Assessment of the effect of dietary on type 2 diabetes mellitus.

Sara Asariyandul*

Department of community nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran

Abstract

Type 2 diabetes mellitus (T2DM) is one of the most prevalent diseases in the world. T2DM has a complex aetiology that includes reversible risk variables including food, exercise, and smoking as well as irreversible risk factors like age, genetics, race, and ethnicity. The goals of this review are to look at numerous researches to study the connection between T2DM and various dietary patterns and behaviours, as well as its consequences. The main causes of the rapidly increasing incidence of DM in emerging nations are dietary practises and a sedentary lifestyle. Elevated HbA1c levels in type 2 diabetics are currently regarded as one of the major risk factors for developing microvascular and macrovascular problems. Through food management, the increased HbA1c level can be reduced, reducing the risk of the patients acquiring diabetic complications.

Keywords: Type 2 diabetes mellitus, Diet, Knowledge, Attitude, Practices, Complication.

Introduction

As was previously noted, Indians argued that diet may play a part in the aetiology of T2DM. They did this after noticing that wealthy individuals who eat large amounts of grain, sugar, and oil were disproportionately affected by the illness. Diabetes mortality rates decreased during the First and Second World Wars as a result of famines and food shortages in the affected nations, including Germany and other European nations. The mortality rate for diabetes in Berlin decreased from 23.1/100,000 in 1914 to 10.9 in 1919. Other nations, like Japan and North American nations, which did not have a food crisis during the same time period, did not experience a shift in the mortality rate due to diabetes. T2DM is strongly correlated with high fat and carbohydrate intake. Numerous studies have found a link between a high sugar diet and the emergence of T2DM. Ludwig spent months studying more than 500 youngsters from various ethnic backgrounds. After taking into account several factors like dietary, demographic, anthropometric, and lifestyle choices, it was discovered that the frequency of obesity rose for each additional serving of carbonated beverages eaten.

Type 2 diabetics' knowledge of diet

According to the American Diabetes Association, self-dietary management is a crucial first step in giving diabetics the knowledge and skills they need to manage their condition's complications, nutritional needs, and medical conditions [1]. A study revealed that the targeted group, who were at a high risk of developing T2DM, had low dietary awareness. Males consumed more red meat and fried food than females did. In terms of daily rice consumption, there were significantly more men than women. Food options, portion sizes, and sedentary behaviour have all substantially expanded recently in Saudi Arabia, raising the prevalence of obesity. Because fast food is so convenient, a lot of Saudis are regrettably growing more obese, which raises the alarming diabetes numbers. 45 Saudis, meanwhile, consume an excessive amount of sugary beverages. Additionally, Backman46 claimed that nutritional awareness is a critical variable that affects dietary behaviours [2].

Attitude of type 2 diabetics toward food

Through an improvement in the patient's nutritional knowledge, attitudes, and habits, diabetes mellitus can be managed [3]. These elements are seen as being essential to complete diabetes care. The importance of nutrition in managing diabetes is still not well understood by patients, despite the high prevalence of diabetes in gulf countries. According to studies, evaluating patients' dietary attitudes may significantly improve treatment adherence and reduce the frequency of problems.

Type 2 diabetics' eating habits

The primary eating habits of diabetics are impacted by their cultural backgrounds. There were substantial positive associations between knowledge of the diabetic diet and dietary behaviours for each of the dimensions of dietary practises [4]. Knowledge played a significant role in the management of eating behaviours. Over the past ten years, children, teenagers, and adults have all experienced a sharp rise in the practise of skipping breakfast. There is mounting evidence linking skipping breakfast to obesity and other health

***Correspondence to:** Sara Asariyandul**,** Department of Community Nutrition, School of Nutritional Sciences and Dietetics, Tehran University of Medical Sciences, Tehran, Iran, E-mail: sr.asariy011@yahoo.com

***Received**: 4-Oct-2022, Manuscript No. AAAFN-22-80301; **Editor assigned**: 04-Oct-2022, PreQC No. AAAFN-22-80301 (PQ); **Reviewed**: 20-Oct-2022, QC No. AAAFN-22-80301; **Revised**: 22-Oct-2022, Manuscript No. AAAFN-22-80301(R); **Published:** 27-Oct-2022, DOI:10.35841/aaafn-5.5.123*

***Citation:** Asariyandul S. Assessment of the effect of dietary on type 2 diabetes mellitus. Arch Food Nutr. 2022;5(5):123*

problems. Additionally, eating frequently or snacking may raise body weight and risk for metabolic disorders associated with western and responsible dietary patterns. The western dietary pattern was defined by an increased consumption of processed and red meat, chips, dairy products, refined grains, and sweets and desserts. The prudent dietary pattern was characterised by an increased consumption of fish, poultry, varied vegetables, and fruits. In the past, these patterns were linked to the risk of T2DM [5].

Conclusion

In order to enable T2DM patients to better understand the management of their condition, for more appropriate self-care and higher quality of life, stakeholders (healthcare professionals, health facilities, etc.) should promote DM education including food management. The overall goal of T2DM treatment is to prevent patients from experiencing early end-organ problems, which can be accomplished by following a healthy dietary regimen. The patients should also have good knowledge about the disease and diet, for this purpose, the health-care providers must inform the patients to make changes in their nutritional habits and food preparations. Active and effective dietary education may prevent the onset of diabetes and its complications.

References

1. Sami W, Ansari T, Butt NS, et al. Effect of diet on type 2 diabetes mellitus: A review. Int J Health Sci. 2017;11(2):65.
2. Khazrai YM, Defeudis G, Pozzilli P. Effect of diet on type 2 diabetes mellitus: a review. Diabetes Metab Res Rev. 2014;30(S1):24-33.
3. van Dam RM, Rimm EB, Willett WC, et al. Dietary patterns and risk for type 2 diabetes mellitus in US men. Ann Intern Med. 2002;136(3):201-9.
4. Dedoussis GV, Kaliora AC, Panagiotakos DB. Genes, diet and type 2 diabetes mellitus: a review. Rev Diabet Stud. 2007;4(1):13.
5. Franz MJ, Powers MA, Leontos C, et al. The evidence for medical nutrition therapy for type 1 and type 2 diabetes in adults. J Am Diet. 2010;110(12):1852-89.

Citation: *Asariyandul S. Assessment of the effect of dietary on type 2 diabetes mellitus. Arch Food Nutr. 2022;5(5):123*