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Demographic and Health Survey (DHS) update

Nutritional status of adolescents

Why do we lack data on adolescent nutrition

> **To achieve the 2030 Agenda for Sustainable Development, improvements in adolescent nutrition are needed.**

> **Currently, adolescents are underrepresented in national data collection systems:**

- Only data for older adolescent girls 15-19 years are routinely reported in nationally representative surveys as part of the women of reproductive age (15-49 years) age group.

> **Anthropometry (particularly weight and height) has been the cornerstone of nutrition surveillance in children below five years of age and in adults:**

- Harmonised anthropometric indicators for adolescents are lacking.

- This has contributed to their exclusion from data collection systems.

› **Weight and height measurements are used to calculate population nutritional indicators for adolescents 15-19 years.**

› **Until recently, country reports have primarily presented anthropometric indicators according to adult definitions.**

› **This fails to account for differences in adolescent nutritional status by sex and age.**

- **Short stature (stunting):** The absolute cut-off used in adults (height <145 cm) is not applicable below 20 years of age, since approximately one fifth of adult height is attained during adolescence.

- **Thinness:** Using adult cut-offs for mild (BMI <18.5 to 17 kg/m^2) and moderate/ severe (BMI <17 kg/m^2) thinness tends to greatly overestimate the proportion of adolescents classified as thin.

- **Overweight/obesity:** Using adult cut-offs for overweight (BMI >25 to 30 kg/m^2) and obesity (BMI >30 kg/m^2) tends to marginally underestimate the proportion of adolescents classified as overweight/obese.
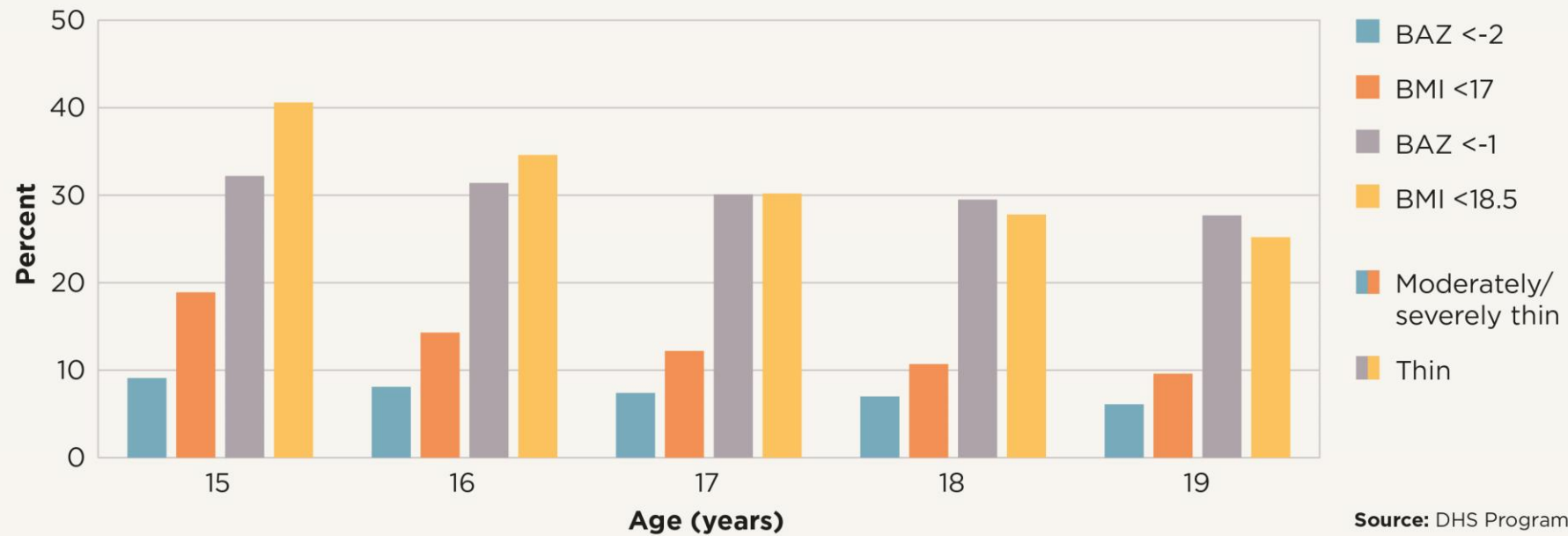
Figure 1

