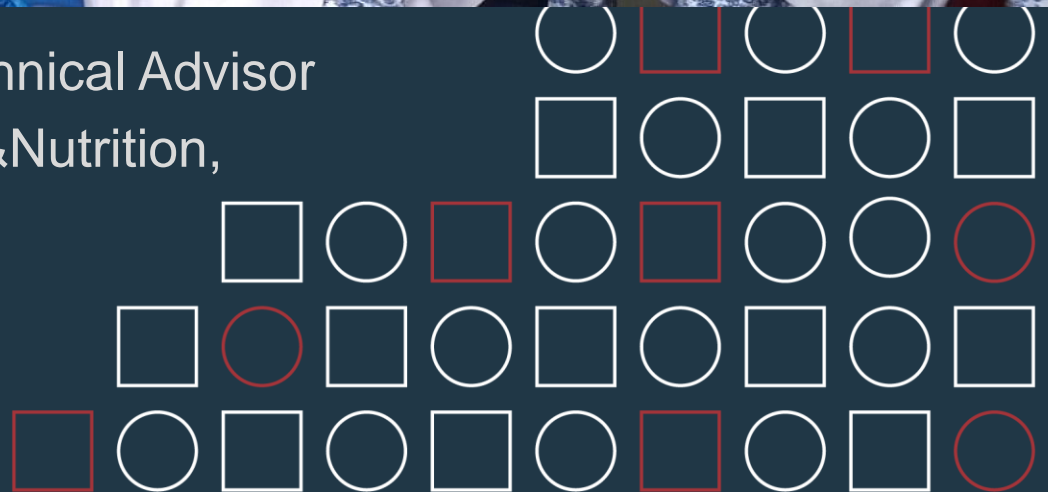


Adolescent Nutrition: Innovative programs and partnerships to reaching adolescents beyond the health system



Marion Roche, PhD, Senior Technical Advisor
Adolescent & Women's Health & Nutrition,
December 2nd, 2019



QUIZ

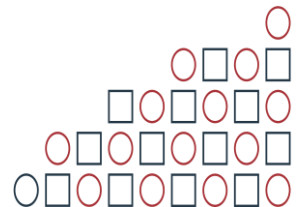
Adolescence is described as the ages of:

1. 15 - 19

2. 10 -

3. 14 - 18

4. 10 - 24



QUIZ

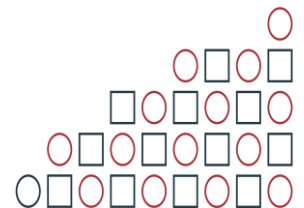
How many of the world's 1.2 billion adolescents live in low- and middle-income countries?

1. 50%

3. 72%

3. 67%

4.



QUIZ

What is the leading cause of disability (DALYS) in adolescent girls globally?

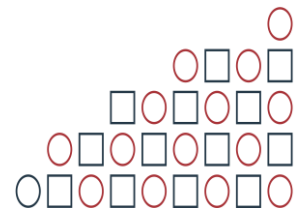
1. Road Traffic Accidents

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 boys¹
- After infancy, adolescence (10-19 years of age) is the most rapid period of growth with the highest nutritional needs²
 - 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 & Zinc³
 - Both undernutrition and obesity or overweight in adolescents are public health concerns in low- and middle income countries³



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.

How physical active are adolescents?



