

THE HIDDEN HUNGER

Through centuries, food has been recognized as crucially important for human beings both in health and disease states and the history of man has been to a long extent struggle to obtain food. World hunger is a hackneyed, much discussed subject. That hunger shows no sign of diminishing. There have been, and still are, many projects and programs to combat it, nevertheless there are unfortunately no signs of real progress. The roots of these evils are still very strong. Realizing this importance, in the global campaign of health for all, provision of sufficient food and promotion of proper nutrition is one of the eight elements of primary health care.^{1,2}

The nutrients in food may be divided into macro-nutrients (form the main bulk of food) i.e. fats carbohydrates and proteins, and micro-nutrients i.e. vitamins and minerals. Vitamin and mineral are called micro-nutrient because they are needed in micro quantity, from a fraction of a milligram to several grams. Vitamins are complex chemical substances. They do not yield energy or carry body building functions. They initiate a process or reaction and play the role as catalyst and are not prepared in the body. They must be included in the diet to maintain normal health and metabolic integrity.^{3,4} Mineral elements are essential to many vital processes and constitute a relatively small amount of the total body tissue. Certain elements are major factors in control of water metabolism e.g. sodium, while others are an integral part of important physiologic compounds, e.g. iodine in thyroxin, iron in haemoglobin and zinc in insulins. There are seven principal elements i.e. Ca, Mg, Na, K, P,S and Cl while at least seven other Fe, Zinc, Cu, I, Mn, Co and Mo are utilized in trace quantities.^{1,4}

Good nutrition is a basic human right & basic component of good health, but despite of the tremendous advances in medical science & other fields malnutrition is widely prevalent in many parts of the world. Most well balanced diet will supply almost all necessary nutrients. Malnutrition occur in people who get insufficient, wrong or monotonous food.³ Like in other developing countries, malnutrition is a major problem in Pakistan. A number of studies in Islamabad, Lahore, Karachi, Peshawar and Mardan have revealed that out of every 100 preschool children 50-70 suffer from variable degrees of malnutrition. Out of that 4-10 may be severely malnourished. In 1985-87 national nutrition survey was conducted which revealed that 48% of children under five are malnourished, 34% pregnant and lactating women under weight, 65% of children under five year age are anemic and 45% pregnant women are anemic. According to the Micro-nutrient Survey of Pakistan, 1977 60% preschool children need attention because of malnutrition and⁷ being severely malnourished.^{5,6,7} Some other studies have also shown a high prevalence of high incidence of nutritional problems.^{8,9}

In Pakistan the two most important trace elements are iron and iodine. The deficiency of these two trace elements are causing great public health problems. According to some studies 45% male and 50% female suffer from anemia and 20 to 60% of the

population is suffering from various grades of goiter. The deficiency due to these elements is hidden in the beginning.³ The overt pathological effects due to their deficiency can influence health and well being long before characteristic clinical symptoms develop. Detection and control of such problems require, initially, a systematic appraisal of those environmental, dietary, physiological and special circumstances which may enhance risks. This secret or insidious form of malnutrition due to micro-nutrient e.g. iron, iodine, calories vitamin A are just as deadly for millions of children and are much more common than any other type of deficiency. This hidden hunger is as important as lack of food or starvation.⁹

One of the target of the seventh 5 year plan (1988-1993) is to protect about 5 million children from 2nd and 3rd degree mal-nutrition, and to prevent this hidden hunger due to micro-nutrients. Unfortunately, most of the doctors (Physician), nurses, LHVs and other paramedicals, who are trained in a conventional manner, do not have much awareness about the applied nutrition. They themselves may not understand the extent of the problem and, as a result, are not always motivated enough to find solution. A multi-disciplinary approach in identification of these problems is very much needed. It will be useful if all health personnel (primary, secondary, & tertiary level) are familiar with the nutritional problems (including deficiency due to micro nutrients) facing the community especially young children, pregnant women and lactating mothers. Health action against malnutrition and especially against this hidden hunger due to micro-nutrients has to be coordinated with the activities of various other sections. This demands a high degree of administrative skill, as well as political commitment to coordinate national nutrition strategies with the other components of national development.

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