



Maternal dietary intakes, micro-nutrient status and birth weight of the new born.

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Abstract:

Dietary intakes during pregnancy are of myriad standing in view of managing higher nutritional demands and maintaining optimum micronutrient status of the growing fetus. Studies in relation to habitual dietary intake in Indian women in relation to birth weight of the new born are limited, Healthy pregnant women were enrolled to assess their dietary intake status, micronutrient profile and birth outcomes 24-hour dietary recall, serum analysis and birth weight measurements, respectively. At enrolment during the end of second trimester nutritional intake of more than 90% of women were found to be below the recommended dietary allowances. Thereafter, at the end of subsequent trimesters significant change in energy, protein, fat vitamin a and vitamin C ($p < 0.001$) were observed excluding iron. Serum magnesium, zinc and iron status were found to decline at each follow up visit. ($p < 0.001$). Magnesium deficiency throughout the period of pregnancy was found to be significantly associated lower birth weight. Pre delivery and postpartum anaemia and a Vitamin A deficient diets were found to be significantly associated with low birth weight of the new born. The results reveal that the probability of low birth weight of the new born increases with lower overall dietary intake accompanied by magnesium and vitamin A deficiency. Presence of anaemia was also found to be an associated contributory factor. Individualized dietary counselling sessions of all pregnant women should be promoted to ensure adequate dietary intake in terms of quantity and quality to attain optimum macro and micronutrient status to prevent low birth weight of the new born.

Biography:

Parmeet Kaur is having 30 years in Nutrition and Dietet-



ics. She trained in Capacity and Leadership Development in Nutritional Sciences at National Institute of Health and Nutrition, Tokyo, Japan, in application of Geographic Information Systems (GIS) at Washington, in Management of Microbiological Hazards in foods at The Netherlands, in Nutrition and Lifestyle Epidemiology at The Netherlands and in Bio-statistics from Kyoto, Japan.

Recent Publications:

1. Effect of Parboiling on Phenolic, Protein, and Pasting Properties of Rice from Different Paddy Varieties, Priyanka Pal, Narpinder Singh, Parmeet Kaur, Amritpal Kaur
2. Traditional and improved paddy varieties: Composition, protein, pasting, and gluten-free chapati making properties, Parmeet Kaur, Narpinder Singh, Priyanka Pal, Amritpal Kaur
3. Protein and starch characteristics of milled rice from different cultivars affected by transplantation date, Parmeet Kaur, Priyanka Pal, Amardeep Singh Viridi, Gulshan Mahajan

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