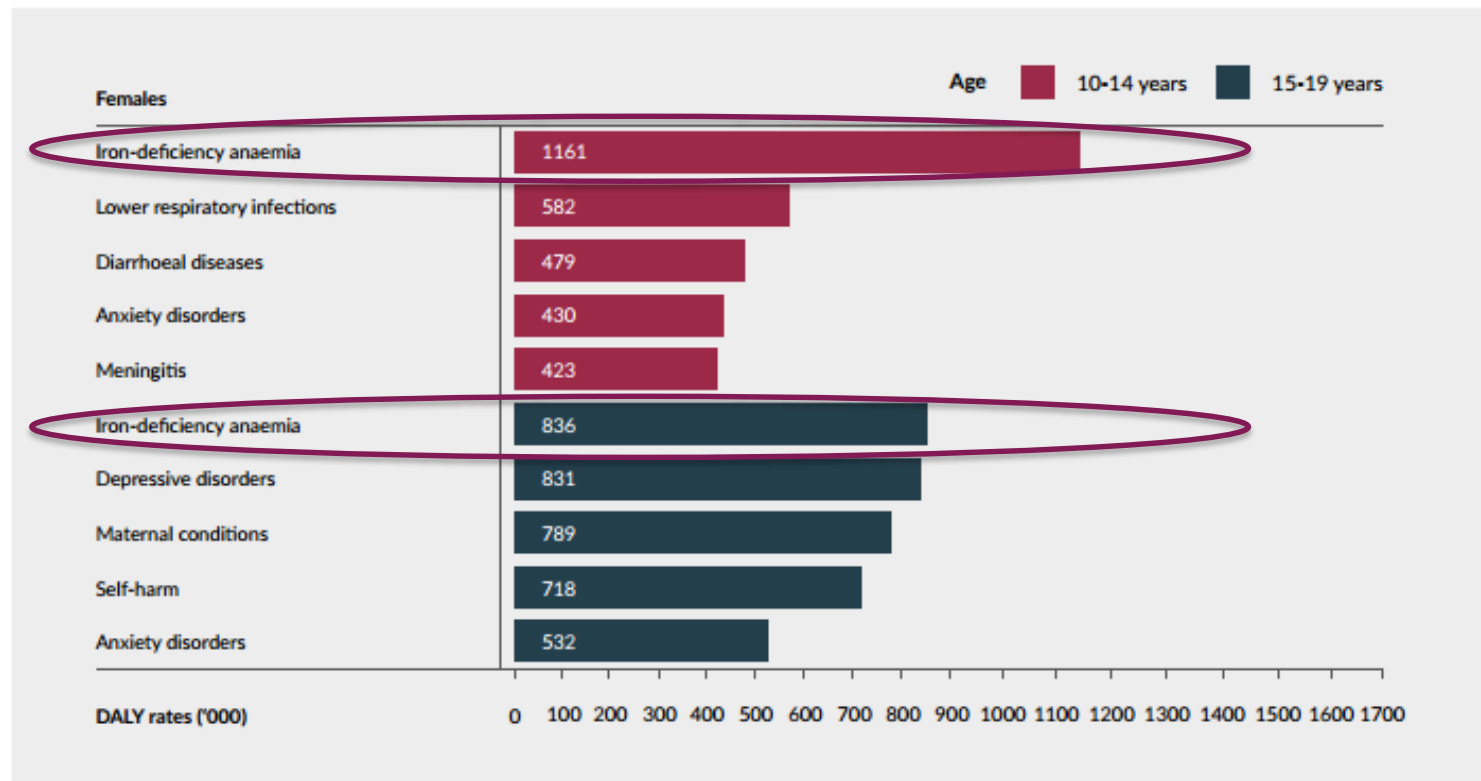
- School-going adolescents **spend 3 or more hours per day** in sedentary activities*
- **Only 23.8% of boys** and **15.4% of girls** meet the physical activity recommendations of at least 60 min of physical activity per day on at least 5 days per week*
- Sedentary behavior of **≥3 h/day** was observed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

*Guthold et al. Journal of Paediatrics;

**Vancampfort et al. International Journal of Behavioural Nutrition and Physical Activity, 2018

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.



