Dietary Diversity for Children

Why in News?

A recent study finds that, India's central region showing the highest prevalence of minimum dietary failure.

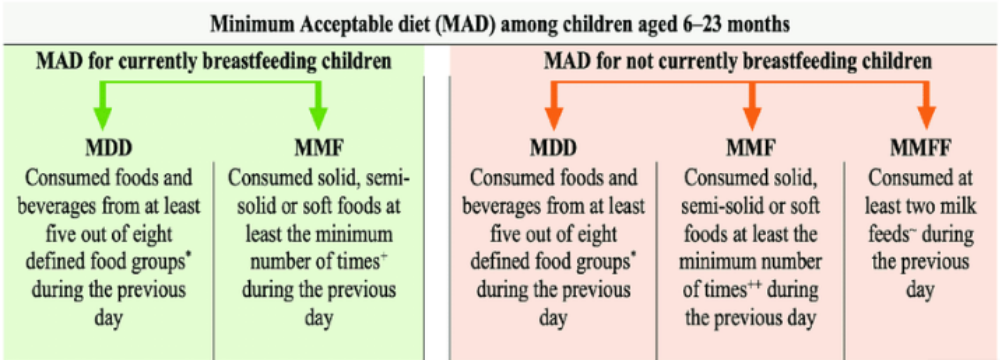
What is diet diversity?

- **Diversity in diets** – It is associated with consuming diverse food groups that provide enough nutrients through a healthy diet.
- It includes adequate quantities of carbohydrates, proteins, vitamins, and minerals through diverse diets.
- It includes cereals, mainly pulses, nuts, oil, meat, fish, eggs, fruits, and vegetables.
- **Dependent factors** – Diet diversity was found to be dependent upon four major factors
    - Availability
    - Affordability
    - Awareness
    - Utilisation
- **Benefits** – Food group diversity is associated with improved linear growth in young children.
- **Lack of diet diversity** – It can increase the risk of micronutrient deficiencies, which can harm children's physical and cognitive development.

Impact factors of Malnutrition
• Poverty • Food insecurity • Inadequate access to health care • Lack of education • Lack of access to safe water and sanitation

What is minimum dietary diversity for children?

- **Minimum dietary diversity (MDD) score** – It is a population-level indicator to *assess diet diversity* as part of infant and young child feeding (IYCF) practices.
- It is calculated for *children of 6-23 months old*.
- **Development** – It is ***developed by WHO and UNICEF*** to provide simple, valid, and reliable metrics for assessing IYCF practices at the population level (WHO/UNICEF, 2021).
- **Umbrella program** – It is a component of the Minimum Acceptable Diet (MAD) indicator, which is a composite indicator described in the same 2021 guidelines.



- **Data collection** - Data are gathered from a questionnaire administered to the child's caregiver.
- Respondents are asked to indicate whether or not their child consumed any food over the ***previous 24 hours from each of the eight food groups.***

MDD-IYCF Food Groups

1	Breast milk
2	Grains, white/pale starchy roots, tubers and plantains
3	Beans, peas, lentils, nuts and seeds
4	Dairy products (milk, infant formula, yogurt, cheese)
5	Flesh foods ((meat, fish, poultry, organ meats)
6	Eggs
7	Vitamin-A rich fruits and vegetables
8	Other fruits and vegetables

- **Calculation**

$$\frac{\text{Number of children 6 – 23 months of age who received foods from 5 or more food groups yesterday during the day or night}}{\text{Children 6 – 23 months of age for whom data on breastfeeding and diet were collected}} \times 100$$

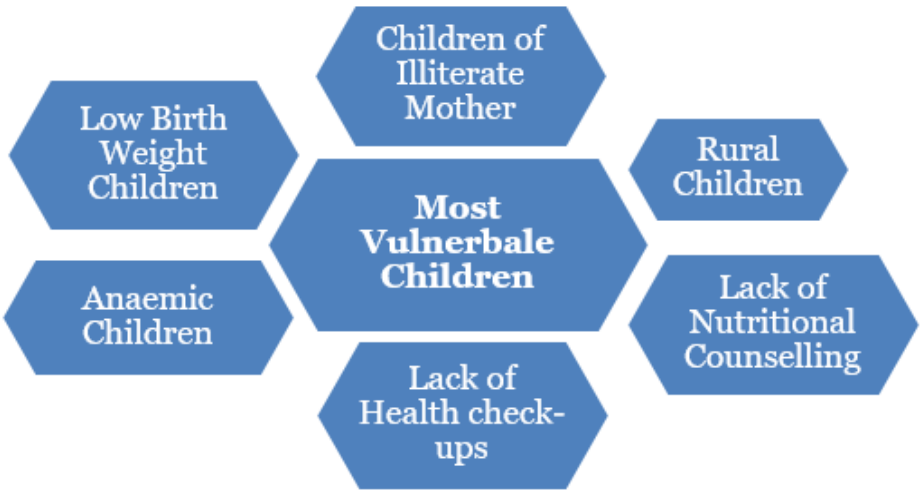
- **Significance** – It can be used to monitor and assess the dietary quality of infants and young children and the appropriateness of complementary feeding practices at the population level.

What are key findings of study?

- **Regional disparities** – There is huge variations across different states and rural-

urban areas.

- **Impact on children** – About 77% of children in India aged 6-23 months lack diversity in diet as suggested by the WHO.
- **Poor performers** – The states of Uttar Pradesh, Rajasthan, Gujarat, Maharashtra and Madhya Pradesh reported the highest levels of inadequate diversity in children's diets, all above 80%.
- **Better performers** – Sikkim and Meghalaya were the only two to report an under-50% prevalence.
- States such as Kerala, Tamil Nadu, Himachal Pradesh, Jammu and Kashmir and Odisha have provided adequate diets for non-breastfed children compared to other states / UTs.
- **Improved food groups** - *Egg consumption raised* from around 5% in NFHS-3 to over 17% in NFHS-5.
- *Legumes and nuts consumption increased* from nearly 14% during 2005-06 to over 17% during 2019-21.
- The consumption of *vitamin A-rich fruits and vegetables increased* by 7.3%, whereas the consumption of fruits and vegetables increased by 13% over the same time.
- For *flesh foods*, the consumption increased by 4%.
- **Insufficient diets** - The *consumption of breastmilk dropped* from 87% in NFHS-3 to 85% in NFHS-5.
- *Dairy products consumption decreased* from 54% in NFHS-3 to 52% in NFHS-5.



What lies ahead?

- Promote dietary diversity through the consumption of a variety of foods from different food groups.
- Implement a food-based minimum dietary diversification approach.
- Call for improvements in public distribution systems.
- Intensify programmes like ICDS.
- Enhance more nutrition counselling efforts.
- Increase awareness and knowledge about the importance of MDD.

The POSHAN Maah thematic celebration on POSHAN Vatikas captures the

importance of diversity in diets. Promoting MDD helps in preventing malnutrition and improving the health and development of children.

References

1. The Hindu| Indian Children lacks Diet Diversity
2. Down To Earth| Findings of Diet Diversity among Indian Children