# Original Research Paper



#### HEALTH PROBLEMS DUE TO MALNUTRITION

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ABSTRACT

Malnutrition refers to deficiency in macronutrients and micronutrients. Malnutrition reduces productivity and causes many health problems. Among children malnutrition leads to wasting, stunting and being underweight. Financial burden of Malnutrition globally may be as much as 3.5 trillion dollars or almost 5% of global GDP. Addressing malnutrition does not cost much and offers a great cost to benefit ratio. This paper addresses the problems due to malnutrition.

## **KEYWORDS:**

#### INTRODUCTION

Malnutrition occurs when individual has deficiency or excess of nutrients – macronutrients and micronutrients. Malnutrition is basically not receiving correct amount of nutrition.

Malnutrition is a category of disease that includes Undernutrition and Overnutrition. Undernutrition leads to stunting, wasting and underweight. Undernutrition also causes loss of productivity due to lower IQ – Intelligence Quotient. Surplus of nutrients leads to overnutrition and leads to obesity and overweight. Malnutrition causes many undesirable health problems. [3]

Malnutrition has a significant impact on economy due to direct health costs and indirect costs to economy in form of loss of productivity. It is estimated that malnutrition costs global economy 3.5 trillion dollars or 5% of global gdp.

This paper studies the various problems related to malnutrition and solutions to address malnutrition. This paper only studies macronutrient deficiency as found in underdeveloped countries and stays away from micronutrient deficiency of Vitamins and Minerals as also found in developed countries.

### Underweight, Stunting And Wasting

Malnutrition in children leads to underweight, stunting and wasting. Underweight means a child has low weight for age. Stunting means a child has low height for age. Wasting means a child has low weight for height.

In India, Malnourishment in children (stunting, wasting and underweight) under 5 years has reduced as per NHFS-5 (2019-21) from 38.4% to 35.5%, 21.0% to 19.3% and 35.8% to 32.1% respectively as compared to NHFS-4 (2015-16). Malnutrition among women aged 15-49 years has also reduced from 22.9% to 18.7%.

Clearly Malnutrition in India is a severe problem. Malnutrition can cause permanent, widespread damage to a child's growth, development and well-being. Stunting in the first 1,000 days is associated with poorer performance in school, both because malnutrition affects brain development, and also because malnourished children are more likely to get sick and miss school.

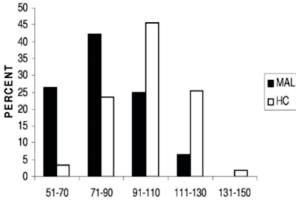
#### Diseases

One of the first systems to begin to shut down is the immune system. This makes undernourished people highly prone to illness and infection and slower to recover. Wounds take longer to heal. Cardiac activity also slows down, leading to low heart rate, low blood pressure and low body temperature. People may feel faint, weak and apathetic about life. They may lose appetite, and parts of their digestive system can

atrophy. Some of the complications of severe undernutrition conditions, such as marasmus and kwashiorkor, results from particular vitamin deficiencies. Vitamin A deficiency can cause vision problems and vitamin D deficiency can cause soft bones.

#### Intelligence Quotient - IQ

Studies show that malnutrition reduces IQ of children. [6]



#### IQ CATEGORY

Malnutrition significantly reduces IQ levels by almost 20 points. Malnutrition also reduces spelling, reading and calculation abilities by almost 20 points.

### Productivity and GDP

It is estimated that that nearly 4% of the GDP is lost due to different forms of malnutrition as per study of ASSOCHAM. The adverse, irreversible and inter-generational impacts of malnutrition make optimal nutrition critical to the development of the country as a whole and all its citizens. [7]

High rates of malnutrition can lead to a loss in gross domestic product (GDP) of as much as 4%-5%, according to an assistant representative in Turkey for the United Nations Food and Agriculture Organization (FAO).

#### **Economic Cost of Malnutrition**

Malnutrition, in all its forms, imposes unacceptably high costs -direct and indirect - on individuals, families and nations. This is a major impediment to achieving the 2030 Sustainable Development Goals. The estimated impact on the global economy could be as high as US\$3.5 trillion per year, or US\$500 per individual. These enormous costs result from economic growth foregone and lost investments in human capital associated with preventable child deaths, as well as premature adult mortality linked to diet-related noncommunicable diseases.[2]

#### CONCLUSION

Mahatma Gandhiji said that God comes to hungry in form of food. Considering the costs associated with malnutrition it is worthwhile investing in nutrition. Some studies estimate a very good cost to benefit ratio for investment in Malnutrition. Governments must give malnutrition adequate importance.

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