Comparison of prevalence estimates of thinness based on adult body mass index (BMI, kg/m²) and adolescent-specific BMI-for-age z-score (BAZ) cut-offs
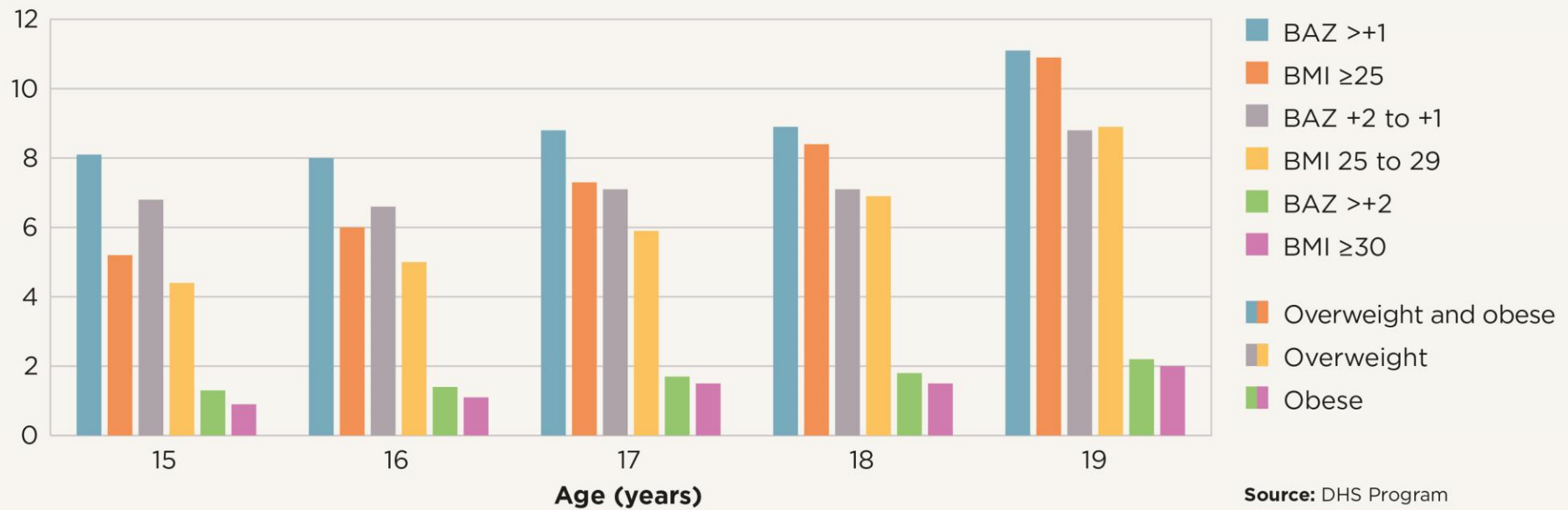

Source: DHS Program

Figure 2

Comparison of prevalence estimates of overweight and obesity based on adult body mass index (BMI, kg/m²) and adolescent-specific BMI-for-age z-score (BAZ) cut-offs

Source: DHS Program

To improve accuracy of national malnutrition estimates, the DHS-8 update incorporated age- and sex-specific definitions of short stature, thinness, and overweight for adolescents 15-19 years

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

> **For interpreting trends:**

- Prevalence estimates for adolescent nutritional status based on adult BMI definitions cannot be compared with those based on BMI-for-age.

- Estimates from older surveys that used adult BMI definitions for adolescents will need to be recalculated using the new adolescent-specific indicators.

> **For policies and programmes:**

- New adolescent nutritional status indicators will need to be incorporated into policy and programme targets, monitoring and evaluation systems and reporting.