



RESEARCH ARTICLE

Dietary Practices of Type 2 Diabetic Patients Attending Diabetic Clinic at Nakuru Level 6 Hospital, Kenya

¹Dominic Kiprotich, ²Peter Chege, and ³Dorothy Mituki

¹Department of Human Nutrition and Dietetics, School of Medicine and Health Sciences, Kabarak University. (kipdominic@kabarak.ac.ke)

²Department of Human Nutrition and Dietetics, School of Medicine and Health Sciences, Kabarak University. (chegepeterm@gmail.com)

³Department of Human Nutrition, Faculty of Health Sciences, Egerton University. (dotmituki@yahoo.com)

Corresponding Author;

*Dominic Kiprotich (kipdominic@kabarak.ac.ke)

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Abstract

Global DM prevalence is 425 million cases, 16 million of which emanate from Africa, and 458,900 from Kenya. Expected global rise is 48% and 156% in Africa by 2045. DM complications are severe and increases risk of death, with one death reported every eight seconds. The financial implications are adverse, with \$825 billion spent globally and \$3.3 billion in Africa; Kenya spends \$234 per DM case. Of the cost-effective interventions, dietary intervention is the most effective. Despite dietary practices, being effective in the management of DM is still a challenge. Against this backdrop, it is reasonable to determine the T2DM patients' dietary practices in order to develop an effective intervention strategy.

This study adopted a descriptive cross-sectional study design. Fisher formula 1998, was used to determine the sample size. Pretest was carried out at Naivasha Hospital where 10% of the respondents participated. Data was analyzed using SPSS version 24 and Nutri-survey. Statistical parameters used were Mean, SD, Percentages, and Chi-square. All research and ethical approvals and permits were obtained before the commencement of the study.

262(96%) T2DM patients participated, the majority were male (58.8%), aged 41-50 years (35.9%), married (79.8%), and had secondary education (42.7%). The main source of income was business (31.7%), they earned a household income of between Kshs 10001-20000; (31.3%), and a family history of DM 59.9%. Starches (40.3%) and cooking oil (96.9%) were consumed daily. Most participants (71.8%) had high DDS. Most participants exceeded their adequacy levels for Energy, Carbohydrates, and proteins, adequacy levels for fats and fiber were low. Most respondents had three meals (55.3%). (48.1%) of the respondents' RBS was >11.0 mmol/l. Household income and DDS ($P \leq 0.018$) had a significant. Whereas, respondents' RBS had a significant association with carbohydrate ($P \leq 0.034$) and Fiber consumption ($P \leq 0.016$).

T2DM patients consume a highly diverse diet, but carbohydrates and fats frequently. They exceed adequacy levels for energy and carbohydrates, adequacy for fiber is poor. T2DM patients have poor glycemic control. T2DM patient's household income is a predictor of dietary diversity. Whereas, carbohydrate and fiber intake are determinate of patients' RBS.

More emphasis should be placed on the quantity of the macronutrients consumed by encouraging the patients to consume a moderate amount of carbohydrates and proteins, but increase their consumption of fiber-rich diet; this is beneficial in glycemic control.

Keywords: Type 2 diabetes mellitus, nutrition knowledge, dietary practice, diabetes, Nutrition status, glycemic control

