

# Adolescent Nutrition – Year in review

## 2023

By Emergency Nutrition Network (ENN)

*Here we summarise key outputs for 2023 from ENN, the Global Adolescent Nutrition Network (GANN), and friends, pertaining to nutrition of adolescents and school-age children (5-19 years).*

### **1. Research gaps and priorities for adolescent nutrition**

Using the Child Health and Nutrition Research Initiative (CHNRI) methodology, a list of 48 research questions was compiled and questions were scored against defined criteria using a stakeholder survey.

The top 5 research priorities are summarised in Box 1, with full results available [here](#). We also collates current knowledge and evidence gaps for the top six CHNRI questions, and propose a detailed, global research agenda to support future research [here](#). Results are described and discussed in this [webinar recording](#).

Box 1. Summary of top 5 research priorities:

1	How should antenatal and postnatal care be adapted to effectively and cost-effectively support the specific needs of pregnant adolescents?
2	What strategies are effective for delivering interventions in schools to improve diets and nutrition of adolescents?
3	What strategies are effective at involving adolescents in defining their own context-specific solutions?
4	What are effective, context-specific, behaviour change communication strategies to improve diets and nutrition of adolescents?
5	What improvements can be made to local food systems to support access to healthy diets in schools?

## 2. Adolescent pregnancy is associated with risk of undernutrition in children

We conducted a systematic review and meta-analysis to examine associations between adolescent pregnancy and child wasting and underweight in children under five years.

We found 92 studies; 57 were included in the meta-analysis. The meta-analysis showed that children born to adolescent vs. adult mothers were at a higher risk of moderate and severe underweight (Figure 1). Findings on risk of wasting were mixed.

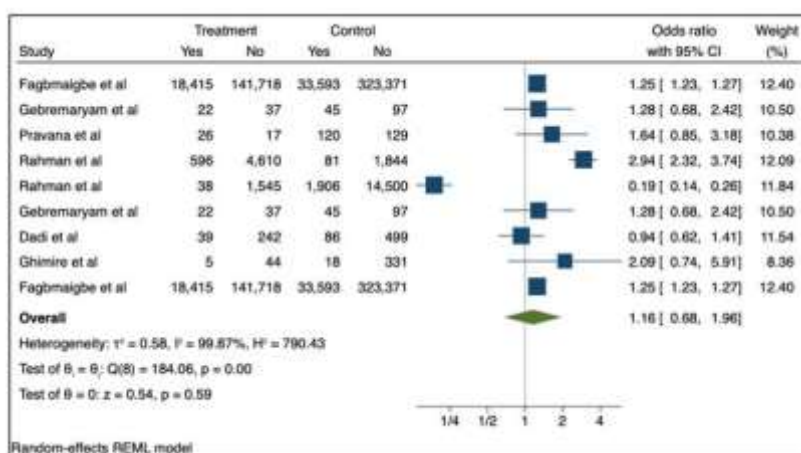


Figure 1. Meta-analysis for the association between adolescent vs. adult pregnancy and the pooled odds of severe childhood underweight (1–59 months).

## 3. What policies are needed to prevent all forms of malnutrition in adolescents?

We created a framework based on evidence-based recommendations, reports and frameworks to support adolescent nutrition to review adolescent nutrition policies. It included actions across the following policy areas:



We then reviewed policy landscapes for two countries (Bangladesh and Malawi), explored the extent to which policies have been implemented and recommended priority actions to address policy gaps. Read our report [here](#).



## 4. How does the Demographic and Health Survey (DHS) update benefit policy and programming?

The DHS now report adolescent-specific indicators for nutritional status (Figure 2)! Unlike in the past when adolescent anthropometry was summarised using adult BMI cut-offs.

We have compiled a short brief outlining WHY this change was needed and HOW it will help countries better respond to adolescents' needs. We also provide accompanying slides for communicating about the changes.

