Nutrition in Adolescence

JUNE 2018 // BRIEF

BANGLADESH

Why Focus on Adolescents?

Malnutrition during adolescence can have lifelong consequences. Adolescents undergo rapid biological and socioemotional changes and set lifelong dietary and related habits. Gender norms can leave girls disproportionately impacted by food insecurity, but many adolescent boys are malnourished as well. Adolescent girls are at risk of dropping out of school, marrying, and becoming pregnant—all of which can harm their nutrition and health as well as that of their offspring. Moreover, adolescence marks the last window of opportunity to reverse stunting.

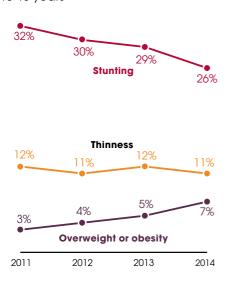
Adolescent Nutrition in Bangladesh

- A nutrition transition is occurring, but undernutrition is still common among adolescents: Stunting has declined but remains high, thinness has remained steady, and overweight is increasing. Anemia and deficiencies in iodine, zinc, and vitamin A are common.
- Adolescents—especially girls in poorer households—consume inadequately diverse diets.
- Other determinants of poor nutrition include early marriage, which is declining but still common, and low secondary school enrollment, which is widespread.
- Within Bangladesh, there is large regional variation in different forms of malnutrition and their determinants.
- While there is less nutritional data on adolescent boys, they also experience a high burden of malnutrition, especially thinness.



Nutritional Status and Trends

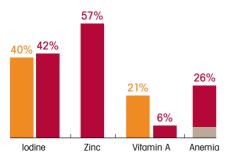
Anthropometry in adolescent girls 10-18 years



Overweight and obesity, which are risk factors for diet-related noncommunicable diseases such as diabetes and cardiovascular disease, are rising in Bangladesh, as they are worldwide.

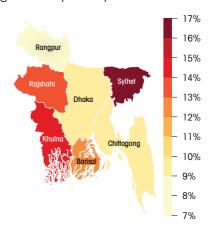
Prevalence of **micronutrient** deficiencies and anemia in 2011–2012

- Nonpregnant, nonlactating women15–49 years
- Children 6–14 years
- Iron deficiency anemia

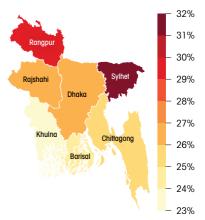


Severe vitamin A deficiency (as shown in the graph) is relatively low, but marginal deficiency is much higher—74% in children 6-14 years and 40% in nonpregnant, nonlactating women.

Prevalence of **thinness** in adolescent girls 10–18 years by division in 2014



Thinness—indicating acute deficiency in macronutrients, chronic undernutrition, or both—appears relatively low. This is because the standard measure of this indicator for adolescents uses a cutoff reflecting a severe level of thinness. If a cutoff that better corresponded with the severity of adult thinness were used, the prevalence of thinness would probably be closer to that of stunting.

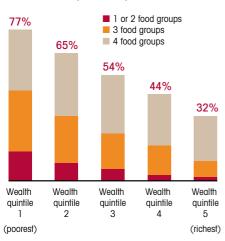


Stunting, which reflects past and recent chronic undernutrition, is declining among adolescent girls but remains high.

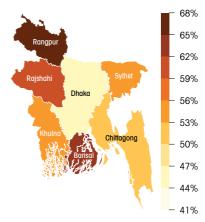
Prevalence of **stunting** in adolescent girls 10–18 years by division in 2014

Key Determinants of Adolescent Malnutrition

Prevalence of **inadequate dietary diversity** in women and adolescent girls 10-49 years in 2014



By wealth quintile



By division

Note: Inadequate dietary diversity is defined here as consumption of fewer than 5 out of the 9 food groups in the previous 24 hours.

Dietary intake

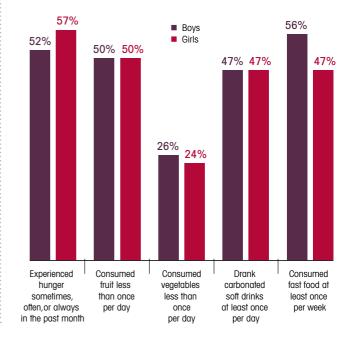
More than half of adolescent girls and women consumed inadequately diverse diets nationally in 2014.

About 80% of kilocalories per capita per day in Bangladesh are from very micronutrient-poor foods, and 70% are from rice alone (75% for rural adolescents).

Only 58% of households have adequately iodized salt.

Dietary diversity varies by season: it is lowest during the post-aus season and highest during the monsoon.

Diets of school-going adolescent boys and girls 13-17 years

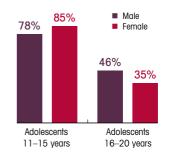


Key Determinants of Adolescent Malnutrition

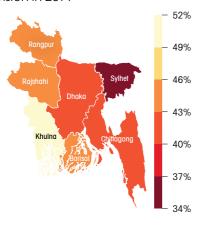
Child marriage and school attendance

Delaying marriage by 1 year in Bangladesh has been associated with nearly a quarter-of-a-year increase in schooling as well as increased literacy for adolescent girls. Educational attainment is associated with a host of nutritional outcomes.

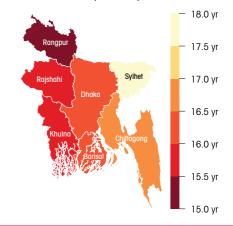
Percentage of adolescents **attending** school by age and sex in 2014



Percentage of adolescents 11–17 years attending secondary school by division in 2014



Median **age at first marriage** among women 20–49 years by division in 2014



What Can Be Done?

- Carry out interventions to promote safe and healthy diets rich in micronutrients and fiber, including fruits and vegetables, legumes, fish, eggs, meats, and dairy, and that aim to reduce consumption of energy-dense, nutrient-poor foods, such as sugar, refined flours, and oils.
- Expand programs that incentivize school enrollment, delay marriage, and increase educational attainment, especially for adolescents in the poorest households.
- Increase coverage of fortified rice, salt, oil, and wheat flour.

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