

## **UNDERSTANDING CONCEPT OF NUTRITION & UNDER NUTRITION IN INDIAN PERSPECTIVE**

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### **ABSTRACT**

Ministry of Women and Child Development, Government of India has decided the month of September to be celebrated as National Nutrition Month every year. The Government of India has set-up POSHAN Abhiyaan (National Nutrition Mission) which was launched by the Hon'ble Prime Minister of India on 8<sup>th</sup> March, 2018 from Jhunjhunu, Rajasthan. The program through use of technology, a targeted approach and convergence strives to reduce the level of Stunting, Under-nutrition, Anemia and Low Birth Weight in Children, as also, focus on Adolescent Girls, Pregnant Women & Lactating Mothers, thus holistically addressing malnutrition. All 36 States/UTs and 718 districts are to be covered in a phased manner by the year 2020. Never before has nutrition been given such prominence at the highest level in the country. This article is aimed to explore the concept of Nutrition and Under Nutrition, its Causes & Consequences in Indian perspective.

**Keywords:** Nutrition, Under Nutrition, Stunting, National Nutrition Mission.

### **INTRODUCTION**

Nutrition is a broad term. It should be understood with a larger perspective. As per WHO, 'Nutrition is the intake of food, considered in relation to the body's dietary needs. Good nutrition – an adequate, well balanced diet combined with regular physical activity – is a cornerstone of good health' [1]. Nutritional status is influenced by three broad factors: food, health and care. Optimal nutritional status results when children have access to affordable, diverse, nutrient-rich food; appropriate maternal and child-care practices; adequate health services; and a healthy environment including safe water, sanitation and good hygiene practices. Food, health and care are affected by social, economic and political fac-

tors. The leading causes of under nutrition in India are lack of adequate knowledge about nutrition, poverty, lack of education, gender bias, increasing population, uneducated, under nourished and economically dependent mothers, poor sanitation, unavailability of food and resources, non deliverance of government facilities etc. Poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity. Specifically the childhood years are formative years of a future adult. If the child is well fed since his or her birth, he or she will surely excel in any field of life. Poor nutrition or under nutrition in the first 1,000 days of children's lives in-

cluding the gestational period, can have irreversible consequences. For millions of children, it means they are, forever, stunted<sup>[2]</sup>. Child under nutrition is assessed by measuring height and weight and screening for clinical manifestations and biochemical markers. Indicators based on weight, height and age are compared to international standards and are most commonly used to assess the nutritional status of a population. Stunting (inadequate length/height for age) captures early chronic exposure to under nutrition; wasting (inadequate weight for height) captures acute under nutrition; underweight (inadequate weight for age) is a composite indicator that includes elements of stunting and wasting. Stunting and other forms of under nutrition are clearly a major contributing factor to child mortality, disease and disability. For example, a severely stunted child faces a four times higher risk of dying, and a severely wasted child is at a nine times higher risk<sup>[3]</sup>. Specific nutritional deficiencies such as vitamin A, iron or zinc deficiency also increase risk of death. Under nutrition can cause various diseases such as blindness due to vitamin A deficiency and neural tube defects due to folic acid deficiency. Brain and nervous system development begins early in pregnancy and is largely complete by the time the child reaches the age of 2. The timing, severity and duration of nutritional deficiencies during this period affect brain development in different ways<sup>[4]</sup>. Under nutrition early in life clearly have major consequences for future educational, income and productivity outcomes. Stunting is associated with poor school achievement and poor school performance<sup>[5]</sup>. Under nutrition completely jeopardizes children's survival, health, growth and development, and it slows national progress towards development goals. Under nutrition is often an invisible problem. Its long lasting impact on a child's future is generally not given due importance.

