Low protein intake is associated with poor glycemic control in young adults with type-1 diabetes mellitus

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Introduction & Aim: Type-1 DM accounts for 5% to 10% of all diagnosed diabetes. Diabetes mellitus (DM) is one of the commonest metabolic disorders of childhood. India has the largest number of type-1 diabetes mellitus patients. The study was conducted amongst young adults’ type-1 diabetes mellitus patients (18-45 years of age). The main objectives of this study were to look at the demographic, clinical, nutritional characteristics and to study the effect of these factors on their glycosylated hemoglobin levels.

Materials & Methods: Data was obtained from updated medical records and clinical examination by physician. Dietary intake was assessed using food dairies and 24 hour recall method. Anthropometry was determined using standard procedures.

Results & Discussion: The analysis revealed that the socio-economic variables did not affect the glycosylated hemoglobin levels. The mean glycosylated hemoglobin value was 8.81±2.38%. Nearly half of the patients were malnourished. The overall quality of the diet intake was inadequate. The multivariate regression model, adjusted for confounding factors like gender, age and BMI, revealed that only duration of the diabetes and protein intake were significant predictors of HbA1C status (p<0.005).

Conclusion: Type-1 diabetes patients are a vulnerable segment of the diabetes population and Indian society needs to be sensitized to their needs.

Biography
Mini Joseph is currently an Assistant Professor in Food & Nutrition at Government College for Women, Trivandrum, Kerala. She is presently pursuing Post-doctoral Fellowship at the Department of Endocrinology, Diabetes & Metabolism at Christian Medical College, Vellore, Tamil Nadu, India. She is a recipient of Young Scientist Award from the Nutrition Society of India in 2012. Her interests are in community nutrition, energy expenditure research, sports nutrition and diabetes.

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