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

Before age 18

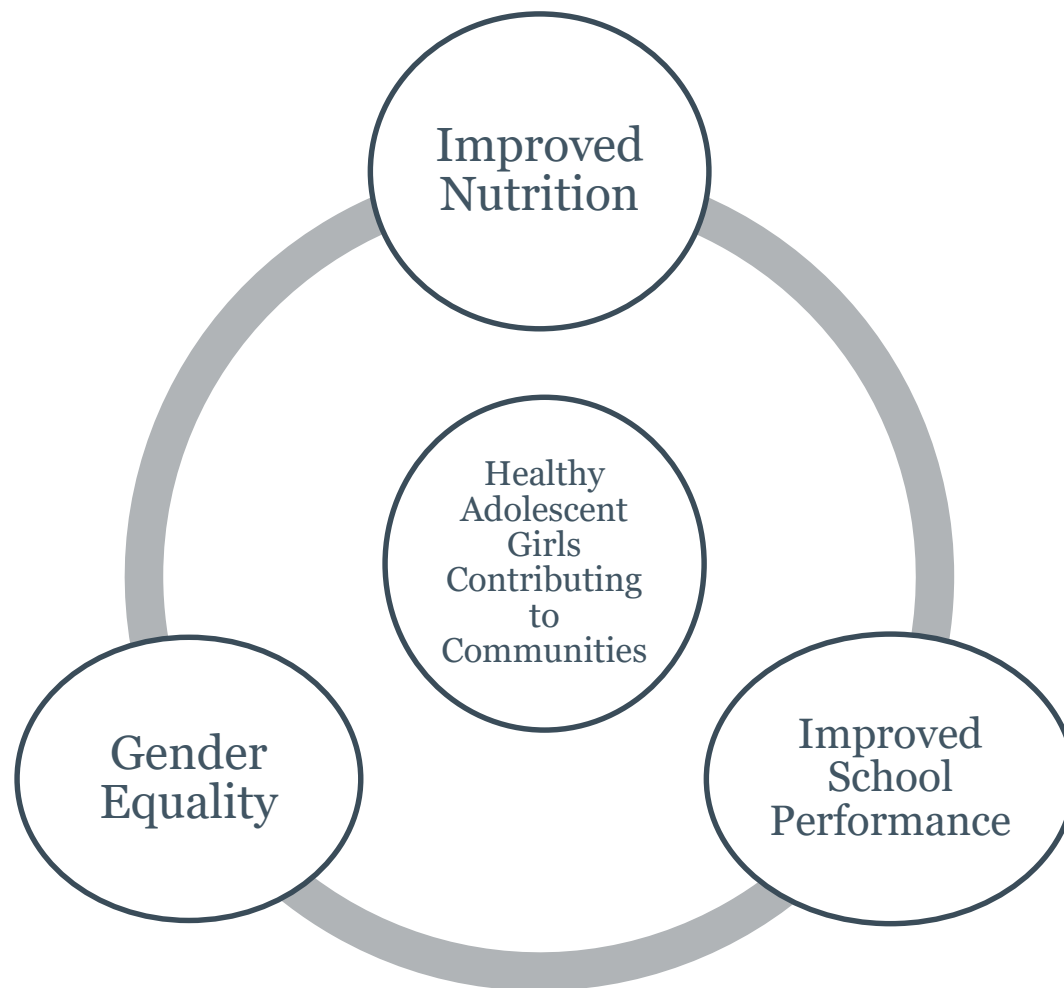


Before age 15

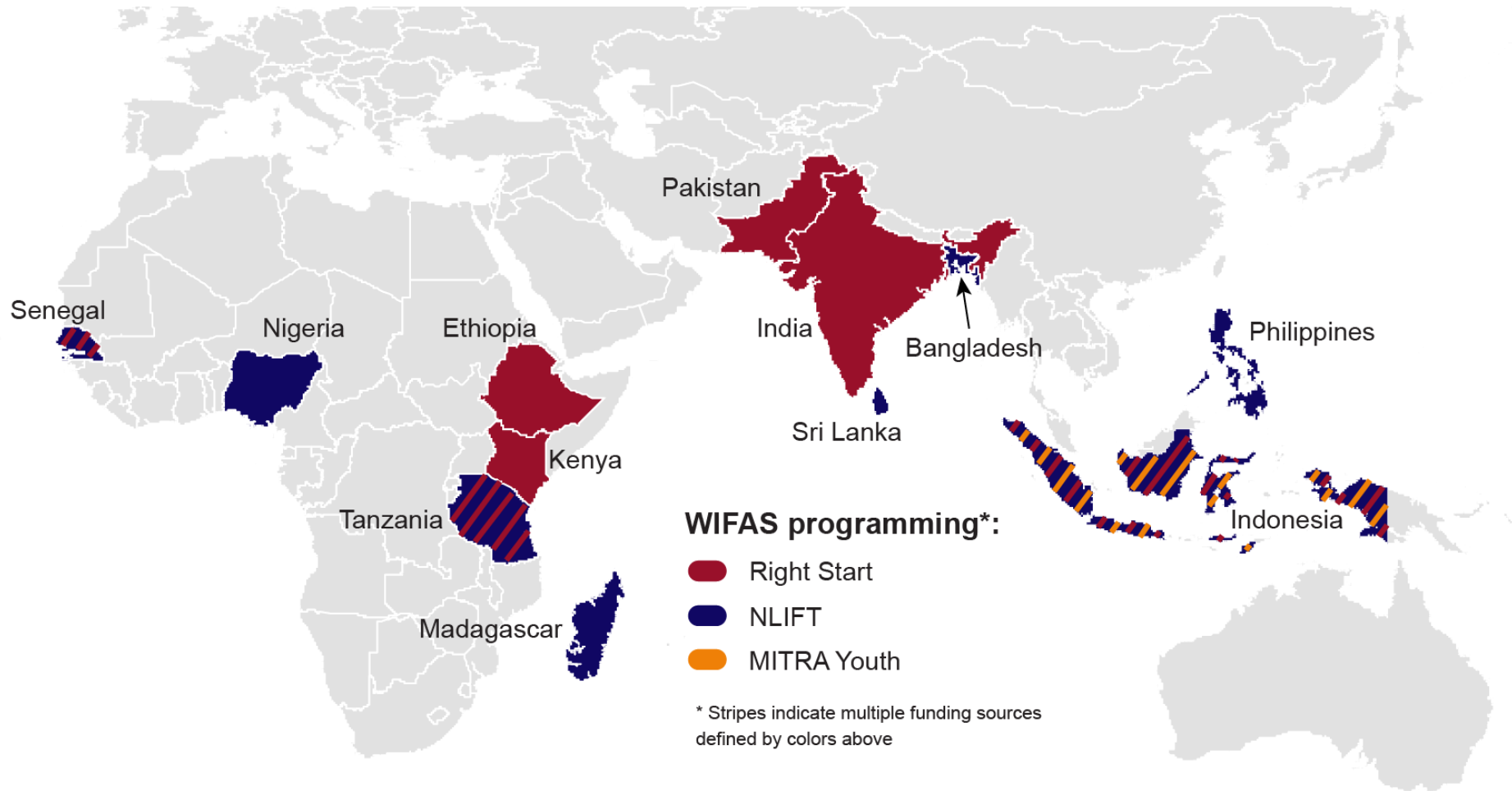


- Adolescent pregnancy: 17-20 M
- 95% occur in low- and middle-income countries

Gender Equality & Nutrition



NI's Adolescent Nutrition Programs and Innovative Partnerships



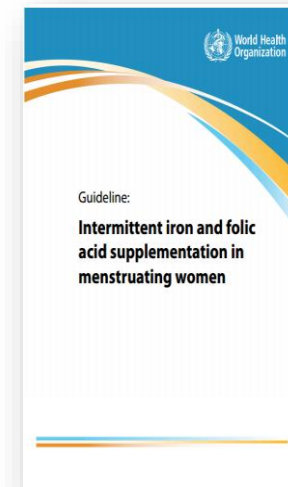
Double Duty Actions for Improving Nutrition: NI's Right Start Program

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

Policy that informs programs

Suggested scheme for intermittent iron and folic acid supplementation in menstruating women

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