## Material & Methods

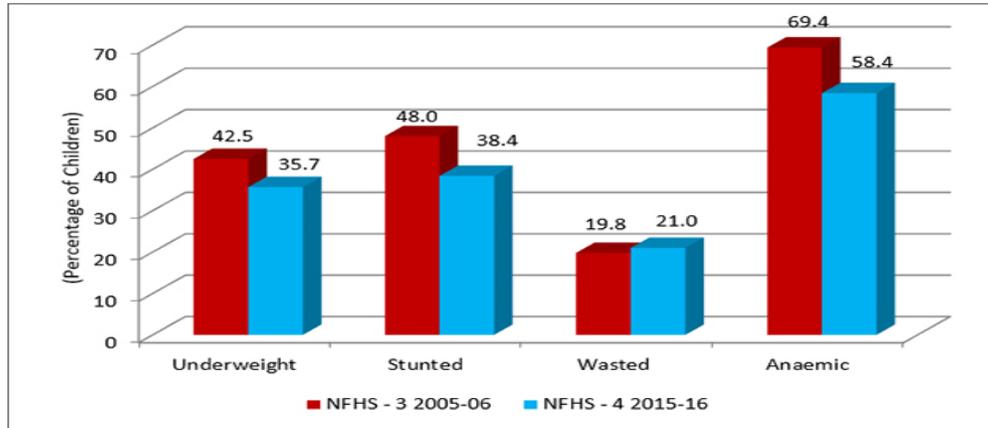
This article is a review article. Various text books, health reports, National Family Health Survey-3 & 4 reports and various publications of international journals and health reports of various organizations like WHO and UNICEF were extensively explored for the synthesis of this review article on Nutritional status in India.

## Nutritional Status in India

According to UNICEF, 'The level of child under nutrition remains unacceptable throughout the world, with 90 per cent of the developing world's chronically undernourished (stunted) children living in Asia and Africa'<sup>[6]</sup>. With persistently high levels of under nutrition in the developing world, vital opportunities to save millions of lives are being lost, and many more millions of children are not growing and developing to their full potential. In India, According to the NFHS-4, Thirty-eight percent of children under age five years are stunted (short for their age); 21 percent are wasted (thin for their height); 36 percent are underweight (thin for their age); and 2 percent are overweight (heavy for their height)<sup>[7]</sup>. Children born to mothers with no schooling and children in the lowest wealth quintile are most likely to be undernourished. Timely initiation of breastfeeding is particularly low for women with no schooling, for home deliveries, and for births delivered by a *dai*. Only 55 percent of children under age six months are exclusively breastfed. Significant disparity in nutritional status also exists in terms of mothers' education and literacy. A number of studies and analyses have found a significant association between low maternal literacy and poor nutrition status of young children. The low status of women is considered to be one of the primary determinants of under nutrition across the lifecycle. Women's low status can result in their own health being compromised, which in turn can lead to lower infant birth weight and may affect the quality of infant care and nutrition. A study in India showed that women with

higher autonomy (indicated by access to money and freedom to choose to go to the market) were signifi-

cantly less likely to have a stunted child when compared with their peers who had less autonomy.



### How Under Nutrition can be prevented?

The most important preventive aspect is to take care of the nutrition of children in the first two years of life, girls during adolescence, and mothers during pregnancy and lactation. Nutritional interventions offered at right time give children the best chance to survive and reach optimal growth and development. Optimal infant and young child feeding guides the initiation of breastfeeding within first hour of birth; exclusive breastfeeding for the first six months of the child's life; and continued breastfeeding for two years or more, together with safe, age-appropriate and hygienically prepared complementary foods starting at 6 months of age. Early initiation of breastfeeding reduces neonatal mortality and many dangers. It ensures early skin-to-skin contact, which is important in preventing hypothermia and establishing the bond between mother and her child. Early initiation of breastfeeding also reduces a mother's risk of post-partum hemorrhage, one of the leading causes of maternal mortality. Colostrum, the milk produced by the mother just after delivery during the first post-partum days, provides protective antibodies and essential nutrients, acts as a first natural immunization for newborns, strengthens their immune system and reduces the chances of death in the neonatal period.

Optimal complementary feeding is the most effective intervention that can significantly reduce stunting during the first two years of life. A comprehensive program approach for improving complementary feeding practices includes timely introduction of age-appropriate and hygienically prepared complementary foods, counseling for caregivers on feeding and care practices and on the optimal use of locally available foods, improving access to quality foods for poor families through social protection schemes and safety nets, and the provision of fortified foods and micronutrient supplements when needed. Vitamin and mineral deficiencies are highly prevalent throughout the developing world. Anemia in young children is a serious concern, because it can result in increased morbidity from infectious diseases and impaired cognitive performance, behavioral and motor development, coordination, language development, and school achievement. Vitamin A is essential for a well-functioning immune system; its deficiency increases the risk of mortality significantly. Vitamin A supplementation twice yearly reduces the risk of blindness, infection, under nutrition and death associated with vitamin A deficiency, particularly among the most vulnerable children. Iodized salt consumed as table salt and/or as food-grade salt (used in food processing) improves brain develop-

ment; prevents motor and hearing deficits. Zinc given as part of Oral Rehydration Therapy for the treatments for diarrhea reduces duration and severity of diarrhea and subsequent episodes. Hand washing with soap by caregivers' and children prior to food preparation and eating, serving foods immediately after preparation, using clean utensils and avoiding feeding bottles helps reduce diarrhea and associated under nutrition in the child.

