

0138

Carbohydrate consumption, insulin use and glucose monitoring knowledge in people with type 1 diabetes.

Alondra Nicole Maldonado Reyes¹, Cecilia Nohemí Ramírez Frias¹, Arely Joseline Lugo de la Cruz¹, Alberto Isaí Martínez López¹, Eliud Salvador Aguilar Barrera^{1,2}

1Nutrition Department, CICS-UMA, Instituto Politécnico Nacional. Mexico City, Mexico. 2Centro de Atención a la Diabetes, Mexico City, Mexico.

Abstract

Background: The knowledge of carbohydrate consumption, glucose control and insulin use, can play a crucial role in metabolic control and the consequent reduction of the risk of complications in type 1 diabetes. The aim of the study was to assess the level of knowledge about carbohydrate consumption, insulin use and glucose monitoring in people with type 1 diabetes and its association with the control of their condition. **Methods:** An online questionnaire was applied to 55 subjects with T1D on knowledge about carbohydrate consumption, insulin use and glucose monitoring. **Results:** The mean age was 25.2 years; 67.3% men; 47.3% with normal BMI and 43.6% underweight for height; mean type 1 diabetes duration, 13.7 years; estimated glucose with monitor 112 mg/dL (95% CI: 91.1-132.8); eHbA1c 6.7% (95% CI: 5.7-7.8); TIR 71.2% (95% CI: 51.5-90.87); blood glucose 119.6 mg/dL (95% CI: 94.7-144.5); 47.3% use long-acting basal insulin. Regarding the level of knowledge, of the 26 questions asked, only 16.4% of the participants answered 16 correctly (62% correct) and only 5.5% answered 20 correctly (77% correct). **Conclusions:** The level of knowledge of carbohydrate consumption, glucose control and insulin use in the study subjects is not desirable. Despite this, clinical and metabolic control data indicate adequate control of his condition. An alarming finding is the high percentage of underweight people.

Keywords: Carbohydrate consumption; insulin; glucose monitoring; type 1 diabetes; knowledge.

Abbreviations: T1D, type 1 diabetes; BMI, body mass index; TIR, time in range; eHbA1c, estimated glycosylated hemoglobin; HbA1c, glycosylated hemoglobin.

Funding and Conflicts of Interest

Nothing to disclose.