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## Intake of Major Dietary Constituents in Patients with Newly Diagnosed Type 2 Diabetes Mellitus in Southern, Sri Lanka

Wasana K. G. P. 1, Attanayake A. P. 1, Weerarathna T. P. 2, Jayatilaka K. A. P. W. 1

## Abstract

Unhealthy dietary practices contribute to the development of type 2 diabetes mellitus (T2DM), a major health burden worldwide. The present study aimed to assess the usual dietary intake in patients with newly diagnosed T2DM to appraise the intake of major dietary constituents. Information on dietary intake was collected using a 24-hour dietary recall from 158 patients with newly diagnosed T2DM referred to the University Medical Clinic, Teaching Hospital, Galle, Sri Lanka. Dietary intake records were assessed using the Sri Lanka food composition table, the Indian food composition table, and the United States Department of Agriculture nutrient database and were compared with the dietary recommendations of the American Diabetes Association. Of all the patients (mean age  $48.6 \pm 7.0$  years), 96 were females. The average daily intake of energy, carbohydrate, protein, fat, and fiber of the enrolled patients were 2720.7 (1283.3 - 3859.1) kcal,  $565.5 \pm 92.7$  g,  $85.1 \pm 18.3$  g, 28.5 (9.1 - 104.8) g and 3.4 (1.6 - 34.0) g, respectively. The percentages of carbohydrate, protein, fat, and fiber that comprise the total energy intake were 82.9%, 12.4%, 9.1%, and 3.4 %, respectively. Almost all patients (99.4%) had consumed more carbohydrates than the recommended amount. Lower than the recommended intake of carbohydrates, protein, fat, and fiber was noted in 0.6%, 86.7%, 92.4%, and 98.7 % of participants, respectively. Out of the total sample, only 12.0%, 5.7%, and 1.3 % met the daily recommendations of protein, fat, and fiber, respectively. In conclusion, the diet of newly diagnosed patients with T2DM consisted of a notable high carbohydrate intake and very low protein and fiber content. Public health approaches to prevent T2DM in Sri Lanka should focus on reducing carbohydrates and improving the protein and fiber content in their diet.

Keywords: Dietary intake, dietary recommendations, newly diagnosed patients with T2DM

<sup>&</sup>lt;sup>1</sup> Department of Biochemistry, Faculty of Medicine, University of Ruhuna, Sri Lanka

<sup>&</sup>lt;sup>2</sup> Department of Medicine, Faculty of Medicine, University of Ruhuna, Sri Lanka