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

Strengthening Health Systems and Multisectoral Collaboration: Demonstration to Scale

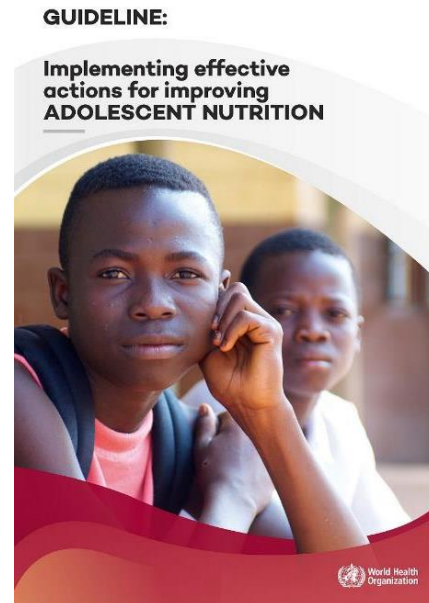


Nutrition Curriculum for Adolescents

- ☐ 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

WORLD ASSOCIATION OF GIRL GUIDES & GIRL SCOUTS



- **Projected Reach:** 585,000 school age & adolescent girls
- **Location:** Philippines, Sri Lanka, Tanzania, Madagascar
- **Key Interventions:** Girl Powered Nutrition Program
 - **Advocacy by Adolescent Girls**
 - **Nutrition Curriculum/Nutrition Badge**
 - **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



