

## ICCN Poster Presentations

### Evidence based nutrition

#### Changing dietary patterns of the young: impact of fast foods

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**Introduction:** Catering to the needs of a swift-paced society, fast foods are becoming an integral part of the lifestyle for the younger population.

**Objectives:** To study the food preferences and fast food consumption of the young (WHO).

**Methods:** Dietary patterns and fast food intake of 120 adolescents and young adults drawn from the fast food clientele of 9 popular fast food outlets was studied. Structured questionnaires were used for data collection. Chi square and Pearsons correlation was applied to study the significance of the results

**Results:** Dietary patterns of 120 subjects aged 16-21 years (both males and females) indicated that 65% of them were missing one/more meals and 62% of them were not carrying packed food to school/college. The frequency of eating at the school/college canteen was reported to be 'daily' by more than 50% of the subjects. Eating at places other than the canteen was reported by 62.5% of the subjects. Pizzas, burgers, ice-creams, soft drinks, French fries, sandwiches and patties were the fast foods most commonly consumed exhibiting a trend of snacks replacing the normal meals. While only 16% were 'low fast food eaters', 63% were 'moderate' and 21% 'high fast food eaters' (energy intake from fast foods being <10%, 10-30% and  $\geq$ 30% of the total day's intake). A high energy intake from fast foods was associated with a high total daily energy intake. Adequacy of nutrient intake for seven essential nutrients from fast foods was analyzed on the basis of Nutrient Adequacy Ratios (NARs). For each nutrient, the NAR was calculated as a ratio of the nutrient intake per 100 kilocalories of energy intake from fast foods to its respective RDA per 100 kilocalories of RDA of energy. Grade points of 1, 2 and 3 were given for NAR values of <0.66, 0.66 - <1 and >1 respectively. The consolidated score for seven nutrients (Fast Food NAR) ranging from 7-21 was found to be 'poor/fair' (7-11/12-16) for 94% of the subjects, reflecting an inadequate intake of essential nutrients from fast foods.

**Conclusion:** Excessive consumption of fast foods, which are nutritionally imbalanced, may adversely affect health and enhances the vulnerability to degenerative diseases.

#### Nutrition and health status of rural adolescent girls in selected ICDS blocks of Delhi and Rajasthan

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Adolescent girls need special care in view of their present and future roles. The only national programme targeted towards the developmental needs of these girls is the Adolescent Girl (AG) scheme of Integrated Child Development Services (ICDS). The present study has been undertaken in ICDS blocks of Delhi (*Alipur, Kanjhawala and Mehrauli*) and Rajasthan (*Deeg*) to assess the baseline nutrition/health status and related knowledge of rural adolescent girls in these areas.

**Methods:** 181 girls (aged 11-21 years) comprised the sample and the dietary intake data were gathered by one day 24 Hour Recall coupled with Food Frequency Questionnaire. Data on weight/height/BMI were gathered and hemoglobin status was assessed by cyanmethemoglobin method. An interview schedule was employed to elicit knowledge relating to nutrition and health.

**Results:** Data indicate that the diets were cereal based and monotonous; 58.4% of subjects were found to have intake less than 75 percent of RDA while a substantial proportion of them had inadequate nutrient intake (NAR<0.66) with respect to most of the micronutrients especially iron (93.4%), vitamin A (75.7%) and folic acid (81.8%). The incidence of anaemia (hemoglobin level <12 g/dl), thinness ('BMI for age' <5<sup>th</sup> centile) and stunting ('height for age' <3<sup>rd</sup> percentile) was 93.2%, 35.9% and 30.4%. Further, a large majority of the subjects had inadequate knowledge relating to immunization, colostrum/exclusive breast-feeding, childcare practices as well as that relating to prevention of deficiency diseases.

**Conclusions:** The nutrition/health needs of the rural adolescent girls must be addressed in a holistic manner (providing food supplementation, imparting nutrition/health education as well as skills in income generation). A comprehensive programme like AG scheme, if implemented effectively, has the potential not only to break the intergenerational cycle of malnutrition but also result in improved knowledge and empowerment of these girls to face their challenging roles.