

NUTRITIONAL EVALUATION OF CHILDREN WITH TYPE 1 DIABETES ON ADMISSION TO THE ENDOCRINOLOGY-DIABETOLOGY AND NUTRITION DEPARTMENT

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INTRODUCTION

Nutritional education is a cornerstone in the management of the type 1 diabetic patient in combination with insulin and physical activity.

AIM

The objective of our study was to explore the nutritional profiles of type 1 diabetic children during their first hospitalization in our department.

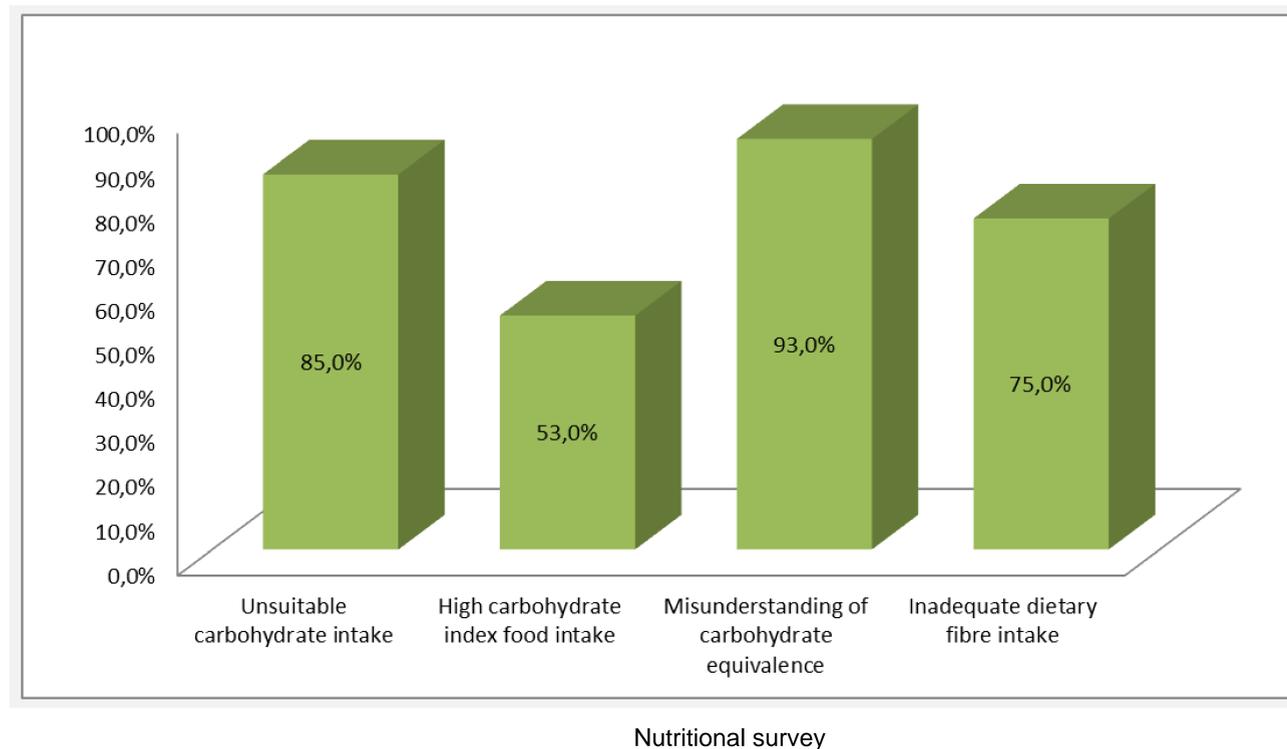
METHOD

- This is a retrospective descriptive study.
- Carried out 100 type 1 diabetic patients less than 15 years old hospitalized in the Endocrinology-Diabetology and Nutrition Department of the Mohammed VI University Hospital Center of Oujda, in the eastern of Morocco.
- All patients underwent a full clinical examination, and a nutritional evaluation.
- The data collected were analyzed using SPSS 25 software.

RESULTS

The main age was 11.1 ± 3.6 years with a sex ratio M/F at 1.17. The average BMI was $17.2 \pm 3.1 \text{ kg/m}^2$, with an average duration of diabetes of 3.1 ± 2.9 years. The HbA1c was over 10% in 40.9% of patients. Analysis of the lipid profile revealed hypertriglyceridemia in 10.8% of cases, and hypoHDLemia in 26% of cases. Fifty-six percent of patients had three main daily meals associated with a snack in 52% of cases with a notion of snacking in 50%. The diet was normo-caloric in 41% of cases, with a mean total energy intake of $2133 \pm 655 \text{ kcal}$ [900-3900kcal].

The nutritional assessment revealed dietary errors, as follows: inappropriate carbohydrate intake, with the use of foods with a high carbohydrate index and a lack of recognition of carbohydrate equivalents; and most of the children had an inadequate intake of dietary fibre (figure). There was a significant correlation between energy consumption and age ($p=0.02$; $r=0.46$). Only 27% of patients practiced physical exercise.



CONCLUSIONS

A high total energy intake with poor knowledge of carbohydrate equivalence was noted in most children, which is consistent with the data in the literature. The presence of dyslipidemia can be explained by excessive lipid intake with insufficient nutritive fiber and lack of physical activity.

Therefore, dietary advice should be individualized for each child with type 1 diabetes based on age, physical activity and body size.

REFERENCES

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