Tackling Adolescent Malnutrition

Mains: *GS II: Health*

Why in News?

Recently, The NFHS-6 (2023-24) findings reveal alarming trends about obesity and high bood sugar.

What is National Family Health Survey (NFHS)?

- **NFHS** – It is a large, multi-round national survey conducted across India to collect reliable data on health, family welfare, and new social indicators.
- **Findings from NFHS-6**
- **Obesity among 15-49 years**
  - Men – 22.9% to 27.3%.
  - Women – 24% to 30.7%,
- **High blood sugar among 15 years above**
  - Men – 15.6% to 20.9%
  - Women – 13.5% to 17.8

*India now faces a **double burden,** undernutrition among children and rising obesity among adolescents and adults.*

- Schools are identified as the most critical setting for prevention, since lifestyle diseases have roots in adolescence.

What is adolescent malnutrition?

- **Definition –** An imbalance between nutrient requirements and intake, encompassing both undernutrition (stunting, wasting, or deficiencies) and over-nutrition (overweight or obesity)
- **Thin-Fat Phenotype –** Children appear lean but carry high metabolic risk (elevated triglycerides, insulin resistance).
- **Implication –** Adolescence is a critical window where poor diets and inactivity set the stage for diabetes, heart disease, and stroke later in life.

What is the status of Adolescent malnutrition in India?

- **Stunting and Underweight –** More than $1\backslash 4^{th}$ of India's adolescents are stunted

(short for their age) and stunting is more common among late adolescents (15–19 years) and girls.
- **Thinness (wasting) –** About one in four adolescents are too thin for their age it mainly affects early adolescents (10–14 years), boys, and those from poorer families.
- **Anaemia –** Anaemia is widespread among adolescents especially girls in the 15–19 age group are the most vulnerable.
- **Overweight and Obesity –** Though undernutrition is the bigger issue, overweight (4.8%) and obesity (1.1%) are rising, mostly seen among urban adolescents and younger age groups.

Why are adolescents vulnerable?

- **Biological demands –** Adolescents (10–19 years) grow rapidly and need more nutrients.
- Poor diets cause stunting and undernutrition and girls are especially vulnerable due to iron loss during menstruation, leading to high anaemia rates.
- **Socioeconomic and caste disparities –** Poverty limits access to proper food, adolescents from lower caste and lower income families show much higher stunting and thinness compared to wealthier groups.
- **Gender bias and social norms –** Cultural bias often favours boys in food distribution, leaving girls undernourished and social pressures around body image also trigger eating disorders among adolescents.
- **Early marriage and pregnancy –** Teenage marriages and pregnancies worsen malnutrition, young mothers with poor nutrition face risks of stillbirths, complications, and pass deficiencies to their children.
- **Dietary and lifestyle shift –** Junk food consumption and sedentary lifestyles are increasing overweight and related health problems among adolescents.
- **Intergenerational cycle –** A mother's nutrition before and during pregnancy strongly affects her child's growth.
- Malnourished adolescents become malnourished mothers, continuing the cycle across generations.

Why are schools important in tackling malnutrition?

- **Direct food security and physical growth –** Programs give vulnerable children at least one essential daily meal, this prevents nutrient deficiencies and supports healthy physical growth.
- **Cognitive development and school attendance –** Proper nutrition improves brain development, helps children score better in tests, and reduces absenteeism by keeping them healthier.
- **Life-long health education –** Beyond meals, institutions teach practical nutrition skills — reading food labels, understanding portion sizes, and making healthy food choices.
- **Community impact –** Students often act as *agents of change*, they share nutritional awareness with their families, which gradually improves eating habits in the wider community.

How schools can help to overcome malnutrition?