Short stature	Height-for-age z-score (HAZ) <-2
Total thin	BMI-for-age z-score (BAZ) <-1
Mildly thin	BAZ <-1 to -2
Moderately and severely thin	BAZ <-2
Overweight and obese	BAZ >+1
Overweight	BAZ +1 to +2
Obese	BAZ >+2

Figure 2. Age- and sex-specific definitions used for adolescent nutritional status in the new DHS-8

## 5. What indicators and global targets are needed for adolescents?

Currently, we have limited standardised nutrition surveillance systems for adolescents and even fewer nutrition targets.

This report summarises current international targets, present the results of a wide stakeholder survey to identify which indicators should be prioritised, and recommends new targets.

### *Box 2. Examples of recommended targets for adolescent nutrition*

#### HEALTH AND NUTRITION

1. **Anaemia:** Extend the current target (50% reduction in women) to early adolescence and to boys.
2. **Overweight:** Extend the current target (no increase in childhood overweight) to adolescents.
3. **Physical activity:** Achieve a 10% relative reduction in the prevalence of insufficient physical activity (defined as <60 mins of moderate activity daily).
4. **Thinness:** Align with the target for young children: reduce and maintain thinness (BAZ/MUAC) to less than 5% (in those 5-19 years).

## Other academic publications:

- [Chowdhury et al., 2023](#), The impact of antenatal balanced plate nutrition education for pregnant women on birth weight: A cluster randomised controlled trial in rural Bangladesh
- [Passarelli et al., 2023](#), Estimating national and subnational nutrient intake distributions of global diets
- [BMJ Collection on Adolescent Wellbeing](#)
- [Kim et al., 2023](#), Feasibility and impact of school-based nutrition education interventions on the diets of adolescent girls in Ethiopia
- [Dandona et al., 2023](#), Review of the India Adolescent Health Strategy in the context of disease burden among adolescents
- [Abera et al., 2023](#), A systematic review and meta-analysis of adolescent nutrition in Ethiopia: Transforming adolescent lives through nutrition (TALENT) initiative
- [Wardak et al., 2023](#), Adolescent rights-based approaches to health research about us
- [Sabet et al., 2023](#), The forgotten girls: the state of evidence for health interventions for pregnant adolescents and their newborns in low-income and middle-income countries

## Other Events

- On July 26, 2023, the World Health Organization (WHO) Expert Medicines Committee accepted Nutrition International's submission to include the **new formulation of weekly iron and folic acid supplementation (WIFAS) in the Model List of Essential Medicines (EML)**. A huge win. Read more [here](#).
- In April 2023, Alive & Thrive held a webinar on **'How an adolescent nutrition program in Ethiopia has led to improvements in dietary practices of girls'**. The summary and recording are available [here](#).
- If you missed the **Global Forum for Adolescents** from 11-12 October 2023, you can catch up on **news and stories from the 1.8 Billion Young People** [here](#), and view recordings from the event [here](#).
- From 3-5 October 2023, the **Research Consortium for School Health and Nutrition** held its **inaugural Annual Showcase**, sharing key findings on the design, cost, implementation and impact of school meals. Recordings are available [here](#).

## Other Reports

- Nutrition International compendium of case studies: [From policy to practice: Inspiring stories in anaemia prevention](#)
- UNICEF report: [Undernourished and Overlooked: A global nutrition crisis in adolescent girls and women](#)
- GAGE report: [Investing in adolescent girls: mapping global and national funding patterns from 2016-2020](#)
- Save the Children report: [Investing in Now and the Future II: The adolescent health and nutrition index](#)

For more news and outputs like this, join the [Global Adolescent Nutrition Network \(GANN\)](#). Receive quarterly newsletter and webinar invites. Sign up [here](#).

Do you have questions or operational challenges related to adolescent nutrition that you are seeking advice on? [en-net](#) is a free and open online community forum for nutrition; click [here](#) to explore or submit a question on Adolescent Nutrition.