

Impact of Nutrition Counselling in the Management of Malnutrition among Juvenile Diabetics

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ABSTRACT Juvenile diabetes is the commonest endocrine metabolic disease of childhood. It develops as a result of synergistic effect of genetic, environmental and immunological factors that ultimately destroy the pancreatic beta-cells. To study the impact of nutrition counselling in the management of malnutrition among juvenile diabetics, thirty male juvenile diabetics were selected in the age group of 13-18 years from two hospitals of Ludhiana, and were divided on the basis of their age into two groups of 13-15 years and 16-18 years, with 15 subjects in each group. General, diabetic, dietary information and anthropometric measurements of the subjects were recorded by interview schedule before and after nutrition counselling. After one month of control period, both the groups were imparted nutrition counselling (NC) for 3 months at 15 days interval by individual and group contacts about diabetes, its types, causes, symptoms, complications and its management through insulin therapy, diet and physical activity. Pamphlets containing above information were also distributed after every session. Before NC the number of moderately malnourished subjects was 11(13-15 yrs) and 12(16-18yrs), which reduced to 8 (13-15 yrs) and 10 (16-18yrs) whereas number of marginally malnourished subjects increased from 3 to 5 (13-15 yrs) and 3 to 4 (16-18 yrs). However, the number of normal subjects increased from 1 to 2 (13-15 yrs) and 0 to 1 (16-18 yrs) after NC. The dietary adequacy of cereals, pulses, green leafy vegetables, other vegetables and fruits was lower which improved after nutrition counselling. Percent adequacy of intake of energy, carbohydrates, protein, iron and zinc by the subjects was lower before NC and increased significantly after NC, whereas the adequacies of thiamine, riboflavin, niacin, ascorbic acid, calcium, phosphorus, magnesium and folic acid were higher before NC and even increased after NC. Thus it can be inferred from the study that nutrition counselling can be an effective measure for bringing favorable and significant changes in the nutritional profile of juvenile diabetics, which may lead to an improvement in diabetic state, management of malnutrition and thus helps in retardation of secondary complications.