Every adolescent girl must be protected against under nutrition and nutritional deficiencies like anemia through dietary counseling, weekly iron and folic acid supplementation, twice yearly de-worming prophylaxis. In addition developing life-skills to avoid early marriage and early pregnancy is also vital. Every pregnant woman must have access to sufficient quality and quantity food including during pregnancy and lactation. Every pregnant woman and breastfeeding mother must take iron folic acid supplements daily to reduce maternal anemia and improve pregnancy and lactation outcomes. Regular consumption of salt with adequate levels of iodine is required by all pregnant women in order to prevent fetal brain damage associated with iodine deficiency.

## DISCUSSION

Nutrition is just not a national issue. Globally, interest in nutrition has also increased dramatically. Recurrent food shortages, rising food prices, strengthened evidence and rising obesity have created the impetus for widespread concern and action. More than ever, investing in nutrition is seen as a key development priority to benefit global welfare. The Group of 8 (G8) of the world's wealthiest countries has put nutrition high on its development agenda, and the United Nations Secretary-General's Zero Hunger Challenge includes the elimination of stunting as a goal. The global nutrition community is uniting around the Scaling up Nutrition (SUN) movement, which supports nationally driven processes for the reduction of stunting and other forms of malnutrition<sup>[8]</sup>. Promoting optimal nutrition prac-

tices, meeting micronutrient requirements and preventing and treating severe acute malnutrition are key goals for nutrition programming.

So far, various government initiatives have been launched over the years which seek to improve the nutrition status in the country. These include the Integrated Child Development Services (ICDS), the National Health Mission, the *Janani Suraksha Yojana*, the *Matritva Sahyog Yojana*, the Mid-Day Meal Scheme, and the National Food Security Mission, among others. However, concerns regarding malnutrition have persisted despite improvements over the years. It is in this context that the National Nutrition Strategy was released in September, 2017. The Strategy aims to reduce all forms of malnutrition by 2030, with a focus on the most vulnerable and critical age groups. The Strategy aims to launch a National Nutrition Mission, similar to the National Health Mission. This is to enable integration of nutrition-related interventions cutting across sectors like women and child development, health, food and public distribution, sanitation, drinking water, and rural development. A decentralized approach will be promoted with greater flexibility and decision making at the state, district and local levels. Further, the Strategy aims to strengthen the ownership of *Panchayati Raj* institutions and urban local bodies over nutrition initiatives. Much importance is to be given to cater the nutritional requirements of pregnant women, lactating mothers and the children up to 2 years. Governance reforms envisaged in the Strategy include convergence of state and district implementation plans for ICDS, NHM (National Health Mission), NAM (National Ayush Mission) and *Swachh Bharat*, focus on the most vulnerable communities in districts with the highest levels of child malnutrition, and service delivery models based on evidence of impact. Scale-up of integrated, community-based nutrition programs linked with health, water and sanitation, and other relevant interventions is a priority strategy that can bring measurable improvements in children's nutritional status,

survival and development. Community support can include providing services such as counseling, support and communication, screening for acute malnutrition and follow-up of malnourished children; deworming; and delivering vitamin A and micronutrient supplements. Synergizing nutrition-specific interventions with other early child development interventions at the community level is also important for holistically promoting early child development and reducing inequalities.

## CONCLUSION

Children and women are the backbone of our society. The instances of under nutrition and nutritional deficiency diseases are most common among them. It becomes imperative for any educated person and to the government also to take steps to strengthen the underlying framework in order to improve the nutritional status of children as well as women. It is the need of hour to strengthen the infrastructure and manpower. In order to strengthen the underlying framework, strong and decisive steps should be taken so that they are able to meet the challenges. Any Government Scheme whether new or old can only bear fruitful results, if the implementing authorities are willing to understand the needs of the connecting link as well as the recipients. Adequate nutritive diet is the rightful demand of any child as well as any citizen. A country can only progress when its citizens are healthy and its children are not undernourished, stunted, wasted or underweight. No one should die of hunger. Then only can India shine. Therefore celebrating Nutrition Month can only be meaningful if every Indian does his or her best as parents, as caregivers, as service providers and as government functionaries and as a progressive society in order to eradicate Malnutrition and nutritional deficiencies from our country. It can be the best gift to our next generation.

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