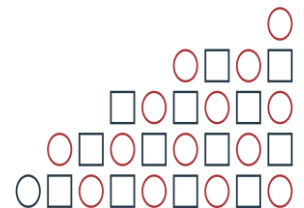
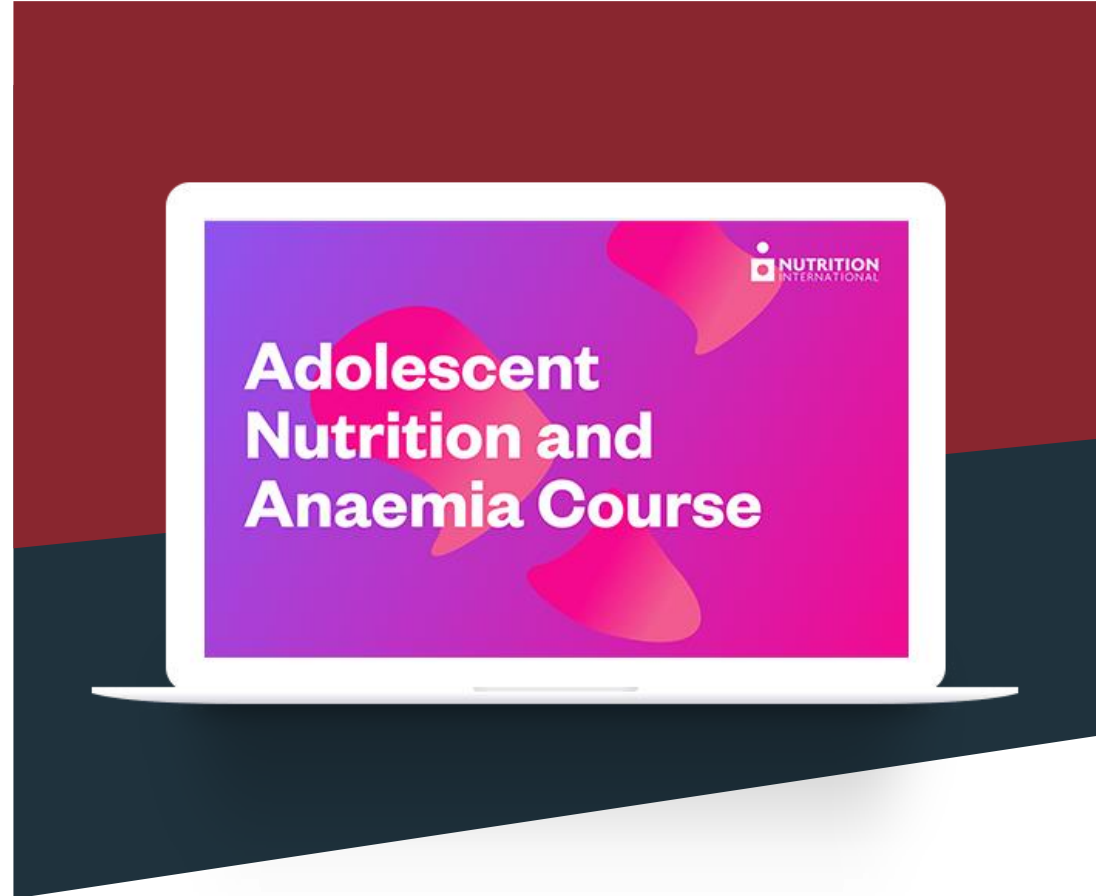


- **Projected Reach:** 25,000 adolescent girls in safe spaces Nigeria; 130,000 out of school girls Senegal
- **Location :** 4 states Northern Nigeria & 3 Regions Senegal
- **Key Interventions:** **Integrating Nutrition into Family Planning Services**
 - **Nutrition Specific:**
 - ☐ Availability of WIFAS 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

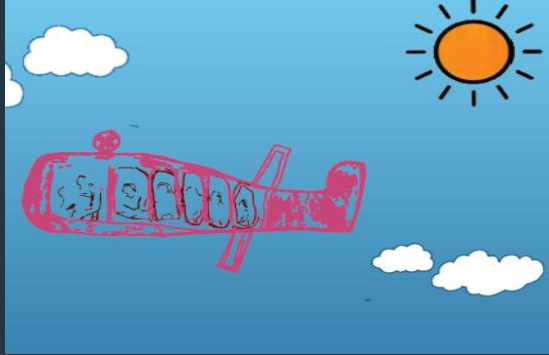
Opportunities in Adolescence

- 1. Addressing current nutrition & preventing future malnutrition**
- 2. Forming lifelong nutritional and lifestyle behaviors**
- 3. Promoting Gender Equality and Girls' Empowerment**

**HOW A NEW
COURSE FOCUSED
ON ADOLESCENT
NUTRITION AND
ANAEMIA WILL
HELP BRIDGE THE
GAP**



Her Voice



rich business women

Future Prime
Minister

university
students

teachers

civil servants

engineers

pilots

flight
attendants

doctors

artists

References & Resources

References

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7. Vancampfort et al. International Journal of Behavioural Nutrition and Physical Activity,2018
8. UNICEF. 2012. The state of the world's children 2011: Adolescence an age of opportunity. New York: United Nations Children' Fund.
9. UNICEF India, FAQs Anaemia
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Additional Resources:

- <https://www.nutritionintl.org/resources/weekly-iron-folic-acid-supplementation-wifas-for-adolescents-faqs>
- <https://www.who.int/nutrition/publications/guidelines/effective-actions-improving-adolescent/en/>

Thank you

