrition Needs of Girls and Adolescents
      - Rainbow Plate: Dietary Diversity
      - Balanced Diet
      - Physical Activity
      - Good Sleep
      - Hydration
      - Hygiene
GIRL EFFECT SPRINGSTER

• **Projected Reach**: 4,800,000
• **Location**: Indonesia

**Key Interventions:** Nutrition Information through Online Mobile Platform
- Information on Nutrition for Growth and Wellbeing
- Healthier Snacking Options
- Alternatives to High Sugar Drinks
- Dietary Diversity & WIFAS promotion
- **Projected Reach**: 25,000 adolescent girls in safe spaces Nigeria; 130,000 out of school girls Senegal
- **Location**: 4 states Northern Nigeria & 3 Regions Senegal
- **Key Interventions**: Integrating Nutrition into Family Planning Services
  - **Nutrition Specific**:
    - Availability of WIFAS and counseling to adolescents
    - Gender Sensitive Nutrition Education
  - **Nutrition Sensitive**:
    - Keeping adolescent girls in school
    - Family Planning Information
    - Preventing Early Marriage and Delaying First pregnancy, Birth Spacing
Opportunities in Adolescence

1. Addressing current nutrition & preventing future malnutrition

2. Forming lifelong nutritional and lifestyle behaviors

3. Promoting Gender Equality and Girls’ Empowerment
Frequently Asked Questions on WIFAS for Adolescents

Weekly Iron Folic Acid Supplementation (WIFAS) for Adolescents

https://www.nutritionintl.org/resources/weekly-iron-folic-acid-supplementation-wifas-for-adolescents-faqs/
HOW A NEW COURSE FOCUSED ON ADOLESCENT NUTRITION AND ANAEMIA WILL HELP BRIDGE THE GAP
Her Voice

Future Prime Minister

teachers

engineers

pilots

flight attendants

artists

rich business women

university students

civil servants

doctors
References & Resources

References

9. UNICEF India, FAQs Anaemia

Additional Resources:

- https://www.nutritionintl.org/resources/weekly-iron-folic-acid-supplementation-wifas-for-adolescents-faqs
Thank you