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Micronutrient Malnutrition: A Precondition for Cancer Development

Premila Devi Thongbam*

Indian Council of Agricultural Research, Research Complex for North Easter Hill Region, Meghalaya-793103, India

Micronutrients, the nutrients which are required in small amounts by our body are basic needs for our proper metabolism. Deficiency of such nutrients causes unwanted reactions inside our body leading to many diseases. If the malnutrition is not corrected within proper time by proper intake of the micronutrients, many chronic disease and even cancer may be developed. Therefore in other words we can say that micronutrient malnutrition is the precondition for cancer development. Many works has shown cancer development and progression could be prevented if proper micronutrients are supplied in diet. Many studies indicated importance of vitamin C for cancer prevention. For example, low level of serum iron, minerals like Ca, K, Na, Mg, Mn, Se and GSH increased the risk of cancer [1]. There is inverse correlation between intake of GSH fruit and vegetables and risk of oral cancer indicates that GHS may have an important protective effect to cancer treatment. Even we are exposed to carcinogens such as arsenic and nitroso compounds, intake of proper antioxidants and micronutrients make our body to resist against cancer development [2].

Most of the people are quite aware about macronutrients such as proteins, carbohydrates and essential fatty acids but unaware about the importance of intake of micronutrients 30% of cancer in western countries is an account of improper diet [3].

In recent past researchers proved Micronutrient deficiency as one of main culprits for cancer development. In developing countries, around 60% of oral , pharyngeal, and esophageal to be caused by micronutrient deficiency (World cancer research foundation, 1997). Timothy J. Key et al. [1] described a elucidating review of various dietary constituents for prevention of cancer [4]. In Linxian, China combined supplementation with β-carotene, Se and α-tocopherol results in a significant reduction in cancer mortality. Low level of Vit B12 was shown to increase breast cancer risks among postmenopausal women [5]. Like vitamins, minerals also play important role. Deficiency in minerals such as K, I, Fe, etc. can lead to cancer. K is required for cell to cell information transfer and nerve impulse transmission. Similarly other minerals have their respective role in maintaining proper metabolism. However, judicious intake of micronutrients is also equally important as excessive intake also cause bad effects on human health. Many cases of Cancer could have been or can be still prevented by simply taking enough quantity of micronutrients. Taking enough quantity of micronutrient is a very important step for prevention of cancer just like stopping smoking. Micronutrient malnutrition which is still a silent killer is a main precondition for development of cancer.

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***Corresponding author:** Premila Devi Thongbam, Indian Council of Agricultural Research, Research Complex for North Easter Hill Region, Meghalaya-793103, India, Tel: 91-364-2570364; Fax 91-364-2570355; E-mail: Pthongbam2000@yahoo.co.in

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