- **School interventions –** Schools can improve nutrition through protein-rich midday meals, healthy canteens with seasonal foods, food demonstrations on balanced diets, and gardens/fruit breaks to build healthy habits.
- **Tackling sugar and ultra processed foods (UPF) –** India's UPF intake is rising 13.7% annually, sugary drinks and High in Fat, Sugar, and Salt (HFSS) foods fuel obesity, diabetes, and heart disease.
- Schools should ban sugary beverages, show sugar content boards, run regular awareness drives, and create UPF-free zones nationwide.
- **Physical inactivity –** Adolescents spend more time on screens, less on activity which is as harmful as poor diet, schools must make sports and exercise compulsory, with daily activity periods, fitness checks, clubs, and promote walking/cycling to school.
- **Institutional framework –** Long-term success needs strong policies and institutional support that integrate nutrition, physical activity, and awareness into the school system for sustainable nationwide impact

What are the challenges in using school as a platform to tackle malnutrition?

- **Financial and infrastructure gaps –** School meal programs often suffer from low funding that cannot meet the rising cost of nutritious food.
- Many schools lack basic kitchen facilities like clean water, storage, and refrigeration. Remote schools face supply delays due to weak logistics.
- **Administrative and staffing burden –** Teachers are overburdened with food distribution and record-keeping, reducing teaching time.
- There is a shortage of trained cooks and food handlers, and schools rarely track children's health data such as height and weight.
- **Nutrition and quality issues –** Menus are often monotonous, relying on cheap carbohydrates instead of diverse, nutrient-rich foods and poor hygiene raises food safety risks.
- **Socio-cultural barriers –** The most malnourished children often miss school due to poverty or illness and many reject nutritious but unfamiliar foods, preferring processed snacks.

What are the government initiatives taken to eradicate malnutrition?

- **POSHAN Abhiyaan –** A flagship mission involving multiple ministries to track nutrition outcomes and reduce stunting, undernutrition, and anaemia.
- **Anganwadi Services –** Provides supplementary nutrition, health check-ups, and pre-school education for children (0–6 years), pregnant women, and lactating mothers.
- **Pradhan Mantri Matru Vandana Yojana (PMMVY) –** Gives cash incentives to pregnant and lactating mothers to promote health-seeking behaviour and compensate for wage loss.
- **PM POSHAN Scheme –** Earlier the Mid-Day Meal Scheme, it serves hot cooked meals in government schools to improve nutrition and encourage attendance.
- **Anaemia Mukt Bharat –** Focuses on reducing anaemia among pregnant women, lactating mothers, children, and adolescents through iron and folic acid supplementation.

What are the ethical dimensions involved?

- Adolescent malnutrition raises critical ethical issues of **social justice, equity, and human dignity**, as every child has a right to adequate nutrition and healthy development.
- It reflects **distributive justice**, since poverty, caste, gender bias, and regional disparities deny equal opportunities.
- The principle of **beneficence** requires the State, schools, and society to actively protect adolescent health, while **non-maleficence** demands preventing harm from unhealthy diets and ultra-processed foods. **Accountability and good governance** are essential for effective implementation of nutrition schemes.
- **Intergenerational responsibility** calls for breaking the cycle of malnutrition to ensure a healthier and more productive future generation.

What is the way forward?

- **Maternal and child nutrition (first 1,000 days) –** Proper nutrition here prevents lifelong stunting.
- Key measures: more antenatal visits, exclusive breastfeeding for six months, and timely complementary feeding.
- **Integrated governance and safety nets –** Strengthen coordination between health, women and child development, and agriculture.
- Improve reach and quality of schemes like ICDS and Mid-Day Meals to support vulnerable groups.
- **Micronutrient interventions –** Fight hidden hunger by strengthening staples (rice, oil, salt) with vitamins and minerals.
- Promote biofortified crops like zinc rice and iron pearl millet to link agriculture with nutrition.
- **Managing acute malnutrition –** Expand Nutrition Rehabilitation Centres (NRCs) for severe cases and develop community-based care protocols for wider access.
- **Sustainable food systems –** Shift policies to make nutritious foods cheaper and improve dietary diversity alongside staple grain production.

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Reference

The Hindu | Malnutrition

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