

PP 80

## **Determination of the nutritional status of patients with diabetes mellitus attending the family practice center of the University of Sri Jayewardenepura**

Rathnayake DOW<sup>1</sup>, Mafadha MF<sup>1</sup>, Samaranayaka S<sup>2\*</sup>

<sup>1</sup>Department of Medical Laboratory Science, Faculty of Allied Health Sciences, University of Sri Jayewardenepura, Sri Lanka,

<sup>2</sup>Department of Family Medicine, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka.

**Background:** Dietary restrictions and medications affect the nutritional status of patients with diabetes mellitus. Emphasis on nutritional status is important in controlling the disease as well as preventing complications.

**Objective:** To describe the nutritional status of patients with diabetes mellitus attending the family practice center of the University of Sri Jayewardenepura.

**Method:** Sixty four patients with diabetes were recruited. Socio-demographic details, 24 hour dietary recall were taken by an interviewer-administered questionnaire and the Body Mass Index (BMI) was calculated. Venous blood was taken for haemoglobin and serum albumin assay. Hemoglobin concentration was measured using cyanmethemoglobin method and serum albumin level was measured using the Bromo cresol green method.

**Results:** Out of 64 participants, 21 (32.8%) were males, and 43 (67.2%) were females. Mean age was 63.4±10.0 years and the mean duration of diabetes was 9.0±6.7 years. Mean BMI was 25.0±3.5 kg/m<sup>2</sup>, 31.3% were overweight, and 37.5% were obese. Obesity was more among females (41.9%) and overweight was more among men (42.9%). A percentage of 65.6% and 60.9% of patients had consumed adequate amounts of vegetable and fruits respectively. The protein intake was below the recommended level in 96.9% of participants. Mean calories from consumed carbohydrate was 1640.7±173.5 kcal/day. Mean hemoglobin concentration was 13.1±1.1g/dL and the prevalence of anaemia was 17.2%. 14.3% of males and 18.6% of females were anaemic. Mean duration of diabetes in anemic individuals was higher (10.1±7.6 years) than non-anemic individuals (8.7±6.5 years). Mean serum albumin concentration was 4.4±0.5g/dL. There was a statistically significant relationship between BMI and consumed calories from carbohydrates (p=0.000).

**Conclusion:** Overweight and obesity were common in this population and a considerable percentage was anaemic. Anaemia was more with the increasing duration of diabetes. Protein intake was below the recommended level in the majority. Calories from carbohydrate had a significant association with the BMI. Serum albumin level of all the participants was within the normal range.